



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**  
SOUTH DISTRICT  
P.O. BOX 2549  
FORT MYERS, FL 33902-2549  
[SouthDistrict@dep.state.fl.us](mailto:SouthDistrict@dep.state.fl.us)

RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANERA  
LT. GOVERNOR

JONATHAN P. STEVERSON  
SECRETARY

*Electronic Mail – Received Receipt Requested*

Neil Smith  
Senior Vice President, Sugar Manufacturing  
United States Sugar Corporation  
111 Ponce De Leon Ave.  
Clewiston, Florida 33440

Re: Permit No. 0510003-059-AV  
U.S. Sugar Clewiston Facility  
Title V Permit Renewal

Dear Mr. Smith:

Enclosed is the draft permit package to renew the Title V air operation permit for the U.S. Sugar Clewiston Facility. This facility is located in Hendry County at W.C. Owens Ave. and S.R. 832, Clewiston, Florida. The permit package includes the following documents:

- The Statement of Basis, which summarizes the facility, the equipment, the primary rule applicability, and the changes since the last Title V renewal.
- The renewed draft Title V air operation permit, which includes the specific permit conditions that regulate the emissions units covered by the proposed project.
- The Written Notice of Intent to Issue Air Permit provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the draft permit; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The Public Notice of Intent to Issue Title V Air Permit must be published as soon as possible and the proof of publication must be provided to the Department within seven days of the date of publication. If you have any questions, please contact the Project Engineer, Carter B. Endsley, P.E., by telephone at (239) 344-5637 or by email at [carter.endsley@dep.state.fl.us](mailto:carter.endsley@dep.state.fl.us).

Executed in Fort Myers, Florida.

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Jon M. Iglehart  
Director of  
District Management

JMI/CBE/se

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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

United States Sugar Corporation  
111 Ponce De Leon Ave.  
Clewiston, Florida 33440

Permit No. 0510003-059-AV  
Facility ID No. 0510003  
U.S. Sugar Clewiston Facility  
Title V Air Operating Permit Renewal  
Hendry County, Florida

*Responsible Official:*  
Neil Smith  
Senior Vice President, Sugar Manufacturing

**Facility Location:** U.S. Sugar Clewiston Facility operates the sugar manufacturing plant, which is located in Hendry County at W.C. Owens Ave. and S.R.832, Clewiston, Florida.

**Project:** The purpose of this project is to renew Title V air operation permit No. 0510003-053-AV. Details of the project are provided in the application and the referenced Statement of Basis.

**Permitting Authority:** Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The South District Office of the Department of Environmental Protection is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 2295 Victoria Avenue, Ste. 364, Fort Myers, Florida 33901. The Permitting Authority's mailing address is: P.O. Box 2549, Fort Myers, Florida 33902-2549. The Permitting Authority's telephone number is (239) 344-5600.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft permit by visiting the following website: <http://www.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

**Notice of Intent to Issue Permit:** The Permitting Authority gives notice of its intent to issue a Title V air operation permit renewal to the applicant for the project described above. The applicant has provided reasonable assurance that continued operation of the existing equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a proposed permit and subsequent final permit in accordance with the conditions of the draft permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

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## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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**Comments:** The Permitting Authority will accept written comments concerning the draft Title V air operation permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft permit, the Permitting Authority shall issue a revised draft permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

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

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

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

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT**

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**Mediation:** Mediation is not available in this proceeding.

**Objections:** 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 days of the expiration of the Administrator’s 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public 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. For more information regarding EPA review and objections, visit EPA’s Region 4 web site at <http://www.epa.gov/region4/air/permits/florida.htm>.

Executed in Fort Myers, Florida



\_\_\_\_\_ for  
Jon M. Iglehart  
Director of District Management

\_\_\_\_\_ **March 13, 2015**  
Date

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this written notice of Intent to Issue Title V Air Operation Permit Renewal (including the Public Notice, the Statement of Basis, and the draft permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested to the persons listed below:

- Neil Smith ([nsmith@ussugar.com](mailto:nsmith@ussugar.com))
- Keith Tingberg ([ktingberg@ussugar.com](mailto:ktingberg@ussugar.com))
- Philip D. Cobb ([pcobb@golder.com](mailto:pcobb@golder.com))
- Ms. Ana Oquendo, EPA Region 4: ( [Oquendo.Ana@epamail.epa.gov](mailto:Oquendo.Ana@epamail.epa.gov))
- Ms. Natasha Hazziez, EPA Region 4: ( [hazziez.natasha@epa.gov](mailto:hazziez.natasha@epa.gov))
- Ms. Barbara Friday, DEP BAR: ( [barbara.friday@dep.state.fl.us](mailto:barbara.friday@dep.state.fl.us))

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**

\_\_\_\_\_ **March 13, 2015**  
**Date**

Florida Department of Environmental Protection  
South District Office  
Draft Permit No. 0510003-059-AV  
United States Sugar Corporation, U.S. Sugar Clewiston Facility  
Hendry County, Florida

**Applicant:** The applicant for this project is Unites States Sugar Corporation. The applicant's responsible official and mailing address are: Neil Smith, Senior Vice President, Sugar Manufacturing, United States Sugar Corporation, U.S. Sugar Clewiston Facility, 111 Ponce De Leon Ave., Clewiston Florida, 33440.

**Facility Location:** The applicant operates the existing U.S. Sugar Clewiston Facility, which is located in Hendry County at W.C. Owens Ave. and S.R. 832 in Clewiston, Florida.

**Project:** The applicant applied on January 5, 2015 to the Department for a Title V air operation permit renewal. This is a renewal of Title V air operation permit No. 0510003-053-AV. This facility is a sugar mill and refinery. Sugarcane is harvested in nearby cane fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and processed in a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery. Molasses is also produced as a byproduct. Molasses is stored and processed into an animal feed product for sale.

**Permitting Authority:** Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The South District Office of the Department of Environmental Protection is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 2295 Victoria Avenue, Ste. 364, Fort Myers, Florida 33901. The Permitting Authority's mailing address is: P.O. Box 2549, Fort Myers, Florida, 33902-2549. The Permitting Authority's telephone number is (239) 344-5600.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft permit by visiting the following website: <http://www.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

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**(Public Notice to be Published in the Newspaper)**

Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft permit, the Permitting Authority shall issue a revised draft permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

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

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

**Mediation:** Mediation is not available in this proceeding.

**Objections:** 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 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public 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. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/florida.htm>.

**(Public Notice to be Published in the Newspaper)**

# United States Sugar Corporation U.S Sugar Clewiston Facility

Facility ID No. 0510003  
Hendry County

## **DRAFT Title V Air Operation Permit Renewal**

Permit No. 0510003-059-AV  
(Renewal of Title V Air Operation Permit No. 0510003-053-AV)



### **Permitting Authority:**

State of Florida  
Department of Environmental Protection  
South District Office

2295 Victoria Avenue, Suite 364  
Fort Myers, Florida 33902-2549

Telephone: (239) 344-5600  
Email: [SouthDistrict@dep.state.fl.us](mailto:SouthDistrict@dep.state.fl.us)

### **Compliance Authority:**

State of Florida  
Department of Environmental Protection  
South District Office

2295 Victoria Avenue, Suite 364  
Fort Myers, Florida 33902-2549

Telephone: (239) 344-5600  
Email: [SouthDistrict@dep.state.fl.us](mailto:SouthDistrict@dep.state.fl.us)

**DRAFT Title V Air Operation Permit Renewal**

Permit No. 0510003-059-AV

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# ***DRAFT PERMIT***

**PERMITTEE**

United States Sugar Corporation  
111 Ponce de Leon Avenue  
Clewiston, Florida 33440

Permit No. 0510003-059-AV  
Title V Permit Renewal  
U.S. Sugar Clewiston Facility  
Facility ID No. 0510003  
Hendry County, Florida

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing U.S. Sugar Clewiston Facility is located in Hendry County at W.C. Owens Ave. and S.R. 832, Clewiston Florida. UTM Coordinates are: Zone 17, 506.1 East and 2956.9 North. Latitude is: 26/44/06 North; and, Longitude is: 80/56/19 West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: *(Draft)*  
Renewal Application Due Date: Exp. DATE -225, 20xx  
Expiration Date: Eff. DATE + 5 years, 20xx

*(Draft)*

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Jon M. Iglehart  
Director of  
District Management

JMI/CBE/se

## SECTION 1. FACILITY INFORMATION

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### **Subsection A. Facility Description.**

This facility is a sugar mill and refinery. Sugarcane is harvested from adjacent, neighboring and remote fields in Glades, Hendry, Martin and Palm Beach counties and transported to the mill by train. In the mill, sugarcane is cut into small pieces and processed in a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery. Molasses is also produced as a byproduct. Molasses is stored and processed into an animal feed product for sale.

#### *Regulatory Categories*

- The existing facility is a major source of hazardous air pollutants (HAP).
- The existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The existing facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- Existing units are subject to the following New Source Performance Standards (NSPS) in Part 60 of Title 40, the Code of Federal Regulations (CFR): Subpart A (General Provisions), Subpart Db (Industrial-Commercial-Institutional Steam Generating Units) and Subpart Dc (Small Industrial-Commercial-Institutional Steam Generating Units).
- Existing units are subject to the following National Emissions Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63: Subpart A (General Provisions), Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines), and Subpart DDDDD (Industrial Boilers).

#### *Regulated Pollutants*

- **Criteria Pollutants:** Emissions units at this facility may emit one or more of the following criteria air pollutants: carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM<sub>10</sub>), particulate matter with a mean particle diameter of 2.5 microns or less (PM<sub>2.5</sub>), volatile organic compounds (VOC) and lead (Pb).
- **Other Regulated PSD Pollutants:** In addition to the above criteria air pollutants, emissions units at this facility may emit one or more of the following PSD pollutants: fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H<sub>2</sub>S); total reduced sulfur (TRS), including H<sub>2</sub>S; reduced sulfur compounds, including H<sub>2</sub>S; and mercury (Hg).
- **HAP:** Emissions units at this facility may emit one or more HAP as defined in Rule 62-210.200, F.A.C.

**SECTION 1. FACILITY INFORMATION**

**Subsection B. SUMMARY OF REGULATED EMISSIONS UNITS**

<b>ARMS Facility ID No. 0510003</b>	
<b>EU No.</b>	<b>Emissions Unit Description</b>
<i>Sugar Mill</i>	
001	Boiler 1
002	Boiler 2
009	Boiler 4
014	Boiler 7
027	Biomass Handling and Storage
028	Boiler 8
031	Lime Storage and Truck/Rail Handling System
<i>Sugar Refinery</i>	
015	VHP Sugar Dryer
016	White Sugar Dryer No. 1
017	Granular Carbon Regeneration Furnace
018	Vacuum Pickup Systems
019	Conditioning Silos
020	Screening/Distribution and Sugar/Starch Bins
021	Alcohol Usage
022	Sugar Packaging Line
029	White Sugar Dryer No. 2
035	Rental Refinery Package Boiler
043	Bulk Loadout Operations
<i>Facility</i>	
010	Lime Silo with Baghouse at the Water Treatment Plant
030	Limestone Storage Silo with Baghouse at the Molasses Plant
033	Salt Silo with Baghouse at the Molasses Plant
036	Two Hydrogen Sulfide (H <sub>2</sub> S) Degasification Systems
037	Emergency Reciprocating Internal Combustion Engine(RICE) (WWTP East Pump Station)
038	Emergency RICE (Fire Pump Building)
039	Emergency RICE (WWP 2 <sup>nd</sup> Floor Pump Room)
040	Emergency RICE (WTP Portable Generator)
042	Emergency RICE (Computer/IT Backup)
041	Emergency RICE (WTP Plant Generator)

Please reference the Permit No., Facility ID No., and corresponding Emissions Unit No. on all correspondence, test report submittals, applications, etc.

## SECTION 2. FACILITY-WIDE CONDITIONS

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### Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

**FW.1. Electronic Annual Operating Report and Title V Annual Emissions Fees.** The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1<sup>st</sup> of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

*{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at [eaor@dep.state.fl.us](mailto:eaor@dep.state.fl.us).}*

*{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}*

### PERMITTING AND COMPLIANCE AUTHORITIES

**FW.2. Permitting Authority:** The Department's South District Office is the permitting authority for this renewal permit. The permitting authority for subsequent revisions and renewals is the Department's South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549. The telephone number is 239/344-5600 and the email address is [SouthDistrict@dep.state.fl.us](mailto:SouthDistrict@dep.state.fl.us).

**FW.3. Compliance Authority:** The permittee shall submit all compliance related notifications and reports required of this permit to the Department's South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549. The telephone number is 239/344-5600 and the email address is [SouthDistrict@dep.state.fl.us](mailto:SouthDistrict@dep.state.fl.us).

### PERMIT APPENDICES

**FW.4. Appendices:** The appendices identified as Section 4 in the Table of Contents are attached as an enforceable part of this permit unless otherwise indicated.

## SECTION 2. FACILITY-WIDE CONDITIONS

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### EMISSIONS AND CONTROLS

**FW.5. Circumvention:**

The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

**FW.6. General VOC and OS Emission Limiting Standards:** The permittee shall not 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. Nothing was deemed necessary and ordered on a facility-wide basis. [Rule 62-296.320(1)(a), F.A.C.]

**FW.7. General Visible Emissions:** Unless otherwise specified by this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. If the presence of uncombined water is the only reason for failure to meet visible emission standards given in this rule, such failure shall not be a violation of this rule. All visible emissions tests performed pursuant to this rule shall be conducted in accordance with EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. This permit condition does not impose any periodic testing requirement. [Rule 62-296.320(4) (b)1, F.A.C.]

**FW.8. Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An “objectionable odor” means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.; and Permit No. PSD-FL-333D]

**FW.9. Unconfined Particulate Emissions:** The permittee shall also take the following reasonable precautions to prevent fugitive particulate matter emissions from any activity, including: vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling of fuels, raw materials or products.

- a. Where practicable, enclose or cover conveyor systems.
- b. Minimize drop distances of dry materials when handling.
- c. As necessary, provide wind breaks around material handling equipment.
- d. Where possible, confine abrasive blasting.
- e. Paving and maintenance of roads, parking areas and yards.
- f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- g. As necessary, provide landscape and/or vegetation.
- h. As necessary, remove dust from roads, work areas, parking areas, and other paved areas under the control of the permittee to prevent fugitive dust emissions.
- i. As necessary, apply water or other dust suppressants to control emissions from unpaved roads, yards, and other activities such as road grading, land clearing, and the demolition of buildings.

[Rule 62-296.320(4)(c), F.A.C.]

**FW.10. Definitions:** Unless otherwise specified by permit, startup, shutdown and malfunction are defined as follows.

- a. *Startup:* Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.

## SECTION 2. FACILITY-WIDE CONDITIONS

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- b. *Shutdown*: Shutdown is defined as the cessation of the operation of an emissions unit for any purpose.
- c. *Malfunction*: A malfunction is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

[Rule 62-210.200(Definitions), F.A.C.]

**FW.11. Excess Emissions Prohibited**: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations that are based on data collected from continuous emissions monitoring systems (CEMS). [Rule 62-210.700(4), F.A.C.]

**FW.12. Excess Emissions Allowed**: (Rule 62-210.700, F.A.C., cannot vary any federal NSPS or NESHAP provisions.) Unless otherwise specified in an emissions unit subsection or Appendices of this permit, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing:

- a. Best operational practices to minimize emissions are adhered to, and
- b. The duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period.

[Rule 62-210.700(1), F.A.C.]

**FW.13. Excess Emissions Notification**: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. (Plant Operation – Problems). If requested, a full written report on the malfunctions shall be submitted in a quarterly report. [Rule 62-210.700(6), F.A.C.]

**FW.14. Plant Operation - Problems**: If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]

### ADMINISTRATIVE REQUIREMENTS

**FW.15. Renewal Application**: The permittee shall submit an application to renew this permit using the appropriate form specified in Rule 62-210.900, F.A.C. prior to 225 days before the expiration of this permit. [Rules 62-4.090, 62-213.420, F.A.C. and 62-213.430, F.A.C.]

**FW.16. Statement of Compliance**: The permittee shall submit the annual statement of compliance using DEP Form No. 62-213.900(7), F.A.C. to the Compliance Authority and EPA within 60 days of the end of the calendar year. [Rules 62-213.440(3)(a)2 & 3, F.A.C.]

**FW.17. Records Retention**: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

## SECTION 2. FACILITY-WIDE CONDITIONS

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**FW.18. Certification by Responsible Official:** In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

**FW.19. Reporting to EPA:** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency should be sent to: EPA Region 4 Office; Air, Pesticides & Toxics Management Division; Air and EPCRA Enforcement Branch - Air Enforcement Section; 61 Forsyth Street; Atlanta, Georgia 30303-8960. The telephone number is 404/562-9077 and the fax number is 404/562-9163.

**FW.20. Prevention of Accidental Releases (Section 112(r) of CAA):**

- a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: 703/227-7650.
- b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C, when applicable.

[40 CFR 68]

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection A. Boilers 1 and 2**

This subsection addresses the following regulated emissions units.

<b>EU No.</b>	<b>Emissions Unit Description</b>
<b>001</b>	<p>Boiler 1 is a hybrid suspension-grate boiler with a vibrating grate. Bagasse is the primary fuel and distillate oil is a startup and supplemental fuel. Particulate matter emissions are controlled by a Type D, Size 125, Joy Turbulaire wet impingement scrubber. Boiler No. 1 is classified as a “Hybrid Suspension Grate” (HSG) boiler under 40 CFR 63.7575.</p> <p>DESIGN INFORMATION: Boiler No. 1 has a maximum design steam production rate of 185,000 lb/hour (24 hour average) at 750° F and 600 psig. Exhaust gases exit at 150° F with an approximate flow rate of 250,000 acfm from a stack that is 8 feet in diameter and 213 feet tall.</p>
<b>002</b>	<p>Boiler 2 is a hybrid suspension-grate boiler with a vibrating grate. Bagasse is the primary fuel and distillate oil is a startup and supplemental fuel. Particulate matter emissions are controlled by a Type D, Size 125, Joy Turbulaire wet impingement scrubber. Boiler No. 2 is classified as a “Hybrid Suspension Grate” (HSG) boiler. Under 40 CFR 63.7575.</p> <p>DESIGN INFORMATION: Boiler No. 2 has a maximum design steam production rate of 185,000 lb/hour (24-hour average) at 750° F and 600 psig. Exhaust gases exit at 150° F with an approximate flow rate of 250,000 acfm from a stack that is 8 feet in diameter and 213 feet tall.</p>

Note: These boilers (No. 1 & 2) had the OFA (Overfire Air Systems) upgraded to meet MACT CO limits in emissions per NESHAPS 40 CFR 63 Subpart DDDDD. [Permit No. 0510003-058-AC].

**CAPACITY, FUELS AND PERFORMANCE RESTRICTIONS**

**A.1. Permitted Capacity:** Boilers 1 and 2 are authorized to fire bagasse as the primary fuel and distillate oil as an auxiliary fuel. Each boiler shall not exceed the permitted capacities specified in the following table.

<b>Parameter</b>	<b>Boiler 1</b>	<b>Boiler 2</b>
Steam Production, lb/hour (24-hour daily block average)	185,000	185,000
Total Heat Input Rate, MMBtu/hour (24-hour daily block average)	397	397
Heat Input Rate from Oil, MMBtu/hour (1-hour block average)	130	130
Oil Firing Rate (gallons per hour, maximum)	963	963

[Rules 62-4.070(3) and 62-213.440(4), F.A.C.; and Permit Nos. 0510003-039-AC and PSD-FL-272B]

**A.2. Authorized Fuels:** Each boiler is authorized to fire the following fuels.

- a. *Bagasse:* The primary fuel is bagasse, which is the fibrous byproduct remaining from the sugarcane after milling.
- b. *Distillate Oil:* Any oil fired in these boilers shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. The oil firing system for each boiler consists of the following general equipment: one multi-stage low-NO<sub>x</sub> burner (0.17 lb/MMBtu) with a steam-atomized center-fired oil gun; a flame scanner; an igniter with flame proving rod, and an individual burner wind box with an electrically-operated modulating damper.
- c. *On-specification Used Oil:* Incidental amounts of on-specification used oil (≤0.05% sulfur by weight) generated on site may be co-fired.

## SECTION 3. SPECIFIC CONDITIONS

### Subsection A. Boilers 1 and 2

- d. *Petroleum-contaminated Soils:* Small quantities of petroleum-contaminated soils not to exceed 500 cubic yards per boiler per season may be co-fired. Such soils shall contain only soil, “virgin” fuels and oils, and/or “on-specification” used oil. Petroleum-contaminated soils shall be fired at a rate of no more than 2% by weight of the bagasse feed rate to the boiler.

Appendix I specifies the fuel monitoring requirements for fuels at this facility.

[Rules 62-210.200(PTE), 62-212.400(12) and 62-213.410, F.A.C.; and Permit Nos. 0510003-039-AC and PSD-FL-272B]

- A.3. Restricted Operation:** These units operate primarily during the sugarcane crop season (October through April) and the hours of operation are not limited; however, the following restrictions apply.

- a. *Off Season:* Boilers 7 and 8 shall operate as the primary units to support the sugar refinery during the off season (May through September). When Boilers 7 and 8 are down for maintenance, repair or during periods of unusually low steam demand, Boilers 1, 2 and 4 may operate individually or simultaneously as backup units, but the combined total steam production shall not exceed 1,845,000 pounds of steam during any 3-hour period and 10,800,000 pounds of steam during any 24-hour daily block period. An application to modify any of the above steam production limitations shall be accompanied by a revised air quality analysis that demonstrates compliance with the ambient air quality standards and PSD increments for the revised conditions. A request to modify these restrictions shall be accompanied by a new PSD Air Quality Analysis.
- b. *Oil Firing:* The combined oil firing from Boilers 1, 2 and 4 shall not exceed 6,000,000 gallons during any consecutive 12 months.

[Rule 62-210.200(PTE); and Permit Nos. PSD-FL-272B and 0510003-039-AC]

- A.4. Startup and Shutdown Plans for Mill Boilers:** Appendix K of this permit identifies the general procedures that will be used for startup and shutdown of the mill boilers including methods to minimize emissions. [Rules 62-4.070(3) and 62-210.700(1), F.A.C.]

### CONTROL EQUIPMENT AND TECHNIQUES

- A.5. Wet Scrubbers:**

- a. For each boiler, the permittee shall operate and maintain a Joy Turbulaire wet impingement scrubber (Type D, Size 125) to control particulate matter emissions and achieve the emissions standards specified in this permit. In accordance with the manufacturer’s recommendations, each wet scrubber control system shall be equipped with instrumentation to monitor the total pressure drop across the scrubber (inches of water column) and water flow rate (gpm). Such instrumentation shall be calibrated at least annually, properly maintained and operational at all times, except during periods of breakdown, repair or calibration. Exhaust from the wet scrubber stacks shall be maintained at a minimum of 213 feet in height. The permittee shall operate the wet scrubber in accordance with the CAM provisions of this subsection as well as the general provisions in Appendix H of this permit. [Rule 62-213.440(4), F.A.C.; and Permit No. PSD-FL-272B, 40 CFR 64].
- b. After January 30, 2016, for each boiler, the permittee shall maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation, pursuant to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD. [Table 4 to Subpart DDDDD of 40 CFR 63].

- A.6. Other Control Techniques:** To minimize emissions of sulfur dioxide and sulfuric acid mist, the boilers shall only fire the authorized low-sulfur fuels specified in this subsection. As provided in Appendix J of this

## SECTION 3. SPECIFIC CONDITIONS

### Subsection A. Boilers 1 and 2

permit, operators shall follow the good combustion practices that are generally applicable to all sugar mill boilers. [Rule 62-210.200(PTE), F.A.C.; and Permit No. PSD-FL-272B]

#### EMISSION LIMITING STANDARDS

- A.7. Opacity Standard:** As determined by DEP Method 9, visible emissions from each boiler shall not exceed 30% opacity based on a six-minute average, except for one 2-minute period per hour that shall not exceed 40% opacity. This standard excludes water vapor and applies when firing any combination of authorized fuels. [Rule 62-296.410(1) (b)1, F.A.C.]
- A.8. PM Standard:** As determined by EPA Method 5, PM emissions shall not exceed 0.25 lb/MMBtu of heat input from firing bagasse plus 0.1 lb/MMBtu of heat input from firing oil. When burning a mixture of bagasse and oil, the emissions standard shall be prorated based on the portion of heat input provided from each fuel. A separate compliance test when firing only distillate oil is not required. [Rule 62-296.410(1)(b)2, F.A.C., Permit No. PSD-FL-208A]. In addition to the above, after January 30, 2016, filterable PM emissions from each boiler shall not exceed 4.4E-01 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].
- A.9. CO Standard:** After January 30, 2016, CO emissions from each boiler shall not exceed 2,800 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. [Table 2 to Subpart DDDDD of 40 CFR 63]
- A.10. HCl Standard:** After January 30, 2016, HCl emissions from each boiler shall not exceed 2.2E-02 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63]
- A.11. Mercury Standard:** After January 30, 2016, Mercury emissions from each boiler shall not exceed 5.7E-06 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63]

#### TESTING

- A.12. General Testing Requirements:** The boilers are subject to the applicable provisions in Appendix C of this permit, which specifies the general requirements for test frequencies, test notifications, sampling facilities, test procedures, and test reports. [Rule 62-297.310, F.A.C.]
- A.13. Test Methods:** If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
7, 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Carbon Monoxide (CO), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
26 or 26A	Hydrogen chloride (HCl), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
29, 30A or 30B	Mercury (Hg), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

## SECTION 3. SPECIFIC CONDITIONS

### Subsection A. Boilers 1 and 2

The above methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.401, F.A.C.; and 40 CFR 60, Appendix A]

- A.14.** Boiler excess oxygen levels used for combustion during NOX testing shall not be less than the boiler excess oxygen levels used for combustion during CO testing. [Permit No. 0510003-058-AC].
- A.15.** After January 30, 2016, for demonstrating compliance with emission limits for PM, CO, HCl and Hg pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall:
- Comply with the performance testing requirements in Table 5 to Subpart DDDDD of 40 CFR 63. Performance testing may include fuel analysis for HCl and Hg, if fuel analysis is the selected method of compliance for these pollutants.
  - Comply with the initial compliance test requirements in 40 CFR 63.7510 and 40 CFR 63.7530., and
  - Conduct annual performance tests, fuel analysis, and tune-ups in accordance with 40 CFR 63.7515, 40 CFR 63.7520, 40 CFR 63.7521 and 40 CFR 63.7540
- A.16.** Initial Compliance Tests: The emissions units shall be tested to demonstrate initial compliance with the emissions standards for **PM and VE**. After January 30, 2016, **HCl, mercury, and CO** shall be added to this list for testing. The permittee may elect to perform compliance testing for HCl and Hg using monthly fuel analyses in accordance with 40 CFR 63.7515(e). The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
- A.17.** Annual Compliance Tests: During each federal fiscal year (October 1 - September 30), the permittee shall conduct compliance tests for **PM and VE** from each boiler. **NOx** testing is also required to satisfy condition A.19 below. After January 30, 2016, **HCl, mercury, and CO** shall be added to this list for testing. The permittee may elect to perform compliance testing for HCl and Hg using fuel analysis. See the following condition for an alternative to the visible emissions test when there are combined plumes. For each test run, the permittee shall record the following: steam production rate, temperature and pressure; feedwater flow rate, temperature and pressure; and, at 15 minute intervals, the scrubber pressure drop and water flow rate. For each PM test run, the heat input rate shall be calculated from the steam production data and by assuming a 55% thermal efficiency for the boiler. *NOTE #1: For HCl and Hg, if each of 12 consecutive monthly fuel analyses demonstrate 75% (percent) or less of the applicable emission limit, fuel analyses may be reduced to quarterly. If any quarterly sample exceeds 75% (percent) of the applicable emission limit, then fuel analyses must return to monthly. NOTE #2: As allowed in 40 CFR 63.7515(b), annual testing of HCl, mercury, and CO may be reduced to every three (3) years if results for at least 2 consecutive years are less than or equal to 75% (percent) of the applicable emission limits. If the testing results in emissions greater than the 75% (percent) of the applicable emissions limits, then the testing frequency shall return to annual. [40 CFR 63.7515(c)]. According to 40 CFR 63.7520(e), for each HCl and Mercury test run, the F-Factor methodology must be used to determine compliance with the emission limits. [Rules 62-213.440(1)(b), 62-296.410(3), 62-297.310(4)(a)2, 62-297.401, F.A.C., 40 CFR 63.7515 (b), (c) and (e), 40 CFR 63.7520 (e)].*
- A.18.** Combined Plumes, Alternate Method for Stack Opacity: It is possible that combined plumes from adjacent boilers will prevent a reliable determination of compliance with the opacity standard. If the permittee is unable to perform the scheduled annual visible emissions test because of combined plumes, the permittee shall record the scrubber pressure drop and water flow rate during each test run for particulate matter at 15-minute intervals. The test report shall note the attempt to perform the annual visible emissions test, the reason for not being able to complete the test and shall identify scrubber pressure drops and water flow rates recorded during each test run for particulate matter. [Rules 62-4.070(3), 62-213.440(1)(b) and 62-297.310(7)(a)4, F.A.C.]

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection A. Boilers 1 and 2**

**A.19.** The permittee shall monitor the NOx emissions from each boiler, and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of *five (5)* years following resumption of regular operations after the change. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C. The permittee shall report to the Department within 60 days after the end of each year during which such records must be generated, setting out each unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

- a. The name, address and telephone number of the owner or operator of the major stationary source;
- b. The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
- c. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
- d. Any other information that the owner or operator wishes to include in the report.

[Rule 62-212.300(1)(e), F.A.C., and Permit No. 0510003-058-AC].

**MONITORING, RECORD KEEPING AND REPORTING**

**A.20.** Monitoring Equipment: In accordance with the manufacturer's recommendations, the permittee shall install, operate and maintain equipment to continuously monitor the following parameters: the steam production (lb/hour), pressure (psig) and temperature (° F); the feed water flow rate (gpm), pressure (psig) and temperature (° F); the scrubber flow rate (gpm) and pressure drop (inches of water column); and the total distillate oil fired (gallons). Each device shall be calibrated at least annually and calibration records maintained in a written or electronic log. [Rule 62-213.440(4), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-039-AC]

**A.21.** Daily Operational Records: To demonstrate compliance with the performance requirements of this permit, the permittee shall record the following information in daily logs.

- a. *Boiler Operations*: The permittee shall record the time and date the boiler undergoes startup, shutdown, or malfunction. The permittee shall also log the time the boiler has achieved or regained normal operation. Chart recorders shall continuously record the steam pressure (psig), steam temperature (° F), and steam production rate (lb/hour).
- b. *Wet Scrubber Parameters*: The wet scrubber shall be equipped with a manometer (or equivalent) to monitor the scrubber pressure drop (inches of water column) and a flow meter to monitor the scrubber water flow rate (gpm). The permittee shall comply with the applicable CAM Plan monitoring requirements in this subsection and Appendix H of this permit.

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any. Automated recorders may be used to satisfy the monitoring requirements.

[Rule 62-210.200(PTE), F.A.C.; and Permit No. 0510003-039-AC]

**A.22.** CAM Plan, Wet Scrubbers: The permittee shall comply with the following CAM plan for each boiler.

<b>CAM Criteria</b>	<b>Indicator #1</b>	<b>Indicator #2</b>
<b>Indicator</b>	Pressure drop across scrubber	Total scrubber water flow rate
<b>Measurement Approach</b>	Manometer (or equivalent)	Flow meter

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection A. Boilers 1 and 2**

<b>Indicator Range</b>	An excursion is defined as any pressure drop <b>below 6.5 inches of water column for Boiler 1 and 5.5 inches of water column for Boiler 2</b> . Excursions trigger inspection, corrective action, record keeping and reporting.	An excursion is defined as any flow rate <b>below 200 gallons per minute for each boiler</b> . Excursions trigger inspection, corrective action, record keeping and reporting.
<b>Data Representativeness</b>	Manometer measures scrubber pressure drop with a minimum accuracy of $\pm 0.5$ inches of water column (gage).	Flow meter measures scrubber flow rate with a minimum accuracy of $\pm 5\%$ of total water flow.
<b>Verification of Operational Status</b>	NA	NA
<b>QA/QC Procedures</b>	Maintain equipment in accordance with manufacturer's recommendations.	Maintain equipment in accordance with manufacturer's recommendations.
<b>Monitoring Frequency</b>	Continuous readout	Continuous readout
<b>Data Collection Procedures</b>	Recorded at 4-hour intervals.	Recorded at 4-hour intervals.
<b>Averaging Period</b>	NA	NA

In addition, the permittee shall comply with the general CAM provisions specified in Appendix H of this permit. Automated recorders may be installed to satisfy the recording requirements. The permittee shall record any problems with operation of the wet scrubber and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.; and 40 CFR 64]

**A.23. Fuel Monitoring Provisions:** The permittee shall comply with the applicable fuel monitoring requirements specified in Appendix I (Fuel Monitoring) for each authorized fuel. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0510003-039-AC]

**A.24. Operating Records:**

- a. *Steam Production:* The permittee shall maintain records of the steam production suitable for review.
- b. *Scrubber Parameters:* The permittee shall comply with the CAM plan specified in this subsection as well as the general provisions in Appendix H of this permit.

[Rules 62-213.440(1)(b) and 62-213.440(1)(d)4, F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-039-AC]

**A.25. Test Notifications, Records and Reports - General Requirements:** Appendix C of this permit specifies the general requirements for test notifications, records and reports. [Rule 62-297.310, F.A.C.]

**OTHER APPLICABLE REQUIREMENTS**

**A.26. NESHAP Provisions:** Boilers 1 and 2 are subject to the National Emission Standards for HAPs, Subparts A and DDDDD in 40 CFR 63 for "Industrial-Commercial-Institutional Steam Generating Units". Appendix O of this permit summarizes these provisions. [Rule 62-204.800, F.A.C.]

**A.27.** Prior to January 30, 2016, and annually thereafter, for each boiler, the permittee shall conduct a tune up of the boiler as specified in 40 CFR 63.7540 as a work practice for dioxins/furans. [Table 3 to Subpart DDDDD of 40 CFR 63].

### **SECTION 3. SPECIFIC CONDITIONS**

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#### **Subsection A. Boilers 1 and 2**

- A.28.** Prior to January 30, 2016, the permittee shall conduct a one-time energy assessment for the facility, performed by a qualified energy assessor, as specified in 40 CFR 63.7510(e). [Table 3 to Subpart DDDDD of 40 CFR 63].
- A.29.** Beginning January 31, 2016, each boiler shall have installed an oxygen analyzer system meeting the requirements of 40 CFR 63, Subpart DDDDD.
- A.30.** After January 30, 2016, for each boiler, the permittee shall comply with the monitoring, installation, operation, and maintenance requirements in 40 CFR 63.7525.

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection B. Boiler 4**

This subsection addresses the following regulated emissions unit.

<b>EU No.</b>	<b>Emissions Unit Description</b>
<b>009</b>	<p>Boiler 4 is a hybrid suspension-grate boiler with a travelling grate manufactured by Foster Wheeler. Bagasse is the primary fuel and distillate oil is a startup and supplemental fuel. Particulate matter emissions are controlled by a Type D, Size 200, Joy Turbulaire wet impingement scrubber. Boiler 4 is classified as a “Hybrid Suspension Grate” (HSG) boiler under 40 CFR 63.7575.</p> <p>DESIGN INFORMATION: Boiler 4 has a maximum design steam production rate of 271,604 lb/hour at 850 degrees F. and 600 psig. Exhaust gasses exit a stack that is 150 feet tall and 8.2 feet in diameter at 160 degrees F. with an approximate flow rate of 281,000 acfm.</p>

**CAPACITY, FUELS AND PERFORMANCE RESTRICTIONS**

**B.1. Permitted Capacity:** Boiler 4 is authorized to fire bagasse as the primary fuel and distillate oil as an auxiliary fuel. Boiler 4 shall not exceed the permitted capacities specified in the following table.

<b>Averaging Period</b>	<b>Steam Pressure<sup>a</sup></b>	<b>Steam Temperature<sup>a</sup></b>	<b>Steam Production (lb/hour)</b>	<b>Heat Input<sup>b</sup> (MMBtu/hour)</b>	<b>Wet Bagasse Firing<sup>b</sup> (tons/hour)</b>
<b>1-hour Block</b>	600 psig	850° F	286,543	633	88
<b>24-hour Daily block</b>	600 psig	850° F	271,604	600	83

- a. *Steam Parameters.* Steam temperature and pressure are design parameters. Prior to modifying the steam parameters, the permittee shall notify to the Department. Such changes may require a permit modification.
- b. *Bagasse Heat Input Parameters.* The maximum heat input and bagasse firing rates are estimated based on 55% thermal efficiency of the boiler; wet bagasse containing 55% moisture and a heat content of 3600 Btu/lb; and 1215 Btu (net) per pound of steam at 600 psig and 850° F with standard feed water conditions of 900 psig and 250° F.
- c. *Distillate Oil Heat Input Parameters.* The maximum heat input rate is 326 MMBtu per hour from firing a maximum of 2417 gallons per hour of distillate oil, which produces approximately 225,000 pounds of steam per hour from the sole firing of distillate oil.

The permittee shall maintain continuous monitoring records of the steam temperature, steam pressure, and steam production rate. [Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-039-AC]

**B.2. Authorized Fuels:** Boiler 4 is authorized to fire the following fuels.

- a. *Bagasse:* The primary fuel is bagasse, which is the fibrous byproduct remaining from the sugarcane after milling.
- b. *Distillate Oil:* Any oil fired in these boilers shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. The oil firing system consists of the following general equipment: two multi-stage low-NO<sub>x</sub> burners (~ 0.17 lb/MMBtu) with flame scanners; fuel/steam valve train; steam-atomized center-fired oil gun with igniter and flame proving rod; a multi-burner wind box; a fuel oil pump set; and a burner management control system.

## SECTION 3. SPECIFIC CONDITIONS

### Subsection B. Boiler 4

- c. *On-specification Used Oil:* Incidental amounts of on-specification used oil ( $\leq 0.05\%$  sulfur by weight) generated on site may be co-fired.

[Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-039-AC]

- B.3. Restricted Operation:** Boiler 4 operates primarily during the sugarcane crop season (October through April) and the hours of operation are not limited; however, the following restrictions apply.

- a. *Annual Heat Input Rate Limit:* In addition, the total heat input to this boiler shall not exceed 2,880,000 MMBtu during any consecutive 12 months (equivalent to approximately 400,000 tons of bagasse).
- b. *Oil Firing:* The combined oil firing from Boilers 1, 2 and 4 shall not exceed 6,000,000 gallons during any consecutive 12 months.
- c. *Off Season:* Boilers 7 and 8 shall operate as the primary units to support the sugar refinery during the off season (May through September). When Boilers 7 and 8 are down for maintenance, repair or during periods of unusually low steam demand, Boiler Nos. 1, 2 and 4 may operate individually or simultaneously as backup units, but the combined total steam production shall not exceed 1,845,000 pounds of steam during any 3-hour period and 10,800,000 pounds of steam during any 24-hour period. An application to modify any of the above steam production limitations shall be accompanied by a revised air quality analysis that demonstrates compliance with the ambient air quality standards and PSD increments for the revised conditions. A request to modify these restrictions shall be accompanied by a new PSD Air Quality Analysis.

[Rules 62-210.200(PTE) and 62-212.400(PSD); and Permit Nos. PSD-FL-272B and 0510003-039-AC]

- B.4. Startup and Shutdown Plans for Mill Boilers:** Appendix K of this permit identifies the general procedures that will be used for startup and shutdown of the mill boilers including methods to minimize emissions. [Rule 62-210.700(1), F.A.C.; and Permit No. PSD-FL-272B]

### CONTROL EQUIPMENT AND TECHNIQUES

- B.5. Wet Scrubber:**

- a. To control emissions of particulate matter, the permittee shall install, operate, and maintain a Type D, Size 200 Joy Turbulaire wet impingement scrubber. In accordance with the manufacturer's recommendations, the wet scrubber control system shall be equipped with instrumentation to monitor the total pressure drop across the scrubber (inches of water column) and water flow rate (gpm). Such instrumentation shall be calibrated at least annually, properly maintained and operational at all times, except during periods of breakdown, repair or calibration. The permittee shall operate the wet scrubber in accordance with the CAM provisions of this subsection as well as the general provisions in Appendix H of this permit. [Rule 62-212.400(PSD), F.A.C.; and Permit No. PSD-FL-272B; 40 CFR 64]
- b. After January 30, 2016, the permittee shall maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one-hour average pressure drop and the lowest one hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation, pursuant to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD. [Table 4 to Subpart DDDDD of 40 CFR 63].

- B.6. Other Control Techniques:** To minimize emissions of sulfur dioxide and sulfuric acid mist, the boilers shall only fire the authorized low-sulfur fuels specified in this subsection. As provided in Appendix J of this permit, operators shall follow the good combustion practices that are generally applicable to all sugar mill boilers. In addition, operators shall use the following good combustion practices to minimize CO and VOC emissions while optimizing NO<sub>x</sub> emissions from Boiler 4.

## SECTION 3. SPECIFIC CONDITIONS

### Subsection B. Boiler 4

- a. *O<sub>2</sub> and CO Monitoring.* The permittee shall calibrate, operate, and maintain process monitors to indicate the oxygen and carbon monoxide content of the exhaust flue gas in the boiler furnace. The oxygen process monitor shall include an alarm with a set point at 1.5% (minimum) flue gas oxygen content based on a 1-hour block average. The CO process monitor shall include an alarm with a set point at 3000 ppm (maximum) flue gas CO concentration based on a 1-hour block average. Each monitor shall display both the instantaneous and the 1-hour block average. Readouts of these process monitors shall be provided in the boiler control room.
- b. *Operator Training.* All boiler operators and supervisors shall be properly trained to operate the boiler and pollution control equipment in accordance with the guidelines and procedures established by each equipment manufacturer. Power plant management shall instruct operations and maintenance personnel in proper boiler and scrubber operations so as to minimize stack emissions. This includes instruction for observing the oxygen and carbon monoxide process monitors to promote good combustion as well as adjusting operations in response to an alarm condition.
- c. *Operator Responsibilities.* The boiler operator will maintain steam rate at optimal or desired rate by controlling feed of bagasse fuel into the boiler. Combustion air to the boiler will be maintained at the highest possible level (resulting in sufficient excess air whenever feasible) in order to promote good combustion. The boiler operators shall periodically observe each process monitor and adjust the boiler operation, consistent with good combustion practices. The boiler operator, shift supervisor, and roving operator shall periodically view the smoke stack plume to visually confirm that good combustion is taking place. If an abnormal plume is observed, the operator will immediately take corrective action. The boiler operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken.
- d. *Process Monitor Alarm Response.* If the alarm is tripped for either process monitor (low oxygen content or high CO concentration), the boiler operator shall take corrective actions consistent with good combustion practices. Corrective actions include, but are not limited to, adjusting the air-to-fuel ratio, adjusting the ratio of under-fire air to over-fire air, and firing some fuel oil in place of bagasse. For each such incident, the operator shall summarize the corrective actions taken and the approximate time when operation within the target parameter was regained. It is noted that the monitored flue gas carbon monoxide content is for the purpose of determining efficient combustion and may not be representative of the actual CO emissions from the stack. Operation outside of the specified operating range for either monitored parameter is not a violation of this permit, in and of itself. However, continued or frequent operation outside of the specified operating range for either monitored parameter without corrective action may be considered circumvention of “good combustion practices”.
- e. *NO<sub>x</sub> Optimization.* NO<sub>x</sub> emissions are to be optimized by the proper application of good combustion practices. However, the practices to minimize CO and VOC emissions may result in increased NO<sub>x</sub> emissions due to more excess air and higher combustion temperatures. Therefore, the practices to optimize NO<sub>x</sub> emissions are considered to be the same practices used to minimize CO and VOC emissions, as described above.
- f. *Good Combustion Practices.* Appendix J of this permit specifies operational, maintenance and monitoring procedures that are generally applicable to all sugar mill boilers for maintaining good combustion.

[Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Permit No. PSD-FL-272B]

### EMISSION LIMITING STANDARDS

- B.7. CO Standard:** As determined by EPA Method 10, CO emissions shall not exceed 6.5 lb/MMBtu of total heat input based on a 3-run test average. [Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-272B].

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### Subsection B. Boiler 4

In addition, after January 30, 2016, CO emissions shall not exceed 2,800 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. [Table 2 to Subpart DDDDD of 40 CFR 63].

- B.8. NO<sub>x</sub> Standard:** As determined by EPA Method 7 or 7E, NO<sub>x</sub> emissions shall not exceed 0.20 lb/MMBtu of heat input from firing bagasse based on a 3-run test average. [Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-272B]
- B.9. Opacity Standard:** As determined by DEP Method 9, visible emissions shall not exceed 20% opacity based on a six-minute average, except for one two-minute period per hour that shall not exceed 40% opacity. This standard excludes water vapor. [Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-272B]
- {Permitting Note: This standard is more stringent than that imposed by Rules 62-296.410(2)(b)1, F.A.C. for carbonaceous fuel burning equipment.}*
- B.10. PM Standard:** Particulate matter emissions shall not exceed 0.15 lb/MMBtu of heat input from bagasse firing nor 0.10 lb/MMBtu of heat input from oil firing based on a 3-run test average as determined by EPA Method 5. Compliance when firing both fuels shall be determined by prorating the emissions standards based on the heat input from each fuel. [Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-272B]. In addition, after January 30, 2016, filterable PM emissions shall not exceed 4.4E-01 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].
- {Permitting Note: This standard is more stringent than that imposed by Rules 62-296.410(2)(b)2, F.A.C. for carbonaceous fuel burning equipment.}*
- B.11. SO<sub>2</sub> Standard:** Sulfur dioxide emissions shall not exceed 0.06 lb/MMBtu of heat input from bagasse firing based on a 3-run test average as determined by EPA Methods 6, 6C or 8. This standard shall also serve as a surrogate for sulfuric acid mist (SAM) emissions, which are estimated to be 0.01 lb/MMBtu of heat input from bagasse firing as determined by EPA Method 8. Emissions of SO<sub>2</sub> and SAM from fuel oil firing are limited by the sulfur content restrictions specified by this permit. [Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-272B]
- B.12. VOC Standard:** Volatile organic compound emissions shall not exceed 0.50 lb/MMBtu of total heat input (as propane) based on a 3-run test average as determined by EPA Method 18 and EPA Method 25A, modified to include a means of sample dilution. However, the sample shall not be diluted below the minimum detection limit for the flame ionization detector. Total VOC emissions shall be determined by EPA Method 25A and reported in terms of lb/MMBtu (as propane). EPA Method 18 shall be used to determine emissions of methane and reported in terms of lb/MMBtu (as propane). Emissions of regulated VOC shall be defined as the difference between the total VOC emissions and methane emissions reported in terms of lb/MMBtu (as propane). [Rule 62-212.400(BACT), F.A.C.; Permit No. PSD-FL-272B; and ASP No. 96-H-01]
- B.13. HCl Standard:** After January 30, 2016, HCl emissions shall not exceed 2.2E-02 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63]
- B.14. Mercury Standard:** After January 30, 2016, Mercury emissions shall not exceed 5.7E-06 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63]

### TESTING

- B.15. General Testing Requirements:** The boilers are subject to the applicable provisions of Appendix C, which specifies the general requirements for test frequencies, test notifications, sampling facilities, test procedures, and test reports. [Rule 62-297.310, F.A.C.]
- B.16. Test Methods:** If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods.

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection B. Boiler 4**

<b>EPA Method</b>	<b>Description of Method and Comments</b>
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Notes: Methods shall be performed as necessary to support other methods.
5	Determination of PM Emissions from Stationary Sources
6 or 6C	Measurement of SO2 Emissions (Instrumental)
7 or 7E	Measurement of NOx Emissions (Instrumental)
8	Determination of SAM and SO2 Emissions from Stationary Sources
9	Visual Determination of the Opacity. The minimum observation period shall be no less than 60 minutes.
10	Measurement of CO Emissions (Instrumental). The CO test method shall be based on a continuous sampling train. See Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography). Optionally, EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A; otherwise, all THC emissions measured by EPA Method 25A will be assumed to be regulated VOC.
19	Calculation Method for NOx, PM, and SO2 Emission Rates. Method shall be performed as necessary to support other methods.
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization). Method may be modified to include a means of sample dilution. However, the sample shall not be diluted below the minimum detection limit for the flame ionization detector.
26 or 26A	Hydrogen chloride (HCl), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
29, 30A or 30B	Mercury (Hg), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

The above methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.401, F.A.C.; 40 CFR 60, Appendix A; and Permit No. PSD-FL-272B]

- B.17.** After January 30, 2016, for demonstrating compliance with emission limits for PM, CO, HCl and Hg pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall:
- a. Comply with the performance testing requirements in Table 5 to Subpart DDDDD of 40 CFR 63. Performance testing may include fuel analysis for HCl and Hg, if fuel analysis is the selected method of compliance for these pollutants.
  - b. Comply with the initial compliance test requirements in 40 CFR 63.7510 and 40 CFR 63.7530., and
  - c. Conduct annual performance tests, fuel analysis, and tune-ups in accordance with 40 CFR 63.7515, 40 CFR 63.7520, 40 CFR 63.7521 and 40 CFR 63.7540
- B.18.** Combined Plumes, Alternate Method for Stack Opacity: It is possible that combined plumes from adjacent boilers will prevent a reliable determination of compliance with the opacity standard. If the permittee is unable to perform the scheduled annual visible emissions test because of combined plumes, the permittee shall record the scrubber pressure drop and water flow rate during each test run for particulate matter at 15-minute intervals. The test report shall note the attempt to perform the annual visible emissions test, the reason for not being able to complete the test and shall identify scrubber pressure drops and water flow

## SECTION 3. SPECIFIC CONDITIONS

### Subsection B. Boiler 4

rates recorded during each test run for particulate matter. [Rules 62-4.070(3), 62-213.440(1)(b) and 62-297.310(7)(a)4, F.A.C.]

- B.19. Annual Compliance Tests:** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct annual performance tests for CO, NO<sub>x</sub>, PM, VOC and opacity to demonstrate compliance with the emissions standards specified in this subsection. All CO and NO<sub>x</sub> tests shall be conducted concurrently. [Rules 62-4.070(3), 62-212.400(PSD), and 62-297.310(7)(a)4, F.A.C.; and Permit No. PSD-FL-272B]. After January 30, 2016, HCl and mercury shall be added to this list for testing. The permittee may elect to perform compliance testing for HCl and Hg using fuel analysis. [40 CFR 63.7515(b), (c) and (e), 40 CFR 63.7520(e)].
- B.20. Compliance Tests Prior to Renewal:** The permittee shall conduct tests for CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOC, visible emissions, HCl, mercury, and boiler thermal efficiency to demonstrate compliance with the emissions standards and conditions specified in this subsection.
- All CO and NO<sub>x</sub> tests shall be conducted concurrently.
  - During each SO<sub>2</sub> performance test, the permittee shall sample and analyze the bagasse fuel for sulfur content. The sulfur content shall be used to calculate the potential uncontrolled SO<sub>2</sub> emissions as well as the control efficiency during the test. This information shall be submitted in the test report.
  - The boiler thermal efficiency shall be determined with the ASME boiler efficiency short form method or other equivalent method. This test shall demonstrate, in part, adherence to the maintenance provisions of the good combustion practices plan. If the test for boiler thermal efficiency indicates an efficiency of less than 50%, the permittee shall begin conducting annual tests. If maintenance and repair result in regaining a boiler thermal efficiency of 50% or more, testing may revert back to the federal fiscal year prior to renewal.

[Rules 62-212.400(PSD), and 62-297.310(7)(a)4, F.A.C.; and Permit No. PSD-FL-272B, 40 CFR 63.7515(b), (c) and (e), 40 CFR 63.7520(e)]

- B.21. Tests After Substantial Modifications:** Additional performance tests may be required after any substantial modification and appropriate shake-down period of the boiler or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4, F.A.C.; and Permit No. PSD-FL-272B]
- B.22. Monitoring of Test Parameters:** During any required test, the permittee shall monitor and record the scrubber pressure drop, the scrubber water flow rate, the flue gas oxygen content, and the flue gas carbon monoxide content at 15 minute intervals. The permittee shall monitor and record the steam production rate, steam temperature, steam pressure, feed water flow rate, feed water temperature, feed water pressure, and oil flow rate and calculate and record the bagasse consumption rate and the heat input rate for each run. For each test run, the heat input rate shall be calculated from the steam production data and by assuming a 55% thermal efficiency for the boiler. [Rule 62-297.310(5), F.A.C.; and Permit No. PSD-FL-272B]

### MONITORING, RECORD KEEPING AND REPORTING

- B.23. Monitoring Equipment:** In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain all monitoring equipment including: steam flow meters, steam integrators, strip chart recorders, pressure gages, manometers, scrubber water flow meters, fuel oil flow meters, and all other monitoring devices used to demonstrate compliance with the conditions of this permit. Each device shall be calibrated at least annually. All calibrations and repairs shall be recorded as part of the Daily Operational Records. [Rule 62-212.400(PSD), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-039-AC]
- B.24. Daily Operational Records:** To demonstrate compliance with the performance requirements of this permit, the permittee shall record the following information in daily logs.

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection B. Boiler 4**

- a. *Boiler Operations:* The permittee shall record the time and date the boiler undergoes startup, shutdown, or malfunction. The permittee shall also log the time the boiler has achieved or regained normal operation. Chart recorders shall continuously record the steam pressure (psig), steam temperature (° F) and steam production rate (pounds per hour). Alternatively, the permittee may install an automated device to record these parameters.
- b. *Flue Gas Parameters:* The permittee shall record the oxygen and carbon monoxide contents of flue gas once normal operation is established after startup and at least once per hour of operation. Alternatively, the permittee may install an automated device to record these parameters.
- c. *Wet Scrubber Parameters:* Once normal operation is established after startup, the permittee shall record the scrubber pressure drop (inches of water column) and water flow rate (gpm). Thereafter, the permittee shall record this information in accordance with the CAM provisions in this subsection and the general provisions in Appendix H of this permit. Alternatively, the permittee may install an automated device to record these parameters.
- d. *Calibrations:* The permittee shall record in the daily log any monitoring equipment calibrations and repairs.
- e. *Daily Summary:* For each day of operation, the permittee shall calculate and record the following by the end of the next workday.
  - (1) Operation: hours/day;
  - (2) Steam production rate: lb/day and lb/hour (daily average);
  - (3) Heat input: MMBtu/day and MMBtu/hour (daily average); and
  - (4) Fuel Oil Consumption: gallons/day.

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any.

[Rules 62-212.400(PSD), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-039-AC]

- B.25.** Monthly Operations Summary: Within ten calendar days of the end of each month, the permittee shall calculate and record the following information in a written or electronic log to demonstrate compliance with the performance requirements of this permit: hours of operation; steam production rate (lb); heat input rate (MMBtu); wet bagasse consumption rate (tons); total oil fired (gallons); and for any monitored parameters with missing records, the data availability (percent) for the month. These records shall indicate the amounts for the previous month and the consecutive 12-month rolling total. All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any. [Rules 62-212.400(BACT), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-039-AC]
- B.26.** Fuel Monitoring Provisions: The permittee shall comply with the applicable fuel monitoring requirements specified in Appendix I (Fuel Monitoring) for each authorized fuel. [Rules 62-210.200(PTE), F.A.C.; and Permit No. 0510003-039-AC]
- B.27.** CAM Plan for Wet Scrubber: The permittee shall comply with the following CAM plan requirements as well as the general provisions specified in Appendix H of this permit.

<b>CAM Criteria</b>	<b>Indicator #1</b>	<b>Indicator #2</b>
<b>Indicator</b>	Pressure drop across scrubber	Total scrubber water flow rate

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection B. Boiler 4**

<b>CAM Criteria</b>	<b>Indicator #1</b>	<b>Indicator #2</b>
<b>Measurement Approach</b>	Manometer (or equivalent)	Flow meter
<b>Indicator Range</b>	An excursion is defined as any pressure drop <b>below 6.0 inches of water column</b> . Excursions trigger inspection, corrective action, record keeping and reporting.	An excursion is defined as any flow rate <b>below 220 gallons per minute</b> . Excursions trigger inspection, corrective action, record keeping and reporting.
<b>Data Representativeness</b>	Manometer measures scrubber pressure drop with a minimum accuracy of $\pm 0.5$ inches of water column (gage).	Flow meter measures scrubber flow rate with a minimum accuracy of $\pm 5\%$ of total water flow.
<b>Verification of Operational Status</b>	NA	NA
<b>QA/QC Procedures</b>	Maintain equipment in accordance with manufacturer's recommendations.	Maintain equipment in accordance with manufacturer's recommendations.
<b>Monitoring Frequency</b>	Continuous readout	Continuous readout
<b>Data Collection Procedures</b>	Recorded at 4 hour intervals.	Recorded at 4 hour intervals.
<b>Averaging Period</b>	NA	NA

In addition, the permittee shall comply with the general CAM provisions specified in Appendix H of this permit. Automated recorders may be installed to satisfy the recording requirements. The permittee shall record any problems with operation of the wet scrubber and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.; and 40 CFR 64]

- B.28.** Test Notifications, Records and Reports - General Requirements: Appendix C of this permit specifies the general requirements for test notifications, records and reports. [Rule 62-297.310, F.A.C.]

**OTHER APPLICABLE REQUIREMENTS**

- B.29.** NESHAP Provisions: Boiler 4 is subject to the National Emission Standards for HAPs, Subparts A and DDDDD in 40 CFR 63 for "Industrial-Commercial-Institutional Steam Generating Units). Appendix O of this permit summarizes these provisions. [Rule 62-204.800, F.A.C.]
- B.30.** Prior to January 30, 2016, and annually thereafter, for each boiler, the permittee shall conduct a tune up of the boiler as specified in 40 CFR 63.7540 as a work practice for dioxins/furans. [Table 3 to Subpart DDDDD of 40 CFR 63].
- B.31.** Prior to January 30, 2016, the permittee shall conduct a one-time energy assessment for the facility, performed by a qualified energy assessor, as specified in 40 CFR 63.7510(e). [Table 3 to Subpart DDDDD of 40 CFR 63].
- B.32.** Beginning January 31, 2016, each boiler shall have installed an oxygen analyzer system meeting the requirements of 40 CFR 63, Subpart DDDDD.
- B.33.** After January 30, 2016, for each boiler, the permittee shall comply with the monitoring, installation, operation, and maintenance requirements in 40 CFR 63.7525.

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection C. Boiler 7**

This subsection addresses the following regulated emissions unit.

EU No.	Emissions Unit Description
014	<p>Boiler 7 is an Alpha Conal Model No. ATT-203-18 hybrid suspension-grate boiler with a vibrating grate. It fires primarily bagasse with distillate oil as a supplemental and alternate fuel. Particulate matter emissions are controlled by two (2) parallel wet sand separators followed by an ABB electrostatic precipitator. Boiler 7 is classified as a “Hybrid Suspension Grate” (HSG) boiler under 40 CFR 63.7575.</p> <p>DESIGN INFORMATION: Boiler 7 has a maximum steam production rate of 385,000 pounds per hour at 750 degrees F. and 600 psig. Exhaust gases exit a stack that is 8.0 feet in diameter and 225 feet tall at 312 degrees F. with an average flow rate of 296,657 acfm.</p>

**CAPACITY, FUELS AND PERFORMANCE RESTRICTIONS**

C.1. Permitted Capacity: Boiler 7 is authorized to fire bagasse as the primary fuel with wood chips and distillate oil used as auxiliary fuels. Boiler 7 shall not exceed the permitted capacities specified in the following table.

Averaging Period	Steam Pressure <sup>a</sup>	Steam Temperature <sup>a</sup>	Steam Production (lb/hour)	Heat Input <sup>b</sup> (MMBtu/hour)	Wet Bagasse Firing <sup>b</sup> (tons/hour)
1-hour block	600 psig	750° F	385,000	812	113
24-hour daily block	600 psig	750° F	350,000	738	103

- a. *Steam Parameters.* Steam temperature and pressure are design parameters. Changes to these parameters shall be reported to the Department and may require a permit modification.
- b. *Bagasse Heat Input Parameters.* The maximum heat input and bagasse firing rates are estimated based on 55% thermal efficiency of the boiler; wet bagasse containing 55% moisture and a heat content of 3600 Btu/lb; and 1160 Btu (net) per pound of steam at 600 psig and 750° F with standard feed water conditions of 900 psig and 250° F.
- c. *Distillate Oil Heat Input Parameters.* The maximum distillate oil firing rate is 2417 gallons per hour, which produces approximately 225,000 pounds of steam per hour from the sole firing of distillate oil at a heat input rate of 326 MMBtu per hour.
- d. *Wood Chip Burning Parameters.* Wood chips shall be fired at a heat input rate of no more than 369 MMBtu per hour based on a 24-hour daily block average. The heat input rate from firing wood chips shall not exceed 1,616,220 MMBtu during any consecutive 12 months (equivalent to 25% of the maximum annual heat input rate).

The permittee shall maintain continuous monitoring records of the steam temperature, steam pressure, and steam production rate.

[Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; EPA alternative opacity monitoring plan approval dated February 1, 2008; and Permit Nos. PSD-FL-208A, 0510003-018-AC and PSD-FL-389A]

## SECTION 3. SPECIFIC CONDITIONS

### Subsection C. Boiler 7

**C.2. Authorized Fuels:** Boiler 7 is authorized to fire the following fuels.

- a. *Bagasse:* The primary fuel is bagasse, which is the fibrous byproduct remaining from the sugarcane after milling.
- b. *Wood Chips:* Wood chips may be fired as a startup and restricted auxiliary fuel. Wood chips shall consist of clean dry wood and vegetative materials. The wood chips shall be substantially free of plastics, rubber, glass, painted wood, chemically treated wood, and non-combustible materials. The firing of any household garbage, hazardous wastes, or toxic materials is prohibited.
- c. *Distillate Oil:* Any oil fired in this boiler shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. The oil firing system consists of multi-stage low-NO<sub>x</sub> burners and a burner management control system.
- d. *On-specification Used Oil:* Incidental amounts of on-specification used oil ( $\leq 0.05\%$  sulfur by weight) generated on site may be co-fired.

[Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Permit Nos. PSD-FL-208A, 0510003-029-AC and PSD-FL-389A]

**C.3. Restricted Operation:** Boiler 7 operates primarily during the sugarcane crop season (October through April) and may operate during the off season (May through September) to support the sugar refinery. The hours of operation are not limited (8,760 hours per year); however, no more than 4,500,000 gallons of distillate oil shall be fired during any consecutive 12-month period.

[Rules 62-210.200(PTE) and 62-212.400(12), F.A.C.; 40 CFR 60.44b(l)(1); and Permit Nos. PSD-FL-208A and 0510003-029-AC]

*{Permitting Note: The annual oil firing limit ensures that the annual capacity factor (as defined in 40 CFR 60.41b) remains below 10% and avoids applicability of the NO<sub>x</sub> standard in accordance with 40 CFR 60.44b(l)(1).}*

**C.4. Startup and Shutdown Plans for Mill Boilers:** Appendix K of this permit identifies the general procedures that will be used for startup and shutdown of the mill boilers including methods to minimize emissions. [Rules 62-4.070(3) and 62-210.700(1), F.A.C.]

### CONTROL EQUIPMENT AND TECHNIQUES

**C.5. Sand Separators:** The permittee shall operate and maintain two wet sand separators to remove large particles prior to the electrostatic precipitator. [Rule 62-210.200(PTE); and Permit No. PSD-FL-208A]

**C.6. Electrostatic Precipitator:**

- a. The permittee shall operate and maintain an electrostatic precipitator to achieve the PM standards specified in this subsection. The original design control efficiency is 98%. Exhaust from the outlet stack shall be maintained at a minimum of 225 feet in height. [Rule 62-210.200(PTE); and Permit No. PSD-FL-208A]
- b. After January 30, 2016, the permittee shall maintain the 30-day rolling average total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to 40 CFR 63.7530(b) and Table 7 to Subpart DDDDD of 40 CFR 63.

**C.7. Other Control Techniques:**

- a. *Low-Sulfur Fuels:* To minimize emissions of sulfur dioxide and sulfuric acid mist, the boilers shall only fire the authorized low-sulfur fuels specified in this subsection.

## SECTION 3. SPECIFIC CONDITIONS

### Subsection C. Boiler 7

- b. *Good Combustion Practices:* Appendix J of this permit specifies operational, maintenance and monitoring procedures that are generally applicable to all sugar mill boilers for maintaining good combustion.

[Rules 62-210.200(PTE) and 62-212.400(PSD), F.A.C.; and Permit No. PSD-FL-208A]

#### EMISSION LIMITING STANDARDS

The “lb/hour” standards in the following conditions are based on the maximum 24-hour daily block average maximum heat input rate.

- C.8. CO Standards:** As determined by EPA Method 10, CO emissions shall not exceed 0.70 lb/MMBtu of heat input, 516 lb/hour and 2262 tons/year when firing bagasse. [Permit No. PSD-FL-208A]. In addition, after January 30, 2016, CO emissions shall not exceed 2,800 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. [Table 2 to Subpart DDDDD of 40 CFR 63].
- C.9. NO<sub>x</sub> Standards:** As determined by EPA Methods 7 or 7E, NO<sub>x</sub> emissions shall not exceed 0.25 lb/MMBtu of heat input, 185 lb/hour and 809 tons/year when firing bagasse. As determined by EPA Method 7E, NO<sub>x</sub> emissions shall not exceed 0.31 lb/MMBtu of heat input and 228.8 lb/hour when firing wood chips alone or in combination with other fuels. As determined by EPA Methods 7 or 7E, NO<sub>x</sub> emissions shall not exceed 0.20 lb/MMBtu of heat input when firing distillate oil. No periodic testing for oil firing is required. [Rules 62-204.800, and 62-212.400(BACT), F.A.C.; 40 CFR 60.43b(f); and Permit Nos. PSD-FL-208A and 0510003-029-AC]
- C.10. Opacity Standard:** As determined by EPA Method 9, visible emissions shall not exceed 20% opacity based on a 6-minute average except for one 6-minute period per hour that shall not exceed 27% opacity. This standard excludes water vapor and applies when firing any combinations of fuels. [Rules 62-204.800, and 62-212.400(BACT), F.A.C.; 40 CFR 60.43b(f); and Permit Nos. PSD-FL-208A, 0510003-029-AC and PSD-FL-389A]
- C.11. PM/PM<sub>10</sub> Standard:** As determined by EPA Method 5 or 17, PM emissions shall not exceed 0.03 lb/MMBtu of heat input, 22 lb/hour and 97 tons/year when firing any combinations of fuels. *{Permitting Note: All PM shall be assumed to be PM<sub>10</sub>.}* [Rules 62-204.800, 62-296.410 and 62-212.400(BACT), F.A.C.; 40 CFR 60.43b; and Permit Nos. PSD-FL-208A, 0510003-029-AC and PSD-FL-389A]. In addition, after January 30, 2016, filterable PM emissions shall not exceed 4.4E-01 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].
- C.12. SAM Standards:** As determined by EPA Method 8, SAM emissions shall not exceed 0.017 lb/MMBtu of heat input, 13 lb/hour and 55 tons/year when firing bagasse. Compliance with the fuel sulfur specifications and SO<sub>2</sub> emissions limits shall serve as indicators of compliance. No periodic tests are required. [Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-208A]
- C.13. SO<sub>2</sub> Standards:** As determined by EPA Methods 6, 6C or 8, SO<sub>2</sub> emissions shall not exceed 0.17 lb/MMBtu, 125 lb/hour and 550 tons/year when firing any combinations of fuels. [Rules 62-204.800, 62-296.410 and 62-212.400(BACT), F.A.C.; 40 CFR 60.43b; and Permit Nos. PSD-FL-208A and 0510003-029-AC]
- C.14. VOC Standards:** As determined by EPA Methods 18 and 25 or 25A, VOC emissions shall not exceed 0.212 lb/MMBtu of heat input, 157 lb/hour and 685 tons/year when firing bagasse. [Rule 62-212.400(BACT), F.A.C. and Permit Nos. PSD-FL-208A and 0510003-029-AC]
- C.15. HCl Standard:** After January 30, 2016, HCl emissions shall not exceed 2.2E-02 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63]
- C.16. Mercury Standard:** After January 30, 2016, Mercury emissions shall not exceed 5.7E-06 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63]

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection C. Boiler 7**

**TESTING**

**C.17. Test Methods:** If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods.

<b>EPA Method</b>	<b>Description of Method and Comments</b>
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5 or 17	Determination of PM Emissions from Stationary Sources
6 or 6C	Measurement of SO <sub>2</sub> Emissions (Instrumental)
7 or 7E	Measurement of NO <sub>x</sub> Emissions (Instrumental)
8	Determination of SAM and SO <sub>2</sub> Emissions from Stationary Sources
9	Visual Determination of the Opacity
10	Measurement of CO Emissions (Instrumental). The CO test method shall be based on a continuous sampling train. See Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography). Optionally, EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A; otherwise, all THC emissions measured by EPA Method 25A will be assumed to be regulated VOC.
19	Calculation Method for NO <sub>x</sub> , PM, and SO <sub>2</sub> Emission Rates. Method may be used to supplement other methods.
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization). Method may be modified to include a means of sample dilution. However, the sample shall not be diluted below the minimum detection limit for the flame ionization detector.
26 or 26A	Hydrogen chloride (HCl), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
29, 30A or 30B	Mercury (Hg), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

The above methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.401, F.A.C.; 40 CFR 60, Appendix A; and Permit Nos. PSD-FL-272B and 0510003-018-AC]

**C.18.** After January 30, 2016, for demonstrating compliance with emission limits for PM, CO, HCl and Hg pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall:

- a. Comply with the performance testing requirements in Table 5 to Subpart DDDDD of 40 CFR 63. Performance testing may include fuel analysis for HCl and Hg, if fuel analysis is the selected method of compliance for these pollutants.
- b. Comply with the initial compliance test requirements in 40 CFR 63.7510 and 40 CFR 63.7530., and
- c. Conduct annual performance tests, fuel analysis, and tune-ups in accordance with 40 CFR 63.7515, 40 CFR 63.7520, 40 CFR 63.7521 and 40 CFR 63.7540

## SECTION 3. SPECIFIC CONDITIONS

### Subsection C. Boiler 7

- C.19. General Testing Requirements:** The boilers are subject to the applicable provisions of Appendix C, which specifies the general requirements for test frequencies, test notifications, sampling facilities, test procedures, and test reports. [Rule 62-297.310, F.A.C.]
- C.20. Annual Compliance Tests:** During each federal fiscal year (October 1 - September 30), the permittee shall conduct performance tests when firing bagasse for CO, NO<sub>x</sub>, PM, VOC and opacity to demonstrate compliance with the applicable standards. If wood chips are fired during the federal fiscal year, separate compliance tests when firing wood are required for nitrogen oxides, particulate matter and visible emissions. Since bagasse is the worst-case fuel with regard to particulate matter, annual tests for particulate matter and visible emissions when firing bagasse may also be used to demonstrate compliance with the standards for firing wood chips. Tests for PM and opacity shall be conducted simultaneously unless approval is obtained from the Compliance Authority. [Rule 62-297.310(7)(a), F.A.C. and Permit Nos. PSD-FL-208A, 0510003-029-AC and PSD-FL-389A]. After January 30, 2016, HCl and mercury shall be added to this list for testing. The permittee may elect to perform compliance testing for HCl and Hg using fuel analysis. [40 CFR 63.7515(b), (c) and (e), 40 CFR 63.7520(e)].
- C.21. Renewal Compliance Tests:** The permittee shall conduct performance tests when firing bagasse for CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOC, opacity, HCl, and mercury to demonstrate compliance with the applicable standards prior to renewing the Title V permit (at least every 5 years). Tests for PM and opacity shall be conducted simultaneously unless approval is obtained from the Compliance Authority. Before conducting any emissions tests for renewal, the permittee shall determine the thermal efficiency of the boiler using the ASME short-form or equivalent procedure. The results of the emissions and thermal efficiency tests shall be provided with the application to renew the operation permit. [Rule 62-297.310(7)(a), F.A.C. and Permit No. 0510003-029-AC, 40 CFR 63.7515(b), (c) and (e), 40 CFR 63.7520(e)]
- C.22. Parametric Monitoring for Tests:** The permittee shall continuously monitor and record the oil flow rate and production rate, temperature and pressure of the steam. At no less than 15-minute intervals, permittee shall record the: flow rate to the wet cyclones; the flow rate, temperature and pressure of the feed water; and the amperage and voltage to the electrostatic precipitator. For each test run, the permittee shall monitor and record the bagasse firing rate. For each test run, the permittee shall calculate and record: the heat input rate based on the thermal efficiency and the steam and feedwater parameters; and the total power input to the electrostatic precipitator based on the monitored amperage and voltage. If the most recent thermal efficiency test indicates a thermal efficiency below 50%, the test results shall be used to determine the heat input rate from firing bagasse; otherwise, a default value of 55% may be used. [Rule 62-297.310(5), F.A.C.; and Permit No. PSD-FL-208A]

### MONITORING, RECORD KEEPING AND REPORTING

- C.23. Monitoring Equipment:** In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate, and maintain the monitoring devices used to demonstrate compliance with the conditions of this permit, including: flow meters with integrators, pressure monitors, temperature monitors, strip chart recorders, oil flow meters, etc. Each device shall be calibrated at least annually. [Rule 62-212.400(PSD), F.A.C.; and Permit No. PSD-FL-208A]
- C.24. Daily Operational Records:** To demonstrate compliance with the performance requirements of this permit, the permittee shall record the following information in daily logs.
- Boiler Operations:*** Chart recorders shall continuously record the steam pressure (psig), steam temperature (° F), and steam production rate (pounds per hour). Alternatively, the permittee may install an automated device to record these parameters.
  - ESP Parameters:*** The permittee shall maintain records of the amperage, voltage and total secondary power input to the electrostatic precipitator. The permittee shall comply with the CAM plan specified in this subsection as well as the general provisions in Appendix H of this permit.

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection C. Boiler 7**

- c. *Wood Chip Usage Recordkeeping.* For each 24-hour block of operation (midnight to midnight), the permittee shall maintain records of the amount of wood chips fired to demonstrate compliance with the heat input restrictions of this permit.
- d. *Wood Chips Heat Input Recordkeeping.* For each 24-hour block of operation (midnight to midnight), the permittee shall calculate and record the heat input rate from wood chips.

All records shall indicate the date and time the information was recorded, and in the case of manual recordings, the name of the person who recorded the information. For data that indicates operation outside of the specified permitted levels of the above parameters, the permittee shall record a summary of the incident and any corrective actions taken to regain proper operation, if any.

[Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-389A]

- C.25. Alternative Opacity Monitoring Plan: In lieu of the continuous opacity monitoring requirements of 40 CFR 60.48b, EPA Region 4 approved an alternative opacity monitoring plan as specified in the CAM provisions of this subsection. The Department may require the permittee to install and operate a continuous opacity monitoring system for failure to regularly comply with the opacity standard. [Rule 62-212.400(PSD), F.A.C.; 40 CFR 60.13(i) and 60.48b(a); Permit Nos. PSD-FL-208A and PSD-FL-389A; and EPA approval dated February 1, 2008]
- C.26. Monthly Operations Summary: Within ten calendar days of the end of each month, the permittee shall calculate and record the following information in a written or electronic log to demonstrate compliance with the performance requirements of this permit: hours of operation; steam production rate (lb); heat input rate (MMBtu); wet bagasse consumption rate (tons); and total oil fired (gallons). These records shall indicate the amounts for the previous month and the consecutive 12-month rolling total. [Rule 62-212.400(PSD), F.A.C.; and Permit No. PSD-FL-208A]
- C.27. Fuel Monitoring Requirements: The permittee shall comply with the applicable fuel monitoring requirements specified in Appendix I (Fuel Monitoring) for each authorized fuel. [Rule Permit No. 0510003-029-AC]
- C.28. Power Production: The permittee shall maintain records of the amount of any electrical power (MW) and the percentage of electrical power output distributed to any utility power distribution system. [Permit No. PSD-FL-208A]
- C.29. CAM Plan, ESP: The permittee shall comply with the following CAM plan.

<b>CAM Criteria</b>	<b>Indicator #1</b>
<b>Indicator</b>	Total ESP secondary power input
<b>Measurement Approach</b>	Total secondary power input is calculated from the secondary current and voltage to each ESP field as monitored with an amp/volt meter.
<b>Indicator Range</b>	An excursion is defined as any total secondary power input <b>below 38 kW</b> . (3-hour block average). Excursions trigger inspection, corrective action, record keeping and reporting.
<b>Data Representativeness</b>	Accuracy of amp/volt meter is $\pm 1$ milliampere (mA) and $\pm 1$ kilovolt (kV)
<b>Verification of Operational Status</b>	NA
<b>QA/QC Procedures</b>	Maintain equipment in accordance with manufacturer's recommendations.
<b>Monitoring</b>	Continuous monitoring of secondary current and voltage to each ESP field

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection C. Boiler 7**

<b>CAM Criteria</b>	<b>Indicator #1</b>
<b>Frequency</b>	
<b>Data Collection Procedures</b>	Based on continuous monitoring data, calculate and record a 3-hour block average.
<b>Averaging Period</b>	3-hour block average

In addition, the permittee shall comply with the general CAM provisions specified in Appendix H of this permit. The permittee shall record any problems with operation of the ESP and corrective actions taken in the Daily Operational Records required by this permit.

[Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.; 40 CFR 64; and EPA Region 4 approval dated February 1, 2008]

- C.30.** Test Notifications, Records and Reports - General Requirements: Appendix C of this permit specifies the general requirements for test notifications, records and reports. For each test run, the report shall also indicate the total heat input rate, the heat input rate from firing each fuel, the steam production rate, and the secondary power input to the electrostatic precipitator. [Rule 62-297.310, F.A.C. and Permit No. PSD-FL-389A]
- C.31.** Semiannual Report - Oil Firing: Within 30 days following each semiannual period (January to June and July to December), the permittee shall submit to the Compliance Authority: the distillate oil consumption for each month and the 12-month rolling total (gallons); and the certified vendor fuel analysis for each delivery of distillate oil during the reporting period. [40 CFR 60.49b(w)]

**OTHER APPLICABLE REQUIREMENTS**

- C.32.** NSPS Provisions: Boiler 7 is subject to the New Source Performance Standards of Subparts A and Db in 40 CFR 60 for “Industrial-Commercial-Institutional Steam Generating Units”. Appendix L of this permit summarizes these provisions. [Rule 62-204.800, F.A.C.]
- C.33.** NESHAP Provisions: Boiler 7 is subject to 40 CFR 63 Subparts A and DDDDD, General Conditions and Industrial, Commercial, and Institutional Boilers and Process Heaters. Appendix O of this permit summarizes these provisions. [Rule 62-204.800, F.A.C.; 40 CFR 63 Subparts A and DDDDD]
- C.34.** Prior to January 30, 2016, and annually thereafter, for each boiler, the permittee shall conduct a tune up of the boiler as specified in 40 CFR 63.7540 as a work practice for dioxins/furans. [Table 3 to Subpart DDDDD of 40 CFR 63].
- C.35.** Prior to January 30, 2016, the permittee shall conduct a one-time energy assessment for the facility, performed by a qualified energy assessor, as specified in 40 CFR 63.7510(e). [Table 3 to Subpart DDDDD of 40 CFR 63].
- C.36.** Beginning January 31, 2016, each boiler shall have installed an oxygen analyzer system meeting the requirements of 40 CFR 63, Subpart DDDDD.
- C.37.** After January 30, 2016, for each boiler, the permittee shall comply with the monitoring, installation, operation, and maintenance requirements in 40 CFR 63.7525.

SECTION 3. SPECIFIC CONDITIONS

Subsection D. Boiler 8

This subsection addresses the following regulated emissions unit.

ID	Emission Unit Description
028	<p>Boiler 8 is a membrane-wall hybrid suspension-grate boiler with travelling grate, over-fire air, rotating feeders, and pneumatic spreaders. The primary fuel is bagasse. Wood chips are fired as an alternate or supplemental fuel. Distillate oil is fired as a restricted alternate fuel for startup and supplemental uses. Bottom ash is removed to ash ponds by a submerged conveyor. Particulate matter is controlled by cyclone collectors followed by an ESP. Nitrogen oxides are reduced by a urea-based selective non-catalytic reduction system. Emissions of carbon monoxide and nitrogen oxides are monitored and recorded by continuous emissions monitoring systems. (CEMS). Boiler 8 is classified as a “Hybrid Suspension Grate” (HSG) boiler under 40 CFR 63.7575.</p> <p>DESIGN INFORMATION: At a maximum design heat input rate of 1,077 MMBtu per hour (24-hour daily block average), the maximum continuous steam production is 575,000 pounds per hour (24-hour daily block average) of superheated steam at 600 psig and 750 degree F. for use in the sugar mill and refinery. Exhaust gases exit a stack with a diameter of 10.9 feet and a maximum height of 199 feet at 255 degree F. At capacity, the approximate design flow rate is 437,000 acfm at 5.5% oxygen (245,258 dscfm at 7% oxygen).</p>

CAPACITY, FUELS AND PERFORMANCE RESTRICTIONS

D.1. Boiler Capacities and Restrictions: Rotating feeders, pneumatic spreaders, a traveling grate, and overfire air are used to fire the primary fuel of bagasse and/or wood chips. Low-NO<sub>x</sub> burners are used to fire distillate oil as a restricted alternate fuel for startup and supplemental uses. The maximum oil firing rate is 4161 gallons per hour (equivalent to 562 MMBtu per hour). With a thermal efficiency of 62%, Boiler 8 is designed to generate 633,000 pounds per hour from a heat input rate of 1185 MMBtu per hour (1-hour averages). The hours of operation are not restricted (8,760 hours/year). Boiler 8 shall not exceed the following operational levels.

- a. *Daily Steam Production Limit.* 13,800,000 pounds of steam per day (equivalent to 575,000 pounds of steam per hour and 1077 MMBtu per hour based on 24-hour daily block averages);
- b. *Annual Steam Production Limit.* 3.6135 x 10<sup>+09</sup> pounds of steam per consecutive 12 months (equivalent to 6,767,100 MMBtu per year);
- c. *Annual Heat Input Limit for Wood Chips.* 2,830,356 MMBtu of heat input per consecutive 12 months from firing wood chips (equivalent to 30% of the maximum annual heat input rate);
- d. *Daily Distillate Oil Limit.* 99,864 gallons of distillate oil per day (equivalent to 13,488 MMBtu per day); and
- e. *Annual Distillate Oil Limit.* 6,073,600 gallons of distillate oil per consecutive 12 months (equivalent to 819,936 MMBtu per year).

[Rules 62-212.400(PSD) and 62-210.200(PTE), F.A.C.; NSPS Subpart Db; EPA alternative opacity monitoring plan approval dated May 13, 2008; and Permit No. PSD-FL-333D]

{Permitting Note: The short-term restrictions form the basis of the Air Quality Analysis. The restriction on annual steam production is a surrogate for heat input and allowed the project to avoid PSD applicability for CO emissions. The annual oil firing restriction results in an annual capacity factor of 10% or less, which avoids specific requirements in NSPS Subpart Db.}

D.2. Authorized Fuels: Boiler 8 is authorized to fire the following fuels.

- a. *Bagasse:* The primary fuel is bagasse, which is the fibrous byproduct remaining from the sugarcane after milling.

## SECTION 3. SPECIFIC CONDITIONS

### Subsection D. Boiler 8

- b. *Wood Chips*: Wood chips may be fired as a startup and auxiliary fuel. Wood chips shall consist of clean dry wood and vegetative materials. The wood chips shall be substantially free of plastics, rubber, glass, painted wood, chemically treated wood, and non-combustible materials. The firing of any household garbage, hazardous wastes, or toxic materials is prohibited.
- c. *Distillate Oil*: Any oil fired in this boiler shall be new No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight.
- d. *On-specification Used Oil*: Incidental amounts of on-specification used oil ( $\leq 0.05\%$  sulfur by weight) generated on site may be co-fired.

[Rules 62-212.400(PSD) and 62-210.200(PTE), F.A.C.; and Permit No. PSD-FL-333D]

- D.3.** Startup and Shutdown Plans for Mill Boilers: Appendix K of this permit identifies the general procedures that will be used for startup and shutdown of the mill boilers including methods to minimize emissions. [Rules 62-4.070(3) and 62-210.700(1), F.A.C.]

### CONTROL EQUIPMENT AND TECHNIQUES

- D.4.** Air Pollution Control Equipment: Emissions from Boiler 8 are controlled by the following equipment.

- a. *Cyclone Collectors*: The permittee shall operate and maintain cyclone collectors as a pre-control device prior to the electrostatic precipitator (ESP) to remove entrained sand and large particles in the flue gas. The pre-control device prevents excessive equipment wear and overloading of the ESP. Two wet and one dry cyclone collectors are installed in parallel before the induced draft fan.
- b. *ESP*: The permittee shall operate and maintain an electrostatic precipitator (ESP) to remove particulate matter from the flue gas exhaust and achieve the particulate matter standards specified in this permit. The ESP shall include an automated rapping system that can adjust rapping frequency and intensity to prevent re-entrainment of fly ash. The ESP shall be on line and functioning properly whenever bagasse and/or wood chips are fired. After January 30, 2016, the permittee shall maintain the 30-day rolling average total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to 40 CFR 63.7530(b) and Table 7 to Subpart DDDDD of 40 CFR 63.
- c. *SNCR*: The permittee shall operate and maintain a urea-based selective non-catalytic reduction (SNCR) system to reduce NO<sub>x</sub> emissions in the flue gas exhaust and achieve the nitrogen oxides emissions standards specified in this permit. The system includes automated control of urea injection for at least three injection zones to respond to varying load and flue gas conditions. Urea injection rates and zones are determined based on parameters such as the current injection rate, furnace temperature profile, fuels, steam load, oxygen level, CO level and NO<sub>x</sub> emissions.

[Rule 62-212.400 (PSD), F.A.C.; and Permit No. PSD-FL-333D]

- D.5.** Other Control Techniques: To minimize emissions of sulfur dioxide and sulfuric acid mist, the boilers shall only fire the authorized low-sulfur fuels specified in this subsection. As provided in Appendix J of this permit, operators shall follow the good combustion practices that are generally applicable to all sugar mill boilers. To the extent practicable, the permittee shall maintain the following flue gas levels as good combustion practices.

- a. *Oxygen Levels*: The permittee shall maintain and operate a flue gas oxygen monitor on Boiler 8. When firing bagasse during normal operation, the oxygen content of the boiler exhaust is expected to range from 3% and 6%. High fuel moisture, high ash content, and low load conditions may result in higher flue gas oxygen contents (5% - 7%). When firing only distillate oil, the oxygen content of the boiler exhaust is expected to range from 4% to 5% due to tramp air required for cooling of the stoker,

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pneumatic distributors, and overfire air nozzles. Operators shall ensure that the flue gas oxygen content is sufficient for good combustion.

- b. **CO Levels:** Carbon monoxide is an indicator of incomplete fuel combustion. In addition to insufficient oxygen, high fuel moisture, high ash content and low load conditions may result in elevated levels of carbon monoxide. When firing bagasse and/or wood chips during normal operation, the boiler exhaust CO content is expected to average approximately 400 ppmvd @ 7% oxygen. The operator shall use the measured CO emissions at the stack as an indicator of the combustion efficiency and adjust boiler operating conditions as necessary. The stack exhaust is expected to be 1% - 2% oxygen content higher than the boiler exhaust due to infiltration from the entire system.

The stack exhaust oxygen content is expected to be 1% - 2% higher than the boiler exhaust due to infiltration from the entire system. When firing bagasse and/or wood chips, many factors may affect efficient combustion. The above levels represent adherence to good combustion practices under normal operating conditions. Operation outside these levels is not a violation in and of itself. Repeated operation beyond these levels without taking corrective actions to regain good combustion could be considered "circumvention" in accordance with Rule 62-210.650, F.A.C.

[Rules 62-210.200(PTE) and 62-212.400 (PSD), F.A.C.; and Permit No. PSD-FL-333D]

### EMISSION LIMITING STANDARDS

- D.6. Standards Based on Compliance Tests:** The following emission standards apply when firing bagasse, wood chips, distillate oil, or a combination of these fuels under normal operation at steady-state conditions. The mass emission rates (pounds per hour) are based on the maximum 24-hour daily block average heat input rate. Unless otherwise specified, compliance with these standards shall be based on the average of three test runs conducted under steady-state conditions at permitted capacity.
- a. ***Ammonia Slip Standard:*** As determined by EPA Conditional Test Method CTM-027, ammonia slip shall not exceed 20 ppmvd @ 7% oxygen.
  - b. ***CO Standard:*** To the extent practicable, short term emissions of CO emissions shall be controlled by implementing the good combustion and operating practices identified in this subsection. In addition, after January 30, 2016, CO emissions shall not exceed 2,800 ppm by volume on a dry basis corrected to 3 percent oxygen, 3-run average. [Table 2 to Subpart DDDDD of 40 CFR 63].
  - c. ***Opacity Standard:*** As determined by COMS or EPA Method 9 observations, visible emissions shall not exceed 20% based on a 6-minute average. This standard excludes water vapor and applies when firing any combinations of fuels.
  - d. ***PM Standard:*** As determined by EPA Method 5 stack test, PM emissions shall not exceed 0.025 lb/MMBtu and 26.9 pounds per hour. In addition, after January 30, 2016, filterable PM emissions shall not exceed 4.4E-01 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].
  - e. ***SO<sub>2</sub> Standard:*** As determined by EPA Method 6C stack test, SO<sub>2</sub> emissions shall not exceed 0.06 lb/MMBtu and 64.6 pounds per hour. This emission standard serves as a surrogate for sulfuric acid mist (SAM) emissions.
  - f. ***VOC Standard:*** As determined by EPA Methods 18 and 25A stack tests, VOC emissions shall not exceed 0.05 lb/MMBtu and 53.9 pounds per hour measured as propane. For this permit, "VOC" emissions shall be defined as the total hydrocarbons (THC) measured by EPA Method 25A less the sum of the methane and ethane emissions as measured by EPA Method 18 on a concurrent sample. Alternatively, the permittee may elect to assume that all THC are regulated VOC emissions.
  - g. **HCl Standard:** After January 30, 2016, HCl emissions shall not exceed 2.2E-02 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].

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h. Mercury Standard: After January 30, 2016, Mercury emissions shall not exceed 5.7E-06 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].

[Rule 62-212.400 (PSD), F.A.C.; and Permit No. PSD-FL-333D]

*{Permitting Note: The standards for ammonia slip, opacity, PM, SO<sub>2</sub> and VOC are BACT standards. The SO<sub>2</sub> standard also serves as a surrogate BACT for SAM emissions.}*

**D.7. Standards Based on CEMS**: The following emission standards apply when firing bagasse, wood chips, distillate oil or a combination of these fuels and under all load conditions.

a. *CO Standards*:

- 1) As determined by CEMS data, CO emissions shall not exceed 400 ppmvd @ 7% oxygen based on a 30-day rolling average excluding the following periods: startup, shutdown, malfunction and operation at less than 50% of permitted capacity.
- 2) As determined by CEMS data, CO emissions shall not exceed 1285 tons during any consecutive 12 months including periods of startup, shutdown and malfunction. *{Permitting Note: Compliance with the annual mass emission standard ensures that the original project is not subject to PSD preconstruction review for CO emissions.}*
- 3) In addition, after January 30, 2016, CO emissions shall not exceed 900 ppm by volume on a dry basis corrected to 3 percent oxygen, 30-day rolling average. [Table 2 to Subpart DDDDD of 40 CFR 63].

b. *NO<sub>x</sub> Standard*: As determined by CEMS data, NO<sub>x</sub> emissions shall not exceed 0.14 lb/MMBtu based on a 30-day rolling average.

[Rule 62-212.400 (BACT), F.A.C.; and Permit No. PSD-FL-333D]

**D.8. Excess Emissions for CO, NO<sub>x</sub>, and Opacity**: As provided by the authority in Rule 62-210.700(5), F.A.C., the following conditions supersede the provisions in Rule 62-210.700(1), F.A.C.

a. *CO Emissions*:

- 1) Each 30-day rolling average shall include all valid CEMS data except data collected during the following periods: periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities or operation at less than 50% of its permitted capacity. Any period for which the monitoring system is out of control and data are not available for required calculations constitute a deviation from the monitoring requirements.
- 2) Each 12-month rolling total shall include all valid CEMS data including startup, shutdown and malfunction.

b. *NO<sub>x</sub> Emissions*: NO<sub>x</sub> CEMS data collected during startup, shutdown, malfunction and authorized periods of uncontrolled NO<sub>x</sub> monitoring (item #4 below) may be excluded from the determination of compliance with the 30-day rolling emissions standard, provided:

- 1) Best operational practices are used to minimize emissions;
- 2) For startups and shutdowns, the SNCR system has not yet attained proper operating conditions and is not functional;
- 3) For malfunctions, excluded data shall not exceed two hours in any 24-hour daily block period (up to eight 15-minute CEMS blocks or quadrants of an hour). The permittee shall notify the Compliance Authority within one working day of detecting the malfunction; and
- 4) For two hours each month, the permittee may operate the boiler without the SNCR system in order to collect uncontrolled NO<sub>x</sub> emissions data with the CEMS. For purposes of collecting uncontrolled NO<sub>x</sub> emissions data to adjust the SNCR system, excluded data shall not exceed

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two, 1-hour values during any calendar month. *{Permitting Note: Based on the final design specifications, uncontrolled NO<sub>x</sub> emissions are expected to be 0.30 lb/MMBtu. Uncontrolled NO<sub>x</sub> data collected during these periods will be used to adjust the SNCR system as necessary.}*

- c. *Opacity:* During startup and shutdown, the stack opacity shall not exceed 20% opacity based on a 6-minute block average, except for one 6-minute block per hour that shall not exceed 27% opacity. This alternate opacity standard does not impose a separate annual testing requirement.

CO and NO<sub>x</sub> CEMS data excluded due to startup, shutdown, malfunction or authorized periods of uncontrolled NO<sub>x</sub> monitoring shall be summarized and reported in the “Quarterly CO and NO<sub>x</sub> Emissions Report” required by this permit.

*{Permitting Note: Because compliance is continuously demonstrated by CEMS data, allowances for CO and NO<sub>x</sub> are provided during specific periods of operation in which the control device or technique may not be fully functional. Similarly, an alternate standard is identified for opacity during startup and shutdown because compliance is readily observable. As SO<sub>2</sub> emissions are a function of the fuel sulfur, it is not expected that startups or shutdowns would cause excess emissions of this pollutant. During startups and shutdowns, it is possible that PM and VOC emissions could exceed the “lb/MMBtu” emissions standards. However, there is reason to believe that the mass emission rates (lb/hour) of these pollutants will not exceed the specified standards due to the reduced fuel firing rates. In any case, the specified test methods are generally applicable only during steady-state operation. Therefore, no alternate emissions standards are specified and compliance shall be determined by the test methods and procedures specified in this subsection. The Department’s rules and permits cannot waive or supersede a federal requirement.}*

#### TESTING

- D.9. Test Methods:** If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods.

<b>EPA Method</b>	<b>Description of Method and Comments</b>
CTM-027	Measurement of Ammonia Slip. This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Emissions from Stationary Sources
6C	Measurement of SO <sub>2</sub> Emissions (Instrumental)
7E	Measurement of NO <sub>x</sub> Emissions (Instrumental)
9	Visual Determination of the Opacity
10	Measurement of Carbon Monoxide Emissions (Instrumental). The CO test method shall be based on a continuous sampling train. See Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography). Optionally, EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A.
19	Calculation Method for NO <sub>x</sub> , PM, and SO <sub>2</sub> Emission Rates. Method may be used to supplement other methods.
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization)
26 or 26A	Hydrogen chloride (HCl), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional

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<b>EPA Method</b>	<b>Description of Method and Comments</b>
	details.
29, 30A or 30B	Mercury (Hg), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "http://www.epa.gov/ttn/emc/ctm.html". The other methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A and Permit No. PSD-FL-333D]

- D.10.** After January 30, 2016, for demonstrating compliance with emission limits for PM, CO, HCl and Hg pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall:
- a. Comply with the performance testing requirements in Table 5 to Subpart DDDDD of 40 CFR 63. Performance testing may include fuel analysis for HCl and Hg, if fuel analysis is the selected method of compliance for these pollutants.
  - b. Comply with the initial compliance test requirements in 40 CFR 63.7510 and 40 CFR 63.7530., and
  - c. Conduct annual performance tests, fuel analysis, and tune-ups in accordance with 40 CFR 63.7515, 40 CFR 63.7520, 40 CFR 63.7521 and 40 CFR 63.7540.
- D.11.** General Testing Requirements: The boilers are subject to the applicable provisions of Appendix C, which specifies the general requirements for test frequencies, test notifications, sampling facilities, test procedures, and test reports. [Rule 62-297.310, F.A.C.]
- D.12.** Annual Stack Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct compliance stack tests for ammonia slip, PM, VOC and opacity. After January 30, 2016, **HCl, mercury, and CO** shall be added to this list for testing. (The permittee may elect to perform compliance testing for HCl and Hg using fuel analysis.). Tests shall be conducted between 90% and 100% of the maximum 24-hour continuous heat input rate when firing only bagasse or bagasse with wood chips. Data from the CO CEMS shall be reported for each run of the required tests for NO<sub>x</sub> and VOC emissions. Data from the NO<sub>x</sub> CEMS shall be reported for each run of the required tests for ammonia slip. The Department may require the permittee to repeat some or all of these initial stack tests after major replacement or major repair of any air pollution control or process equipment. [Rules 62-212.400 (PSD) and 62-297.310(7)(a) and (b), F.A.C.; and Permit No. PSD-FL-333D, 40 CFR 63.7515(b), (c) and (e), 40 CFR 63.7520(e)].
- D.13.** Renewal Compliance Tests: Before renewal of this Title V air operation permit, the permittee shall conduct a compliance test for SO<sub>2</sub>, CO, PM, HCl, and mercury emissions when firing only bagasse. In addition, the permittee shall determine the thermal efficiency of the boiler when firing only bagasse using the ASME short-form or equivalent procedure before conducting the SO<sub>2</sub> test and any required annual compliance tests in the year before renewal of the Title V air operation permit. The results of the emissions and thermal efficiency tests shall be provided with the application to renew the Title V air operation permit. [Permit No. PSD-FL-333D, 40 CFR 63.7515(b), (c) and (e), 40 CFR 63.7520(e)].
- D.14.** Parametric Monitoring for Tests: The permittee shall continuously monitor and record the oil flow rate and production rate, temperature and pressure of the steam. At no less than 15-minute intervals, permittee shall record the: flow rate and pressure drop to the wet cyclones; the flow rate, temperature and pressure of the feed water; and the amperage and voltage to the electrostatic precipitator. The bagasse and wood chip fuel firing rate (tons per hour) shall be calculated and recorded based on the steam parameters and the heating value of this fuel. For each test run, the permittee shall calculate and record: the heat input rate based on the thermal efficiency and the steam and feedwater parameters; and the total power input to the electrostatic precipitator based on the monitored amperage and voltage. The actual heat input rate shall be determined using two methods: (a) steam parameters with enthalpies and the measured thermal efficiency, and (b)

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steam parameters with enthalpies and the boiler thermal efficiency. If the most recent thermal efficiency test indicates a thermal efficiency below 56%, the test results shall be used to determine the heat input rate from firing bagasse; otherwise, a default value of 62% may be used. [Rule 62-297.310(5), F.A.C.; and Permit No. PSD-FL-333D]

#### MONITORING, RECORD KEEPING AND REPORTING

- D.15. CEMS:** The permittee shall calibrate, operate and maintain continuous emission monitoring systems (CEMS) to measure and record concentrations of CO, NO<sub>x</sub>, and oxygen in the exhaust of Boiler 8 in a manner sufficient to demonstrate continuous compliance with the CEMS standards specified in this permit. The permittee shall notify the Compliance Authority within one working day of discovering emissions in excess of a CEMS standard subject to the specified averaging period.
- a. *CO Monitors:* The CO monitor shall meet the requirements of Performance Specification 4 or 4A in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60.
  - b. *NO<sub>x</sub> Monitors:* The NO<sub>x</sub> monitor shall meet the requirements of Performance Specification 2 in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. NO<sub>x</sub> shall be expressed “as NO<sub>2</sub>.” Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60. The monitor shall have a maximum span value of 250 ppmvd.
  - c. *Diluent Monitors:* An oxygen monitor shall be installed at each CO and NO<sub>x</sub> monitor location to correct measured CO and NO<sub>x</sub> emissions to the required oxygen concentrations. The oxygen monitor shall meet the requirements of Performance Specification 3 in Appendix B of 40 CFR 60. The required RATA tests shall be performed using EPA Method 3A in Appendix A of 40 CFR 60. Quality assurance procedures shall conform to the requirements of Appendix F in 40 CFR 60.
  - d. *1-Hour Averages:* Each 1-hour block average shall begin at the top of an hour. Each 1-hour average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the 1-hour average is not valid. Except for data authorized to be excluded, the permittee shall use all valid measurements or data points collected during an hour to calculate the 1-hour averages. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour. If the CEMS measures concentration on a wet basis, the permittee shall use at least one of the following methods:
    - 1) The CEMS shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture), or
    - 2) The permittee may estimate the flue gas moisture content as 26.0% for the crop season (high load operation) and 22.7% for the off-crop season (low-load operation).
  - e. *Data Exclusion:* Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Certain emissions data recorded during specifically defined episodes may be excluded from the corresponding compliance demonstration subject to the provisions of Condition No. D.8. in this subsection. All periods of data excluded shall be consecutive for each such episode. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.
  - f. *30-Day Averages:* The 30-day rolling average shall be determined by averaging all 1-hour averages for 30 successive boiler operating days. A boiler operating day begins and ends at midnight of each day and includes any day that fuel is combusted. Final results shall be recorded in terms of the applicable emissions standard.

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- g. *CO Emissions Cap*: For each day (midnight to midnight), the CEMS shall record the total CO mass emissions rate (pounds per day). The 12-month rolling total shall be the sum of the daily mass emission rates reported as “tons per consecutive 12 months”.
- h. *Availability*: Monitor availability for each CEMS shall be 95% or greater in any calendar quarter. The quarterly excess emissions report shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Department’s Compliance Authority.

[Rule 62-212.400 (PSD), F.A.C.; and Permit No. PSD-FL-333D]

- D.16.** Alternative Opacity Monitoring Plan: In lieu of the continuous opacity monitoring requirements of 40 CFR 60.48b, EPA Region 4 approved an alternative opacity monitoring plan as specified in the CAM provisions of this subsection. The Department may require the permittee to install and operate a continuous opacity monitoring system for failure to regularly comply with the opacity standard. [Rule 62-212.400(PSD), F.A.C.; 40 CFR 60.13(i) and 60.48b(a); Permit No. PSD-FL-333D; and EPA approval dated May 13, 2008]
- D.17.** SNCR Urea Injection: In accordance with the manufacturer’s specifications, the permittee shall calibrate, operate and maintain a flow meter to measure and record the urea injection rate for the SNCR system. The permittee shall document the general range of urea flow rates required to meet the NO<sub>x</sub> standard over the range of load conditions by comparing NO<sub>x</sub> emissions with urea flow rates. During NO<sub>x</sub> monitor downtimes or malfunctions, the permittee shall operate at a urea flow rate that is consistent with the documented flow rate for the given load condition. [Rule 62-212.400 (PSD), F.A.C.; and Permit No. PSD-FL-333D]
- D.18.** Cyclones: In accordance with the manufacturer’s recommendations, the permittee shall calibrate, operate and maintain the following equipment: flow meter to monitor the water flow rate (gph) for each wet cyclone and a manometer (or equivalent) to monitor the pressure drop (inches of water) across each cyclone. [Rule 62-212.400 (PSD), F.A.C.; and Permit No. PSD-FL-333D]
- D.19.** Steam Parameters: In accordance with the manufacturer’s recommendations, the permittee shall calibrate, operate and maintain continuous monitoring and recording devices for the following parameters: steam temperature (° F), steam pressure (psig), and steam production rate (lb/hour). Records shall be maintained on site and made available upon request. [Rule 62-212.400 (PSD), F.A.C.; and Permit No. PSD-FL-333D]
- D.20.** Fuel Monitoring Requirements: The permittee shall comply with the applicable fuel monitoring requirements specified in Appendix I (Fuel Monitoring) for each authorized fuel. [Rule 62-210.370(3), F.A.C. and Permit No. PSD-FL-333D]
- D.21.** CAM Plan for ESP: The permittee shall comply with the following CAM plan.

<b>CAM Criteria</b>	<b>Indicator #1</b>
<b>Indicator</b>	Total ESP secondary power input
<b>Measurement Approach</b>	Total secondary power input is calculated from the secondary current and voltage to each ESP field as monitored with an amp/volt meter.
<b>Indicator Range</b>	An excursion is defined as any total secondary power input <b>below 25 kW (3-hour block average) during the crop season (October through April) and 18 kW (3-hour block average) during the off season (May through September)</b> . Excursions trigger inspection, corrective action, record keeping and reporting.
<b>Data</b>	Accuracy of amp/volt meter is ± 1 milliampere (mA) and ± 1 kilovolt (kV)

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<b>CAM Criteria</b>	<b>Indicator #1</b>
<b>Representativeness</b>	
<b>Verification of Operational Status</b>	NA
<b>QA/QC Procedures</b>	Maintain equipment in accordance with manufacturer’s recommendations.
<b>Monitoring Frequency</b>	Continuous monitoring of secondary current and voltage to each ESP field.
<b>Data Collection Procedures</b>	Based on continuous monitoring data, calculate and record a 3-hour block average.
<b>Averaging Period</b>	3-hour block average

In addition, the permittee shall comply with the general CAM provisions specified in Appendix H of this permit. The permittee shall record any problems with operation of the ESP and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.; and 40 CFR 64]

- D.22.** Monthly Operations Summary: By the tenth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the previous month of operation: hours of operation, distillate oil consumption, pounds of steam per month, and the updated 12-month rolling totals for each of these operating parameters. The Monthly Operations Summary shall be maintained on site and made available for inspection when requested by the Department. [Rules 62-4.070(3) and 62-212.400 (PSD), F.A.C.]
- D.23.** Test Notifications, Records and Reports: Appendix C of this permit specifies the general requirements for test notifications, records and reports. In addition to the information required in Rule 62-297.310(8), F.A.C., each stack test report shall also include the following information: steam production rate (lb/hour), heat input rate (MMBtu/hour), calculated bagasse firing rate (tons/hour), wood chip firing rate (tons/hour), and emission rates (lb/MMBtu and ppmvd @ 7% oxygen). [Rule 62-297.310, F.A.C. and Permit No. PSD-FL-333D]
- D.24.** Quarterly Report - CO and NO<sub>x</sub> Emissions: Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing CO and NO<sub>x</sub> emissions including periods of startups, shutdowns, malfunctions, authorized uncontrolled NO<sub>x</sub> emissions monitoring and CEMS systems monitor availability for the previous quarter. If CO or NO<sub>x</sub> CEMS data is excluded from a compliance determination during the quarter due to a malfunction, the permittee shall include a description of the malfunction, the actual emissions recorded, and the actions taken to correct the malfunction. See Appendix L of this permit for the reporting format. [Rules 62-4.070(3), 62-4.130, and 62-210.400(5)(c), F.A.C.]
- D.25.** Semiannual Report - Oil Firing: Within 30 days following each semiannual period (January to June and July to December), the permittee shall submit to the Compliance Authority: the distillate oil consumption for each month and the 12-month rolling total (gallons); the certified vendor fuel analysis for each delivery of distillate oil during the reporting period. [40 CFR 60.49b(w)]

**OTHER APPLICABLE REQUIREMENTS**

- D.26.** NSPS Provisions: Boiler 8 is subject to the New Source Performance Standards of Subparts A and Db in 40 CFR 60 for “Industrial-Commercial-Institutional Steam Generating Units”. Appendix L of this permit summarizes these provisions. [Rule 62-204.800, F.A.C.; 40 CFR 60, NSPS Subpart A and Db; and Permit No. PSD-FL-333D]
- D.27.** NESHAP Provisions: Boiler 8 is subject to 40 CFR 63 Subparts A and DDDDD, General Conditions and Industrial, Commercial, and Institutional Boilers and Process Heaters Appendix O of this permit

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summarizes these provisions. [Rule 62-204.800, F.A.C.; 40 CFR 63 Subparts A and DDDDD; and Permit No. PSD-FL-333D]

- D.28.** Prior to January 30, 2016, and annually thereafter, for each boiler, the permittee shall conduct a tune up of the boiler as specified in 40 CFR 63.7540 as a work practice for dioxins/furans. [Table 3 to Subpart DDDDD of 40 CFR 63].
- D.29.** Prior to January 30, 2016, the permittee shall conduct a one-time energy assessment for the facility, performed by a qualified energy assessor, as specified in 40 CFR 63.7510(e). [Table 3 to Subpart DDDDD of 40 CFR 63].
- D.30.** Beginning January 31, 2016, each boiler shall have installed an oxygen analyzer system meeting the requirements of 40 CFR 63, Subpart DDDDD.
- D.31.** After January 30, 2016, for each boiler, the permittee shall comply with the monitoring, installation, operation, and maintenance requirements in 40 CFR 63.7525.

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**Subsection E. Biomass Handling and Storage**

This subsection addresses the following regulated emissions unit.

EU No.	Emission Unit Description
027	Biomass handling and storage

**EQUIPMENT AND CONTROL TECHNIQUES**

**E.1. Biomass Handling and Storage Equipment:** To minimize fugitive particulate matter, conveyors shall be covered and landing zones provided for conveyor transfer points. The conveyor system shall be completely covered or enclosed except for the transfer points to/from the material stockpile and the point associated with conveying material from conveyor C9A to C9B in the drying mill. The existing bagacillo system pneumatically collects a small fraction of bagasse from the conveyor system and transfers fine particles suspended in the gas stream to the Boiling House. The bagacillo cyclone separates particles from the gas stream, which are used as part of the cake material on the vacuum filters. The bagacillo system is an existing, unregulated emissions unit. [Rule 62-212.400 (BACT), F.A.C. and Permit Nos. PSD-FL-333D and PSD-FL-389A]

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#### Subsection F. Granular Carbon Regenerative Furnace

This subsection addresses the following regulated emissions unit.

EU No.	Emission Unit Description
017  (Internal ID: S-12)	<p>Granular carbon regenerative furnace is used to remove colorants and VOC emissions during the decolorization process in the sugar refinery. The design carbon throughput is up to 60,000 pounds per day. The furnace drives off colorants and VOC emissions from the carbon and regenerates the carbon for reuse. A direct flame afterburner controls VOC emissions and a wet venturi/tray scrubber system controls particulate matter emissions. This emissions unit is not a process heater subject to 40 CFR 63 Subpart DDDDD because combustion gases come into direct contact with the granular carbon [40 CFR 63.7575]. <i>The plant identifies this point source as S-12.</i></p> <p><i>Afterburner:</i> Zero Hearth Type (10'-9" OD x 8 HTH) furnace manufactured by BSP Thermal Systems, Inc.</p> <p>DESIGN INFORMATION: The afterburner is designed for the following specifications: 1200° F to 1400° F design temperature; 10,600 to 16,300 acfm flow rate; 0.5 to 0.75 seconds exhaust gas residence time; and a 92% destruction efficiency. The furnace and afterburner will fire approximately 15,763 cubic feet per hour and a maximum of 138.08 million cubic feet per year.</p> <p><i>Wet Scrubber System:</i> High energy venturi wet scrubber with tray type wet scrubber.</p> <p>DESIGN INFORMATION: The wet scrubber system is designed for the following specifications: 160° F and 4300 acfm outlet gas flow; 12 to 30 inches of water across venturi scrubber with a 36 gpm flow rate; 3 to 8 inches of water across the tray scrubber with 230 gpm flow rate; and a 97% particulate removal efficiency.</p>

#### CAPACITY, FUELS AND PERFORMANCE RESTRICTIONS

- F.1. Authorized Fuel: Only natural gas shall be fired in the granular carbon regenerative furnace and associated afterburner. [Rule 62-212.400(BACT), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]
- F.2. Hours of Operation: The hours of operation for this unit are not restricted (8,760 hours per year). [Rule 62-210.200(PTE), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]

#### CONTROL EQUIPMENT AND TECHNIQUES

- F.3. GCRF Afterburner: The permittee shall operate and maintain an afterburner designed to destroy at least 92% of the VOC emissions during regeneration of the carbon bed as part of the decolorization process. The afterburner shall be designed with a control temperature of between 1200° F and 1400° F and an exhaust gas residence time of between 0.5 and 0.75 seconds. Excluding initial startup, shutdown, and malfunction, the afterburner temperature shall be maintained at 1200° F or higher except for up to 6 total minutes each hour during which the temperature shall not fall below 1000°F. [Rule 62-212.400(BACT), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]
- F.4. GCRF Wet Scrubber: The permittee shall install, operate, and maintain a wet venturi/ tray scrubber system designed to control at least 97% of the maximum particulate emissions during regeneration of the carbon bed as part of the decolorization process. The venturi scrubber shall be designed for a pressure drop of between 12 to 30 inches of water column. The wet tray scrubber shall be designed for a pressure drop of between 3 to 8 inches of water column. Separate manometers (or equivalent devices) shall be installed, operated, and maintained to indicate the pressure drop across each control device. Operation outside of the specified operating range for any monitored parameter is not a violation of this permit, in and of itself. However, continued operation outside of the specified operating range for any monitored parameter without corrective action may be considered circumvention of the air pollution control equipment. [Rule 62-212.400(BACT), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]

### SECTION 3. SPECIFIC CONDITIONS

#### Subsection F. Granular Carbon Regenerative Furnace

##### EMISSION LIMITING STANDARDS

- F.5.** PM Standard: As determined by EPA Method 5, PM emissions shall not exceed 0.7 pounds per hour from the granular carbon regenerative furnace. [Rule 62-212.400 (BACT), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]
- F.6.** Opacity Standard: As determined by EPA Method 9, visible emissions shall not exceed 10% opacity excluding water vapor. [Rule 62-212.400 (BACT), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]
- F.7.** VOC Standard: As determined by EPA Method 25A, VOC emissions shall not exceed 1.0 pound per hour (reported as propane) from the granular carbon regenerative furnace. Optionally, EPA Method 18 may be conducted concurrently to deduct methane. [Rule 62-212.400(BACT), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]

##### TESTING

- F.8.** General Testing Requirements: The emissions unit is subject to the applicable provisions of Appendix C, which specifies the general requirements for test frequencies, test notifications, sampling facilities, test procedures, and test reports. [Rule 62-297.310, F.A.C. and Permit No. and 0510003-054-AC]
- F.9.** Test Methods: If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods.

EPA Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Emissions from Stationary Sources
9	Visual Determination of the Opacity
18	Measurement of Gaseous Organic Compound Emissions (Gas Chromatography). Optionally, EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the THC emissions measured by Method 25A.
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization)

These methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A; Permit No. 0510003-054-AC]

- F.10.** Annual Stack Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct compliance tests for opacity. Compliance with the PM and VOC emissions standards shall be assumed as long as the emissions unit remains in compliance with the opacity standard as well as the control equipment monitoring requirements for the afterburner and wet scrubbing system. [Rules 62-212.400 (PSD) and 62-297.310(7), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-054-AC]
- F.11.** Renewal Compliance Tests: Prior to renewal of the Title V permit, the permittee shall conduct compliance stack tests for opacity, PM and VOC emissions. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **F5.**, **F.6.** and **F.7.** [Rules 62-212.400 (PSD) and 62-297.310(7), F.A.C.; and Permit Nos. PSD-FL-272B and 0510003-054-AC]
- F.12.** Tests after Substantial Modifications: All performance tests shall also be conducted after any substantial modification and appropriate shake-down period of the emission unit or air pollution control equipment. Shakedown periods shall not exceed 90 days after re-starting the unit. [Rule 62-297.310(7)(a)4., F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection F. Granular Carbon Regenerative Furnace**

**F.13. Monitoring of Test Parameters:** During any required test, the permittee shall monitor and record the afterburner temperature and wet scrubber pressure differentials at 15-minute intervals. [Rule 62-297.310(5), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]

**MONITORING, RECORD KEEPING AND REPORTING**

**F.14. CAM Plan, Wet Scrubbers:** The permittee shall comply with the following CAM plan.

<b>CAM Criteria</b>	<b>Indicator #1 (Venturi Scrubber)</b>	<b>Indicator #2 (Wet Tray Scrubber)</b>
<b>Indicator</b>	Pressure drop across venturi scrubber	Pressure drop across wet tray scrubber
<b>Measurement Approach</b>	Manometer (or equivalent)	Manometer (or equivalent)
<b>Indicator Range</b>	An excursion is defined as any pressure drop <b>below 20 inches of water column</b> . Excursions trigger inspection, corrective action, record keeping and reporting.	An excursion is defined as any pressure drop <b>below 4.4 inches of water column</b> . Excursions trigger inspection, corrective action, record keeping and reporting.
<b>Data Representativeness</b>	Manometer measures scrubber pressure drop with a minimum accuracy of $\pm 0.5$ inches of water column (gage).	Manometer measures scrubber pressure drop with a minimum accuracy of $\pm 0.5$ inches of water column (gage).
<b>Verification of Operational Status</b>	NA	NA
<b>QA/QC Procedures</b>	Maintain equipment in accordance with manufacturer's recommendations.	Maintain equipment in accordance with manufacturer's recommendations.
<b>Monitoring Frequency</b>	Continuous readout	Continuous readout
<b>Data Collection Procedures</b>	<i>Once per 8 hour shift.</i>	<i>Once per 8 hour shift.</i>
<b>Averaging Period</b>	NA	NA

In addition, the permittee shall comply with the general CAM provisions specified in Appendix H of this permit. The permittee shall record any problems with operation of the wet scrubbers and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.; and 40 CFR 64]

**F.15. Operations Log:** At least once per 8 hour shift, the permittee shall observe and record the afterburner temperature and the wet scrubber pressure differentials. The permittee may install automated equipment to continuously record these parameters. For any monitored parameters with missing records, the permittee shall calculate and record the data availability (in percent) for each month. [Rule 62-4.070(3), F.A.C. and Permit Nos. PSD-FL-272B and 0510003-054-AC]

**F.16. Test Notifications, Records and Reports - General Requirements:** Appendix C of this permit specifies the general requirements for test notifications, records and reports. [Rule 62-297.310, F.A.C.]

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection G. Miscellaneous Sugar Refinery Sources**

This subsection addresses the following regulated emissions units.

EU No.	Internal ID No.	Emissions Unit Description
015	S-11	VHP sugar dryer controlled by baghouse.
016	S-10	White sugar dryer No. 1 controlled by baghouse.
018	S-1, S-2, S-3	Vacuum systems with baghouses for: screening/distribution system (S-1); 100 lb bagging operation (S-2); and 5 lb bagging operation (S-3).
019	S-7, S-8, S-9	Conditioning silos consisting of three silos controlled by baghouses.
020	S-5, S-6	Screening/distribution system consisting of powdered sugar/starch bins controlled by baghouses.
021	-----	Alcohol Usage
022	S-4	Sugar packaging line controlled by a baghouse.
043	S-17	Baghouse –Bulk Loading Operation.

**CAPACITY AND PERFORMANCE RESTRICTIONS**

- G.1. Production Restrictions:** No more than 2000 tons of refined sugar per day and no more than 730,000 tons of refined sugar per consecutive 12 months shall be packaged at this facility. In addition, no more than 2250 tons of refined sugar per day and no more than 803,000 tons of refined sugar per consecutive 12 months shall be loaded out from this facility. There are no limits on the hours of operation (8,760 hours per year) of these emissions units. [Rules 62-210.200 (PTE) and 62-212.400(PSD), F.A.C.; and Permit Nos. PSD-FL-272B, PSD-FL-346A and 0510003-055-AC]
- G.2. Alcohol Emissions:** Alcohol usage from the sugar refinery shall not exceed 30,000 pounds per consecutive 12 months. [Rule 62-212.400(PSD), F.A.C. and Permit No. PSD-FL-272B]

**CONTROL EQUIPMENT AND TECHNIQUES**

- G.3. Baghouses:** The permittee shall operate and maintain high-efficiency baghouses designed to control at least 99.9% of the particulate matter emitted from each emissions unit and point. [Rule 62-212.400(PSD), F.A.C. and Permit No. PSD-FL-272B]

**EMISSION LIMITING STANDARDS**

- G.4. Baghouse:** The following table identifies the PM limits for each baghouse.

EU No.	Point ID	dscfm	Equivalent Emissions	
			lb/hour	Ton/Year
015	S-11	110,042	1.63	7.14
016	S-10	94,488	1.44	6.30
018	S-1	990	0.06	0.28
	S-2	872	0.06	0.28
	S-3	984	0.06	0.28
019	S-7	2641	0.06	0.25
	S-8	2641	0.06	0.25
	S-9	2641	0.06	0.25
020	S-5	2668	0.06	0.25
	S-6	8735	0.19	0.82

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection G. Miscellaneous Sugar Refinery Sources**

EU No.	Point ID	dscfm	Equivalent Emissions	
			lb/hour	Ton/Year
<b>022</b>	S-4	14,927	0.38	1.66
<b>043</b>	S-17	9,589	0.2	0.90
Totals			4.27	18.66

Compliance with the above PM standards is assumed if compliance with the opacity standard is demonstrated. [Rules 62-210.200(PTE), F.A.C., Permit Nos. PSD-FL-272B and 0510003-055-AC]

- G.5.** Opacity Standard: As a surrogate for particulate matter, visible emissions shall not exceed 5% opacity from any of these emissions units or points. [Rule 62-212.400(PSD), F.A.C., Permit Nos. PSD-FL-272B and 0510003-055-AC]

**TESTING**

- G.6.** General Testing Requirements: The unit is subject to the applicable provisions of Appendix C, which specifies the general requirements for test frequencies, test notifications, sampling facilities, test procedures, and test reports. [Rule 62-297.310, F.A.C.]

- G.7.** Test Methods: Any required stack tests shall be performed in accordance with the following methods.

EPA Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content <i>{Notes: Methods shall be performed as necessary to support other methods.}</i>
5	Determination of Particulate Emissions from Stationary Sources
9	Visual Determination of the Opacity

These methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A]

- G.8.** Annual Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct visible emissions tests on each baghouse exhaust. Compliance with the PM standards shall be assumed as long as the emission unit remains in compliance with the opacity standard. [Rule 62-297.310(7)(a)1, F.A.C. and Permit Nos. PSD-FL-272B and 0510003-055-AC]

- G.9.** Renewal Compliance Tests: Prior to renewal of the Title V permit, the permittee shall also conduct compliance tests for Visual Emissions (VE) opacity. (Visual emissions (VE) test (only), is allowed to demonstrate compliance with the particulate matter (PM) standard. [Rules 62-212.400 (PSD) and 62-297.310(7), F.A.C.; and Permit PSD-FL-346A]

**MONITORING, RECORD KEEPING AND REPORTING**

- G.10.** CAM Plan, Baghouses (EU-018): The permittee shall comply with the following CAM plan.

CAM Criteria	Indicator #1
<b>Indicator</b>	Opacity of each of baghouse vents (S-1, S-2 and S-3) on the vacuum systems (EU-018)
<b>Measurement Approach</b>	In accordance with EPA Method 22, observer conducts a 1-minute observation of each baghouse vent.
<b>Indicator Range</b>	An excursion is defined as any observed visible emissions. Excursions trigger

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection G. Miscellaneous Sugar Refinery Sources**

<b>CAM Criteria</b>	<b>Indicator #1</b>
	inspection, corrective action, record keeping and reporting.
<b>Data Representativeness</b>	Visible emissions are either present or not.
<b>Verification of Operational Status</b>	Verify operation of vacuum system before observations are made.
<b>QA/QC Procedures</b>	EPA Method 22 procedures are specified in Appendix A of 40 CFR 60.
<b>Monitoring Frequency</b>	One minute observations made once per day for each baghouse vent.
<b>Data Collection Procedures</b>	Daily observations shall be recorded in a written or electronic log.
<b>Averaging Period</b>	NA

In addition, the permittee shall comply with the general CAM provisions specified in Appendix H of this permit. The permittee shall record any problems with operation of the baghouses and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.; and 40 CFR 64]

- G.11. Monthly Records:** Within ten days following each month, the permittee shall calculate the refined sugar packaging rate, the refined sugar load out rate and the alcohol usage rate. The permittee shall record each monthly rate and the 12-month rolling total in a written or electronic log. Calculation of the alcohol usage shall be determined by the purchase records and the appropriate Material Data Safety Sheets. [Rule 62-212.400(PSD), F.A.C. and Permit No. PSD-FL-272B]
- G.12. Test Notifications, Records and Reports - General Requirements:** Appendix C of this permit specifies the general requirements for test notifications, records and reports. [Rule 62-297.310, F.A.C.]

## SECTION 3. SPECIFIC CONDITIONS

### Subsection H. White Sugar Dryer 2

This subsection addresses the following regulated emissions unit.

EU No.	Emissions Unit Description
029	<p>White sugar dryer 2 is a fluidized bed-type dryer/cooler. After wet refined sugar is centrifuged, the dryer will be used to drive off remaining moisture. The refined sugar is then transferred to the conditioning silos. Particulate matter emissions from the dryer are controlled by a set of four (4) high-efficiency cyclone collectors in parallel, followed by a wet scrubber.</p> <p>DESIGN INFORMATION: White sugar dryer 2 has a rated design capacity of 85 tons per hour of refined sugar. Sugar with a moisture content of approximately 1.5% by weight enters the dryer between 120° - 140° F and is suspended in a fluidized bed with jets of hot, conditioned air. A maximum of 11,000 pounds per hour of low pressure steam (12 psig) from the existing mill boilers supply heat for the process; no fuel is fired. Sugar exits the dryer with a moisture content of approximately 0.03% by weight and a temperature between 92° F to 102° F. Flue gas exhaust at 90° F exits a stack approximately 82 feet above ground level with a volumetric flow rate of 90,000 acfm. The rectangular stack is 7.0 feet by 6.0 feet. The scrubber pressure drop and scrubber water recirculation flow rate are continuously monitored.</p>

#### CAPACITY AND PERFORMANCE RESTRICTIONS

**H.1. Permitted Capacity:** The maximum design capacity of the sugar dryer is 85 tons per hour of sugar. [Rule 62-210.200(PTE), F.A.C. and Permit No. PSD-FL-346A]

#### CONTROL EQUIPMENT AND TECHNIQUES

**H.2. Air Pollution Control Equipment:**

- a. *Cyclone Collectors:* In accordance with the manufacturer's recommendations, the permittee shall operate and maintain a set of four high-efficiency cyclone collectors in parallel (Entoleter, LLC Model 6600 or equivalent) with a design removal efficiency of at least 99% of the particulate loading from the new white sugar dryer based on the following inlet conditions: inlet temperature of 110° F; inlet flow rate of 105,000 acfm; inlet dust loading of 14 grains per dscf of inlet gas (11,760 lb/hour); and a pressure drop across the cyclone collectors of 6 inches of water column. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain a manometer (or equivalent) to monitor the pressure differential across each cyclone collector. Although no periodic records of the pressure differential are required, the devices shall be properly maintained and functional to provide operational data for evaluating problems.
- b. *Wet Scrubber:* In accordance with the manufacturer's recommendations, the permittee shall operate and maintain a wet scrubber (Entoleter, LLC Centrifield Vortex Model 1500 or equivalent) with a design removal efficiency of at least 96% of the particulate loading from the new cyclone collectors. The design control efficiency is based on the following inlet conditions: inlet temperature of 113° F; inlet flow rate of 105,000 acfm; inlet dust loading of 0.14 grains per dscf of inlet gas (118 lb/hour); a scrubber water recirculation flow rate of 500 gpm; a scrubber make-up water flow rate of 12 gpm; and a pressure drop of 8 inches of water column. In accordance with the manufacturer's recommendations, the permittee shall calibrate, operate and maintain devices to continuously monitor and record the wet scrubber water recirculation rate (gpm) and the pressure differential across the wet scrubber (inches of water column).

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

[Rule 62-212.400(BACT), F.A.C.; and Permit No. PSD-FL-346A]

## SECTION 3. SPECIFIC CONDITIONS

### Subsection H. White Sugar Dryer 2

#### EMISSION LIMITING STANDARDS

- H.3. PM Standard:** As determined by EPA Method 201A stack test, particulate matter emissions less than 10 microns (PM<sub>10</sub>) shall not exceed 0.005 grains per dscf and 4.2 pounds per hour based on the average of three test runs. As determined by EPA Method 5 stack test, particulate matter emissions shall not exceed 15.0 pounds per hour based on the average of three test runs. [Design; Rule 62-212.400(BACT), F.A.C. and Permit No. PSD-FL-346A]
- H.4. Opacity Standard:** Visible emissions from the wet scrubber stack shall not exceed 10% opacity excluding water vapor. [Rule 62-212.400(PSD), F.A.C. and Permit No. PSD-FL-346A]

#### TESTING

- H.5. General Testing Requirements:** The emissions unit is subject to the applicable provisions of Appendix C, which specifies the general requirements for test frequencies, test notifications, sampling facilities, test procedures, and test reports. [Rule 62-297.310, F.A.C.]
- H.6. Test Methods:** If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods.

EPA Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content <i>{Notes: Methods shall be performed as necessary to support other methods.}</i>
5	Determination of Particulate Emissions from Stationary Sources
9	Visual Determination of the Opacity
201A	Determination of PM <sub>10</sub> Emissions from Stationary Sources

These methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A]

- H.7. Annual Compliance Tests:** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct compliance tests for opacity. [Rules 62-212.400 (PSD) and 62-297.310(7), F.A.C.; and Permit No. PSD-FL-346A]
- H.8. Renewal Compliance Tests:** Prior to renewal of the Title V permit, the permittee shall also conduct compliance tests for PM emissions and opacity. [Rules 62-212.400 (PSD) and 62-297.310(7), F.A.C.; and Permit No. PSD-FL-346A]
- H.9. Monitoring of Test Parameters:** During any required test, the permittee shall monitor and record the following information at the beginning and end of each test run: sugar processing rate through the dryer (tons per hour); the scrubber water recirculation rate (gpm); the scrubber water sugar content in brix; the pressure differential across each cyclone collector (inches of water column); and the pressure differential across the wet scrubber (inches of water column). [Rule 62-297.310(5), F.A.C. and Permit No. PSD-FL-346A]

#### MONITORING, RECORD KEEPING AND REPORTING

- H.10. CAM Plan, Wet Scrubber:** The permittee shall comply with the following CAM plan.

CAM Criteria	Indicator #1	Indicator #2
Indicator	Total scrubber water flow rate	Pressure drop across scrubber
Measurement	Flow meter	Manometer (or equivalent)

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection H. White Sugar Dryer 2**

<b>CAM Criteria</b>	<b>Indicator #1</b>	<b>Indicator #2</b>
<b>Approach</b>		
<b>Indicator Range</b>	An excursion is defined as any flow rate <b>below 500 gallons per minute</b> . (3-hour block average). Excursions trigger inspection, corrective action, record keeping and reporting.	An excursion is defined as any pressure drop <b>below 8 inches of water column</b> . (3-hour block average). Excursions trigger inspection, corrective action, record keeping and reporting.
<b>Data Representativeness</b>	Flow meter measures scrubber flow rate with a minimum accuracy of $\pm 5\%$ of total water flow.	Manometer measures scrubber pressure drop with a minimum accuracy of $\pm 0.5$ inches of water column (gage).
<b>Verification of Operational Status</b>	NA	NA
<b>QA/QC Procedures</b>	Maintain equipment in accordance with manufacturer's recommendations.	Maintain equipment in accordance with manufacturer's recommendations.
<b>Monitoring Frequency</b>	Continuous readout	Continuous readout
<b>Data Collection Procedures</b>	Based on continuous monitoring data, calculate a 3-hour block average.	Based on continuous monitoring data, calculate a 3-hour block average.
<b>Averaging Period</b>	3-hour block average	3-hour block average

The scrubber system shall be operated so that fresh water makeup will be added to maintain a maximum sugar content of 15 brix in the recirculated scrubber water. In addition, the permittee shall comply with the general CAM provisions specified in Appendix H of this permit. The permittee shall record any problems with operation of the wet scrubber and corrective actions taken in the Daily Operational Records required by this permit. [Rules 62-204.800 and 62-213.440(1)(b)1.a, F.A.C.; 40 CFR 64; and Permit No. PSD-FL-346A]

- H.11.** Test Notifications, Records and Reports - General Requirements: Appendix C of this permit specifies the general requirements for test notifications, records and reports. [Rule 62-297.310, F.A.C.]

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection I. Miscellaneous Material Silos**

This subsection addresses the following regulated emissions units.

<b>EU No.</b>	<b>Emissions Unit Description</b>
<b>010</b>	Lime silo with baghouse at the water treatment plant.
<b>030</b>	Limestone storage silo with baghouse at the molasses plant. Limestone is unloaded from the silo via gravity drop to a mechanical auger that conveys it to the molasses plant. DESIGN INFORMATION: Lime is delivered by truck and unloaded pneumatically into the silo at an approximate rate of 33 tons per hour. The maximum throughput rate is 5000 tons per year. Particulate matter emissions are estimated as 0.126 lb/hour and 0.55 tons/year. [Permit No. 0510003-033-AC]
<b>031</b>	Lime storage and truck/rail handling system at the sugar refinery consists of two lime silos, truck and railcar pneumatic unloading and conveying equipment, three (3) associated baghouse control systems and a lime slaker system (as necessary). DESIGN INFORMATION: Each baghouse control system is designed for a flow rate of approximately 500 acfm and an outlet grain loading of 0.02 grains per dscf. The estimated maximum PM emissions from each baghouse are 0.08 pounds per hour and 0.35 tons per year. [Permit No. 0510003-034-AC]
<b>033</b>	Salt silo with baghouse at the molasses plant. DESIGN INFORMATION: The maximum process rate for salt loading is 33 tons/hour and the maximum estimated PM emissions are 0.13 lb/hour and 0.57 tons/year. [Permit No. 0510003-025-AC]

*Process Description for Lime Storage and Handling System (EU-031):* A combination of lime and flocculants are used to clarify raw sugarcane juice, which is then evaporated, crystallized, and centrifuged to form raw sugar. Some of the raw sugar is sold and some of it is processed into white sugar at the refinery on site. Lime is delivered by railcar and/or truck and unloaded into two new storage silos. Lime is unloaded from the silos via bottom drop into a lime slaker. Water is mixed with the lime and pumped to a lime slurry storage tank and agitator for use in the process. The total lime throughput is approximately 5000 tons/year.

Lime is unloaded pneumatically from trucks to the silos by a blower system at a rate of approximately 33 tons per hour. A 25-ton truck can be unloaded in about 45 minutes. Lime is unloaded from railcars by a separate vacuum-type system, which includes a collection bin, rotary airlocks, and transporter blower to pneumatically transport lime to the silos at a rate of approximately 5 tons per hour. It can take about 18 hours to unload 180,000 pounds of lime from a railcar. The silos and the collection bin are controlled by a baghouse. The silos are controlled with a bin vent filter to remove particulate matter during silo loading and unloading. Emissions from the collection bin are controlled by a filter receiver to remove particulate matter during railcar unloading. Each baghouse is designed for a flow rate of less than 500 acfm and an outlet grain loading of 0.02 grains per dscf.

**EQUIPMENT**

**I.1.** Equipment: To control PM emissions when loading and unloading, each silo shall be equipped with a baghouse. [Rules 62-4.070(3), 62-210.200(PTE), F.A.C.]

**PERFORMANCE RESTRICTIONS**

**I.2.** Permitted Capacity:

- a. The maximum loading rate for the limestone storage silo (EU 030) is 33 tons/hour. [Permit No. 0510003-033-AC]
- b. The maximum operating rate of the salt silo (EU 033) is approximately 33 tons per hour. [Permit No. 0510003-025-AC]

**I.3.** Restricted Operation: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

## SECTION 3. SPECIFIC CONDITIONS

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### Subsection I. Miscellaneous Material Silos

#### EMISSIONS STANDARDS

- I.4.** Opacity Standards: As determined by EPA method 9, emissions from each baghouse vent shall not exceed 5% opacity. [Rules 62-4.070(3), 62-210.200(PTE), 62-296.320(4)(a) and 62-296.620(4), F.A.C.]

#### EMISSIONS PERFORMANCE TESTING

- I.5.** Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct visible emissions tests in accordance with EPA Method 9 on each baghouse vent to demonstrate compliance with the opacity standard. The minimum observation period shall be at least 30 minutes or, if the operation is normally completed in less than 30 minutes and does not recur within that time, the test shall last for the length of the silo loading operation. Tests shall be conducted at a material transfer rate representative of the typical operation used throughout the year. For each test, the permittee shall record and report the material handling rate, pneumatic line pressure and pressure differential across the baghouse. For the lime storage and handling system (EU-031), annual tests shall be conducted while unloading lime from a railcar. Prior to renewing the air operation permit, a test shall also be conducted while unloading lime from a truck (EU-031). [Rules 62-4.070(3), 62-296.320(4)(a) and 62-296.620(4), F.A.C.]

#### MONITORING, RECORD KEEPING AND REPORTING

- I.6.** Test Notifications, Records and Reports - General Requirements: Appendix C of this permit specifies the general requirements for test notifications, records and reports. [Rule 62-297.310, F.A.C.]

**SECTION 3. SPECIFIC CONDITIONS**  
**Subsection J. Rental Refinery Package Boiler**

This section of the permit addresses the following emissions unit.

EU No.	Emissions Unit
035	Rental refinery package boiler with a maximum heat input rate of 12 MMBtu per hour from firing distillate oil

**EQUIPMENT**

**J.1. Refinery Package Boiler:** In accordance with the conditions of this subsection, the permittee is authorized to install and operate a rental package boiler rated at 300 horsepower that will fire distillate oil. The package boiler will be a rental unit and may be a different unit each year. Depending on the original manufacture date, the selected rental boiler may be subject to the applicable provisions in Subpart Dc of 40 CFR 60. The rental boiler is subject to Subpart DDDDD of 40 CFR 63. [Permit No. 0510003-045-AC]

**PERFORMANCE RESTRICTIONS**

**J.2. Permitted Capacity:** The maximum heat input rate of the boiler is 12 MMBtu per hour from firing distillate oil at approximately 85 gallons per hour (gph). [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-045-AC]

**J.3. Authorized Fuel:** The boiler is authorized to fire distillate oil or on-specification used oil with a maximum sulfur content of 0.05% by weight. On-specification used oil shall meet the additional requirements specified in Appendix I (Fuel Monitoring) of this permit. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-045-AC]

**J.4. Operational Restrictions:** The boiler shall only operate during the period of June 1<sup>st</sup> through September 30<sup>th</sup> of each year. It shall only operate during this period when all other mill boilers are shutdown (or in the process of shutting down) due to repair or maintenance. The refinery package boiler shall not fire more than 63,240 gallons of distillate oil during the authorized period of operation. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0510003-045-AC]

**EMISSIONS STANDARDS**

**J.5. Opacity Standard:** As determined by EPA method 9, visible emissions shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406, F.A.C.]

**J.6. BACT Determinations:** Particulate matter and sulfur dioxide emissions shall be minimized by the efficient combustion of distillate oil containing a maximum fuel sulfur content of 0.05% by weight. [Rule 62-296.406, F.A.C.]

**J.7. PM Standard:** If the rental boiler was constructed or reconstructed after June 4, 2010, then filterable PM emissions shall not exceed 1.1E-03 lb per MMBtu of heat input. [Table 1 to Subpart DDDDD of 40 CFR 63]. If the rental boiler was not constructed nor reconstructed after June 4, 2010; then, after January 30, 2016, filterable PM emissions shall not exceed 7.9E-03 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].

**J.8. CO Standard:** CO emissions shall not exceed 130 ppm by volume on a dry basis corrected to 3 percent oxygen, 1 hour minimum sampling time. [Table 1 and Table 2 to Subpart DDDDD of 40 CFR 63].

**J.9. HCl Standard:** If the rental boiler was constructed or reconstructed after June 4, 2010, then HCl emissions shall not exceed 4.4E-04 lb per MMBtu of heat input. [Table 1 to Subpart DDDDD of 40 CFR 63]. If the rental boiler was not constructed nor reconstructed after June 4, 2010; then, after January 30, 2016, HCl emissions shall not exceed 1.1E-03 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection J. Rental Refinery Package Boiler**

**J.10. Mercury Standard:** If the rental boiler was constructed or reconstructed after June 4, 2010, then mercury emissions shall not exceed 4.8E-07 lb per MMBtu of heat input. [Table 1 to Subpart DDDDD of 40 CFR 63]. If the rental boiler was not constructed nor reconstructed after June 4, 2010; then, after January 30, 2016, mercury emissions shall not exceed 2.0E-06 lb per MMBtu of heat input. [Table 2 to Subpart DDDDD of 40 CFR 63].

**TESTING REQUIREMENTS**

**J.11. Annual Compliance Tests:** During each federal fiscal year (October 1 - September 30), if the rental boiler is operated, then it shall be tested to demonstrate compliance with each applicable emission standard listed in the preceding six specific conditions. [Rule 62-297.310(7)(a)4, F.A.C.]

**J.12. Test Methods:** If required, stack tests shall be performed in accordance with the following methods or the most recent versions of these methods:

<b>Method</b>	<b>Description of Method and Comments</b>
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Carbon Monoxide (CO), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
26 or 26A	Hydrogen chloride (HCl), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.
29, 30A or 30B	Mercury (Hg), see Table 5 to Subpart DDDDD of 40 CFR 63 for additional details.

**J.13. Test Requirements:** The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix C (General Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

**J.14.** For demonstrating compliance with emission limits for PM, CO, HCl and Hg pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall:

- a. Comply with the performance testing requirements in Table 5 to Subpart DDDDD of 40 CFR 63. Performance testing may include fuel analysis for HCl and Hg, if fuel analysis is the selected method of compliance for these pollutants.
- b. Comply with the initial compliance test requirements in 40 CFR 63.7510 and 40 CFR 63.7530., and
- c. Conduct annual performance tests, fuel analysis, and tune-ups in accordance with 40 CFR 63.7515, 40 CFR 63.7520, 40 CFR 63.7521 and 40 CFR 63.7540

**J.15.** The permittee shall conduct an annual tune up of the boiler as specified in 40 CFR 63.7540(10).

**J.16.** The permittee must install, operate, and maintain an oxygen analyzer system in accordance with 40 CFR 63.7525(a).

**MONITORING, RECORD KEEPING AND REPORTING**

**J.17. Monitoring Equipment:** In accordance with the manufacturer’s recommendations, the permittee shall install, operate and maintain equipment to continuously monitor the oil flow rate. The device shall be calibrated at least annually and calibration records maintained in a written or electronic log. [Rule 62-213.440(4), F.A.C.; and Permit No. 0510003-045-AC]

**J.18. Fuel Monitoring Requirements:** The permittee shall comply with the applicable fuel monitoring requirements specified in Appendix I (Fuel Monitoring) for each authorized fuel. [Rule 62-210.370(3), F.A.C. and Permit No. 0510003-045-AC]

### SECTION 3. SPECIFIC CONDITIONS

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#### Subsection J. Rental Refinery Package Boiler

- J.19.** Test Notifications, Records and Reports - General Requirements: Appendix C of this permit specifies the general requirements for test notifications, records and reports. [Rule 62-297.310, F.A.C.]
- J.20.** Notification: Within three days of bringing a rental boiler on site, the permittee shall notify the Compliance Authority of the following: make and model, maximum heat input rate (MMBtu/hour), the date that the boiler was constructed or last reconstructed (whichever is later), the applicability of NSPS 40 CFR 60 Subpart Dc, and preliminary plans for conducting all applicable emissions testing. [Rule 62-4.070(3), F.A.C.].

#### OTHER APPLICABLE REQUIREMENTS

- J.21.** NSPS Provisions: If the boiler was originally manufactured, modified or reconstructed after June 9, 1989, it is subject to and shall comply with the applicable federal requirements in NSPS Subpart Dc of 40 CFR 60. The boiler will be a rental unit and may be a different unit each year. See Appendix L (NSPS Provisions) of this permit. [Rule 62-204.800, F.A.C. and Subpart Dc of 40 CFR 60].

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**K. Degasification Systems**

This section of the permit addresses the following emissions unit.

<b>EU No.</b>	<b>Emission Unit Description</b>
036	Two Hydrogen Sulfide Degasification Systems

*{Permitting Note: In accordance with Rule 62-212.400(PSD), F.A.C., the above emission unit is subject to a Best Available Control Technology (BACT) determination for hydrogen sulfide (H<sub>2</sub>S). The final BACT determination is presented in Appendix N of this permit.*

**EQUIPMENT**

- K.1. Degasification Systems:** The permittee is authorized to install and operate two (2) H<sub>2</sub>S degasification systems for the associated water wells. [Permit Nos. 0510003-048-AC/PSD-FL-415 and 0510003-050-AC]
- K.2. Water Use:** The permittee shall install, calibrate and operate flow meters (or equivalent devices) with integrators to monitor the water flow rate from each water well. [Rule 62-212.400(BACT), F.A.C.; Permit Nos. 0510003-048-AC/PSD-FL-415 and 0510003-050-AC]

**PERFORMANCE RESTRICTIONS**

- K.3. Hours of Operation:** The hours of operation are not limited (8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.; Permit Nos. 0510003-048-AC/PSD-FL-415 and 0510003-050-AC]

**EMISSIONS STANDARDS**

- K.4. Hydrogen Sulfide:** The emissions of H<sub>2</sub>S from the combined degasification systems shall not exceed 18.0 tons per consecutive 12-month rolling total based on monthly raw well water flow rates and quarterly water sampling to determine the H<sub>2</sub>S concentration in the raw water entering the degasification units. If the facility receives valid odor complaints associated with the degasification systems as verified by the Compliance Authority, the permittee may be requested to revisit the determination of BACT for H<sub>2</sub>S emissions from degasification systems. [Rule 62-212.400(BACT), F.A.C.; Permit Nos. 0510003-048-AC/PSD-FL-415 and 0510003-050-AC]
- K.5. Objectionable Odor Prohibited:** No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An “objectionable odor” 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 62-296.320(2), F.A.C.; Permit Nos. 0510003-048-AC/PSD-FL-415 and 0510003-050-AC]

**MONITORING AND RECORD KEEPING REQUIREMENTS**

- K.6. Water Wells Sampling/Analysis:** On at least a quarterly basis, the permittee shall obtain representative samples of the water going to the degasification units. The samples shall be taken no earlier than 60 days apart. Each sample shall have an analysis conducted to determine the H<sub>2</sub>S concentration. [Rule 62-212.400(BACT), F.A.C.; Permit Nos. 0510003-048-AC/PSD-FL-415 and 0510003-050-AC]
- K.7. Monthly Records:** Within ten calendar days following each month, the permittee shall observe and record the total monthly water pumped from the water wells to each degasification unit. This information shall be used in conjunction with the measured H<sub>2</sub>S concentration for the given quarter to determine the H<sub>2</sub>S emissions for the month and the previous 12 months, rolling total.  
  
[Rule 62-212.400(BACT), F.A.C.; Permit Nos. 0510003-048-AC/PSD-FL-415 and 0510003-050-AC]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**L. RICE Emergency Engines ≤ 500 HP constructed before June 12, 2006**

The specific conditions in this section apply to the following emissions units:

<b>E.U. ID No.</b>	<b>Brief Description</b>
037	Emergency Reciprocating Internal Combustion Engine(RICE) (WWTP East Pump Station)
038	Emergency RICE (Fire Pump Building)
039	Emergency RICE (WWP 2 <sup>nd</sup> Floor Pump Room)
040	Emergency RICE (WTP Portable Generator)
042	Emergency RICE (Computer/IT Backup)

EU037 is an existing 231 bhp emergency compression ignition (CI) RICE located at the WWTP east pump station. This diesel CAT 3306 engine (engine number 64Z31005) was manufactured in 2000. The displacement is 1.75 liters/cylinder (l/cyl). This engine operates approximately 60 hours per year and is subject to 40 CFR 63 Subpart ZZZZ.

EU038 is an existing 231 bhp emergency RICE located at the Fire Pump Building. This diesel CAT 3306 engine (engine number 64Z28872) was manufactured in 1999. The displacement is 1.75 liters/cylinder (l/cyl). This engine operates approximately 60 hours per year and is subject to 40 CFR 63 Subpart ZZZZ.

EU039 is an existing 230 bhp emergency RICE located at the WWP 2<sup>nd</sup> floor pump room. The diesel CAT 3126DITA engine (engine number 9ZRO3166) was manufactured in 2005. The displacement is 0.90 liters/cylinder (l/cyl). This engine operates approximately 60 hours per year and is subject to 40 CFR 63 Subpart ZZZZ.

EU040 is an existing 231 bhp emergency potable RICE located at the WTP. The diesel CAT 3306T engine (engine number 8JJ00301) was manufactured in 1996. The displacement is 1.75 liters/cylinder (l/cyl). This engine operates approximately 60 hours per year and is subject to 40 CFR 63 Subpart ZZZZ.

EU042 is an existing 36 bhp emergency RICE located at the WTP. The diesel Perkins 3.1524 engine (engine number 147769) was manufactured in 1981. The displacement is 0.83 liters/cylinder (l/cyl). This engine operates approximately 60 hours per year and is subject to 40 CFR 63 Subpart ZZZZ.

The following table provides important details for these emissions units:

<b>E.U. ID No.</b>	<b>Engine Brake HP</b>	<b>Date of Construction</b>	<b>Model Year</b>	<b>Primary Fuel</b>	<b>Type of Engine</b>	<b>Displacement liters/cylinder (l/c)</b>	<b>Serial #</b>	<b>Date of last mod. or reconst.</b>
037	231	-----	2000	Diesel	Emergency	1.75	64Z31005	N/A
038	231	-----	1999	Diesel	Emergency	1.75	64Z28872	N/A
039	230	-----	2005	Diesel	Emergency	0.90	9ZRO3166	N/A
040	231	-----	1996	Diesel	Emergency	1.75	8JJ00B01	N/A
042	36	-----	1981	Diesel	Emergency	0.83	147769	N/A

*{Permitting Note: These emissions units, compression ignition (CI) engines, are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62-204.800(11)(b), F.A.C. This permit section addresses “existing” stationary CI RICE less than or equal to 500 HP that are located at a major source of HAP and that have not been modified or reconstructed after 6/12/2006. Unless the RICE is modified or reconstructed*

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### L. RICE Emergency Engines $\leq$ 500 HP constructed before June 12, 2006

after 7/11/2005, NSPS 40 CFR 60, Subpart IIII, will not apply. The permittee shall comply with the following emissions and operating limitations no later than May 3, 2013.}

#### **Essential Potential to Emit (PTE) Parameters**

##### **L.1. Hours of Operation**

- a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- b. *Maintenance and Testing.* Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 63.6640(f)(1)]
- c. *Non-emergency Situations.* Each RICE is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 63.6640(f)(1)]
- d. *Other Situations.* Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power. [40 CFR 63.6640(f)(1)]
- e. *Engine Startup.* During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

#### **Emission Limitations and Operating Requirements**

##### **L.2. Work or Management Practice Standards**

- a. *Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(a)]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(b)]
- c. *Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Table 2c(1)(c)]
- d. *Operation and Maintenance.* Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e)]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### L. RICE Emergency Engines $\leq$ 500 HP constructed before June 12, 2006

- e. *Oil Analysis.* The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in L.2.a. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent of water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

#### **Monitoring of Operations**

- L.3. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

#### **Compliance**

- L.4. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in Subpart ZZZZ at all times. [40 CFR 63.6605(a)]

*{Permitting Note: As long as the owner or operator operates the stationary RICEs in accordance with the requirements under 40 CFR 63.6640(f)(i) thru (iii), there are no required pollutant emissions limits.}*

- L.5. Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

#### **Recordkeeping Requirements**

- L.6. Notification, Performance and Compliance Records. The owner or operator shall keep the following:

- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- b. Records to show continuous compliance with each emission limitation or operating requirement in specific condition L.2.
- c. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[40 CFR 63.6655(a)(1), (d), (f)]

- L.7. Malfunction Records.

- a. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.

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### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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#### L. RICE Emergency Engines $\leq$ 500 HP constructed before June 12, 2006

- b. Records of actions taken during periods of malfunction to minimize emissions in accordance with specific condition L.5. of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655(a)(2) and (5)]

#### L.8. Maintenance Records.

- a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[40 CFR 63.6655(a)(4) and (e)]

#### L.9. Record Retention.

- a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

#### **Reporting Requirements**

- L.10. Emergency Situation. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in specific condition L.2. of this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63 Table 2c, footnote 1]

#### **OTHER APPLICABLE REQUIREMENTS**

- L.11. NESHAP Provisions: Emissions units 037, 038, 039, 040 and 042 are subject to the National Emission Standards for HAPs, Subparts A and ZZZZ in 40 CFR 63 for “Reciprocating Internal Combustion Engines”. Appendix O of this permit provides a link to these provisions. [Rule 62-204.800, F.A.C and 40 CFR 63.6665]

- L.12. The owner or operator must comply with the general provisions in 40 CFR 63 Subpart A. []

**SECTION 3. SPECIFIC CONDITIONS**

**Subsection M. RICE Emergency Engines ≥ 500 HP constructed before December 19, 2002**

The specific conditions in this section apply to the following emissions unit:

E.U. ID No.	Brief Description
041	1064 bhp Emergency Reciprocating Internal Combustion Engine (WTP plant generator)

EU041 is an existing 1064 bhp emergency RICE located at the WTP. The diesel Detroit 800ROZD71 engine (engine number 378320) was manufactured in 1998. The displacement is 1.50 liters/cylinder (l/cyl). This engine operates approximately 60 hours per year and is subject to 40 CFR 63 Subpart ZZZZ.

The following table provides important details for these emissions units:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder(l/c)	Serial #	Date of last mod. or reconst.
041	1064	-----	1998	Diesel	Emergency	1.50	378320	N/A

*{Permitting Note: This emissions unit, compression ignition (CI) engine, is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62-204.800(11)(b), F.A.C. This permit section addresses “existing” stationary CI RICE that are greater than 500 HP that are located at a major source of HAP and that have not been modified or reconstructed after 12/19/2002. Unless the RICE is modified or reconstructed after 7/11/2005, NSPS 40 CFR 60, Subpart III, will not apply. The permittee shall comply with the following emissions and operating limitations no later than May 3, 2013.}*

**Essential Potential to Emit (PTE) Parameters**

**M.1. Hours of Operation.** The owner or operator of an emergency stationary RICE with a site rating of more than 500 bhp located at a major source of HAP emissions that was installed prior to June 12 2006, must operate the engine according to the conditions in **M.1.a. – c.** If the engine is not operated according to the requirements, the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and will need to meet all requirements for non-emergency situations.

- a. *Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(2)(i)]
- b. *Maintenance and Testing.* Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. [40 CFR 63.6640(f)(2)(ii)]
- c. *Non-emergency Situations.* Each RICE is authorized to operate an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(2)(iii)]

[40 CFR 63.6640(f)]

**General Provisions**

**M.2.** The owner or operator must comply with the general provisions in 40 CFR 63 Subpart A. [40 CFR 63.6665]

## SECTION 4. APPENDICES

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- Appendix A. Citation Format and Glossary
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**SECTION 4. APPENDIX A**  
**Citation Formats and Glossary**

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

**REFERENCES TO PREVIOUS PERMITTING ACTIONS**

**Old Permit Numbers**

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

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

**New Permit Numbers**

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

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

**PSD Permit Numbers**

*Example:* Permit No. PSD-FL-317

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

**RULE CITATION FORMATS**

**Florida Administrative Code (F.A.C.)**

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

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

**Code of Federal Regulations (CFR)**

*Example:* [40 CFR 60.7]

*Means:* Title 40, Part 60, Section 7

**SECTION 4. APPENDIX A**  
**Citation Formats and Glossary**

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**GLOSSARY**

<b>° F:</b> degrees Fahrenheit	<b>MACT:</b> maximum achievable technology
<b>acfm:</b> actual cubic feet per minute	<b>MMBtu:</b> million British thermal units
<b>ARMS:</b> Air Resource Management System	<b>MSDS:</b> material safety data sheets
<b>BACT:</b> best available control technology	<b>MW:</b> megawatt
<b>Btu:</b> British thermal units	<b>NESHAP:</b> National Emissions Standards for Hazardous Air Pollutants
<b>CAM:</b> compliance assurance monitoring	<b>NO<sub>x</sub>:</b> nitrogen oxides
<b>CEMS:</b> continuous emissions monitoring system	<b>NSPS:</b> New Source Performance Standards
<b>cfm:</b> cubic feet per minute	<b>O&amp;M:</b> operation and maintenance
<b>CFR:</b> Code of Federal Regulations	<b>O<sub>2</sub>:</b> oxygen
<b>CO:</b> carbon monoxide	<b>Pb:</b> lead
<b>COMS:</b> continuous opacity monitoring system	<b>PM:</b> particulate matter
<b>DEP:</b> Department of Environmental Protection	<b>PM<sub>10</sub>:</b> particulate matter ≤ 10 microns
<b>Department:</b> Department of Environmental Protection	<b>PSD:</b> prevention of significant deterioration
<b>dscfm:</b> dry standard cubic feet per minute	<b>psi:</b> pounds per square inch
<b>EPA:</b> Environmental Protection Agency	<b>PTE:</b> potential to emit
<b>ESP:</b> electrostatic precipitator	<b>RACT:</b> reasonably available control technology
<b>EU:</b> emissions unit	<b>RATA:</b> relative accuracy test audit
<b>F.A.C.:</b> Florida Administrative Code	<b>SAM:</b> sulfuric acid mist
<b>F.D.:</b> forced draft	<b>scf:</b> standard cubic feet
<b>F.S.:</b> Florida Statutes	<b>scfm:</b> standard cubic feet per minute
<b>FGR:</b> flue gas recirculation	<b>SIC:</b> standard industrial classification code
<b>Fl:</b> fluoride	<b>SNCR:</b> selective non-catalytic reduction
<b>ft<sup>2</sup>:</b> square feet	<b>SO<sub>2</sub>:</b> sulfur dioxide
<b>ft<sup>3</sup>:</b> cubic feet	<b>TPH:</b> tons per hour
<b>gpm:</b> gallons per minute	<b>TPY:</b> tons per year
<b>gr:</b> grains	<b>UTM:</b> Universal Transverse Mercator coordinate system
<b>HAP:</b> hazardous air pollutant	<b>VE:</b> visible emissions
<b>Hg:</b> mercury	<b>VOC:</b> volatile organic compounds
<b>I.D.:</b> induced draft	
<b>ID:</b> identification	
<b>kPa:</b> kilopascals	
<b>lb:</b> pound	

## SECTION 4. APPENDIX B

### Identification of Primary State and Federal Regulations

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#### Applicable State Regulations

Emissions units at this facility are subject to the applicable portions of the regulations specified in the following Chapters of the Florida Administrative Code: 62-4 (Permitting Requirements); 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212 (Preconstruction Review, PSD Review and Best Available Control Technology, and Non-attainment Area Review and Lowest Achievable Emission Rate); 62-213 (Title V Air Operation Permits for Major Sources of Air Pollution); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures). In particular, emissions units are subject to applicable portions of the following source-specific rules.

- Boilers 1, 2, 4, 7 and 8 (EU-001, 002, 009, 014 and 028) are subject to Rule 62-296.410, F.A.C. for carbonaceous fuel burning equipment.
- The temporary rental refinery package boiler is subject to Rule 62-296.406, F.A.C. for fossil fuel steam generators with less than 250 MMBtu per hour of heat input.
- Boilers 4, 7 and 8 (EU-009, 014 and 028), the biomass handling and storage (EU-027) and several emissions units in the sugar refinery (EU-015, 016, 017, 018, 019, 020, 021, 022 and 029) are subject to Rule 62-212.400(BACT), F.A.C.
- For all emissions units requiring tests, Rule 62-297.310, F.A.C. establishes the general requirements.
- The following emissions units are subject to the applicable provisions in Rule 62-213.440, F.A.C. for Compliance Assurance Monitoring: Boilers 1, 2, 4, 7 and 8 (EU-001, 002, 009, 014 and 028), granular carbon regeneration furnace (EU-017), three vacuum pickup systems (EU-018) and white sugar dryer No. 2 (EU-029).

#### Applicable Federal Regulations

Federal environmental requirements are established in Title 40 of the Code of Federal Regulations (CFR). Emissions units are subject to the following source-specific regulations.

- All sources subject to a specific NSPS subpart are also subject to the applicable General Provisions in NSPS Subpart A of 40 CFR 60.
- Boilers 7 (EU-014) and 8 (EU-028) are subject to the New Source Performance Standards (NSPS) in Subpart Db of 40 CFR 60 for industrial-commercial-institutional steam generating units with a maximum capacity of more than 100 MMBtu per hour of heat input.
- If the temporary rental refinery package boiler (EU-035) was constructed, modified or reconstructed after June 9, 1989, it is subject to NSPS Subpart Dc of 40 CFR 60 for small industrial-commercial-institutional steam generating units with a maximum capacity of less than 100 MMBtu per hour of heat input, but greater than or equal to 10 MMBtu per hour of heat input.
- The following emissions units are subject to the applicable provisions in 40 CFR 64 for Compliance Assurance Monitoring: Boilers 1, 2, 4, 7 and 8 (EU-001, 002, 009, 014 and 028), granular carbon regeneration furnace (EU-017), three vacuum pickup systems (EU-018) and white sugar dryer 2 (EU-029).

**SECTION 4. APPENDIX C**  
**General Testing Requirements**

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Unless otherwise specified in the permit, the following testing requirements apply as necessary to all emissions units.

**COMPLIANCE TESTING REQUIREMENTS**

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.]
2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
3. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
4. Applicable Test Procedures
  - a. *Required Sampling Time*.
    - (1) 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.
    - (2) *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.
      - (c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
  - b. *Minimum Sample Volume*. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
  - c. *Calibration of Sampling Equipment*. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

**SECTION 4. APPENDIX C**  
**General Testing Requirements**

TABLE 297.310-1 CALIBRATION SCHEDULE			
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° 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	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

- d. *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), F.A.C.]

5. Determination of Process Variables

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

**SECTION 4. APPENDIX C**  
**General Testing Requirements**

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- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *Sampling Ports.*
  - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
  - (2) The ports shall be capable of being sealed when not in use.
  - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
  - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
  - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
- d. *Work Platforms.*
  - (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
  - (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
  - (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
  - (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- e. *Access to Work Platform.*
  - (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
  - (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
- f. *Electrical Power.*
  - (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
  - (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- g. *Sampling Equipment Support.*
  - (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

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**General Testing Requirements**

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- (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
  - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
  - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
  - (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

- 7. Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
  - a. *General Compliance Testing*.
    - 1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
    - 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
    - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
      - (a) Did not operate; or
      - (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
    - 4. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
      - (a) Visible emissions, if there is an applicable standard;
      - (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
      - (c) Each NESHAP pollutant, if there is an applicable emission standard.
    - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
    - 6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a

**SECTION 4. APPENDIX C**  
**General Testing Requirements**

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compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
  8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
  9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
  10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. *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.
- c. *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 paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

**RECORDS AND REPORTS**

8. Test Reports:

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
  1. The type, location, and designation of the emissions unit tested.
  2. The facility at which the emissions unit is located.
  3. The owner or operator of the emissions unit.
  4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal

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**General Testing Requirements**

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

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

SECTION 4. APPENDIX D

Unregulated and Shutdown Emissions Units

UNREGULATED EMISSIONS UNITS

An “unregulated emissions unit” is 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 otherwise applicable unit-specific emissions or work practice standards (e.g., recordkeeping requirements for small storage tanks under 40 CFR 60, Subpart Kb). All fugitive emissions not subject to unit-specific work practice standards may be included in the application as one or more separate unregulated emissions units. The permittee identifies the following unregulated emissions units and activities for the Clewiston sugar mill and refinery.

**Boiling House**

- Bagacillo cyclones and handling system
- Centrifugals
- Crystallizer cooling towers
- Crystallizers
- Evaporator cleaning operations
- Evaporators
- Handling of raw sugar
- Juice heaters
- Mud belt presses
- Diesel fuel storage tanks (2)
- Process tanks including: batch, caustic, chemical neutralization, juice clarified juice, clarifier, condensate, EDTA, flocculants/coagulant mix, flash, hot liming, lime hold tank, mingler, mixer, melter, molasses tanks, mud mixing, mud receiving, pan feed, magma, mud waste muriatic acid, phosphoric acid, slakes lime tank, spent acid, sugar receivers, sulfamic acid, syrup storage and alcohol storage tanks
- Vacuum mud filters and vacuum pumps
- Vacuum pans, receivers and condensers
- Chemical Mixing Building (Sulfamic acid mix tank, sulfamic acid baghouse with hopper, Rhodine totes for sulfamic acid addition, and phosphoric acid totes)

**Sugar Mill**

- Cane mills
- Cush-cush and DSM screens (Bagacillo)
- Turbine vents
- Laboratory

**Sugar Warehouses**

- Truck Loading of Sugar
- Front End Loader Traffic
- \* Truck Dumping
- \* Sugar Conveying

**Agricultural Equipment Shop**

- Multiple 55-gallon contaminated diesel drums
- Off-road diesel storage tank (25,000 gallon)
- On-road diesel storage tank (10,000 gallon)
- Low sulfur diesel tank (10,000 gallon)
- \* Used oil storage tanks (4)
- \* Vehicle fueling station
- \* Gasoline storage tank
- \* Various equipment shops
- \* Used antifreeze storage tank

**Water Treatment Plant**

- Clarifiers
- Lime Slaker
- Water Treatment Operations
- Anhydrous ammonia storage tank
- Carbon Dioxide tank
- \* Diesel fuel storage tank
- \* Sodium hypochlorite storage tank
- \* Small polymer tanks (2)
- \* Sludge ponds (lime)
- \* water treatment plant supply wells (fugitive H2S Emissions)

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**Unregulated and Shutdown Emissions Units**

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**Molasses Plant**

- Mineral mix tank
  - Mixed feed tank
  - Urea holding tank
  - Urea mixing & storage tank
- \* Phosphoric acid tank
  - \* Sulfuric acid tanks
  - \* Product storage tanks

**South Locomotive Shop**

- Parts Washers (non-HAP)
  - Sand Silo
- \* Painting operations (temporary booth)

**Miscellaneous Activities**

- Diesel, gasoline and fuel oil storage tanks
  - Large storage tanks in boiler house
  - Used oil tanks/drums (covered)
  - Pressurized LPG tanks
  - Solvent recovery stills
  - Distillate oil storage tanks
  - Propane-fired water heater and propane tank in railcar wash facility
  - Ash handling, loading and storage in boiler house
  - Cooling water towers, spray ponds and canals
  - Cane dumping/handling
  - Raw and refined sugar handling
  - Vacuum cleaning systems
  - Cold cleaning operations (non-halogenated solvent)
  - Vehicle-generated dust
  - Parts washers (non-HAP)
  - Boiler feedwater plant
  - Painting operations
  - Solid/hazardous waste storage area
  - Urea storage tank at Boiler 8
  - Calcium nitrate tank
  - Natural gas station at granular carbon regeneration furnace
  - Wastewater ponds
  - Sugar transfer operations
  - Molasses storage tanks
  - Molasses truck/rail loading and unloading
- \* Sugar recovery operations
  - \* Ash/lime mixing inside ash bunker
  - \* Balanced polymer tanks and chemical storage/mixing tanks for boiler feedwater plant
  - Acid storage tanks
  - Process-wide flanges and valves
  - Pump vents (lube oil vents)
  - Vents from hydraulics/lube oil reservoirs and pumps
  - Use of cutting tools
  - Painting operations
  - Batch mixers (<30 cu. ft.)
  - Containers for oils/wax/grease
  - Electric ovens for drying
  - Gear boxes, reducers vents
  - Kerosene ovens for drying
  - Liquid loading/unloading (non-HAP)
  - Oil/water separator/skimmer equipment troughs/storage
  - Scrubber water ponds and troughs
  - Welding operations
  - Wood working and metal working operations
  - Railroad maintenance
  - Boiler blow-down pipes/vents
  - Sandblasting operations: sandblaster and grinder with filter in powerhouse

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**Unregulated and Shutdown Emissions Units**

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**SHUTDOWN EMISSIONS UNITS**

The following emissions units have been permanently shut down. Any proposed future operation of these boilers would require a preconstruction review permit as a “new” emissions unit.

<b>EU No.</b>	<b>Description</b>
003	Boiler 3: Permanent shutdown required by Permit PSD-FL-333 for PSD netting
004	Boiler 5: Permanent shutdown required by Permits PSD-FL-208 and PSD-FL-272 for PSD netting
005	Boiler 6: Permanent shutdown required by Permits PSD-FL-208 and PSD-FL-272 for PSD netting
011	Lime silo at boiling house
012	Diesel generator 1: Dismantled and no longer in operation
013	Diesel generator 2: Dismantled and no longer in operation
023	Propane sock heaters
032	Portable rock crusher

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**SECTION 4. APPENDIX E**

**Insignificant Activities**

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**INSIGNIFICANT EMISSIONS UNITS AND ACTIVITIES**

Pursuant to Rule 61-213.430(6)(b), F.A.C., an emissions unit or activity shall be considered insignificant if all of the following criteria are met:

1. Such unit or activity would be subject to no unit-specific applicable requirement.
2. Such unit or activity, in combination with other units and activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in subparagraph 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s).
3. Such unit or activity would neither emit nor have the potential to emit:
  - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
  - b. 1,000 pounds per year or more of any hazardous air pollutant;
  - c. 2,500 pounds per year or more of total hazardous air pollutants; or
  - d. 5.0 tons per year or more of any other regulated pollutant.

Pursuant to Rule 61-213.430(6)(a), F.A.C., all requests for determination of insignificant emissions units or activities made pursuant to paragraph 62-213.420(3)(n), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to this chapter. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of paragraph 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under this chapter shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to this rule.

**SECTION 4. APPENDIX F**

**Permit History**

**Title V Air Operation Permit**

The most recent Title V air operation permit for this facility was Permit 0510003-032-AV, which was issued on 08/20/2010. This permit incorporated all previous air construction permits through Permit 0510003-031-AC.

**Air Construction Permits**

The following table summarizes the air construction permits issued to this facility.

Permit No.	Issued	Project Description
<i>The following air construction permits were incorporated into previous Permit 0510003-017-AV.</i>		
AC26-126965	02/16/1987	Boiler 4
AC26-238006	02/02/1995	PSD Permit PSD-FL-208 to construct Boiler 7
AC26-247917	05/03/1994	Construct lime silo
AC26-248809	08/09/1995	Boiler 4
AC26-259722	02/14/1995	Miscellaneous
0510003-001-AC	10/29/1996	Construct sugar refinery; superseded by Permit 0510003-004-AC
0510003-003-AC	N/A	Withdrawn
0510003-004-AC	02/14/1997	Modification to sugar refinery; superseded by Permit PSD-FL-272A
0510003-005-AC	10/31/1997	Minor permit revision to extend testing for Boiler 7
0510003-006-AC	11/14/1997	Minor permit revision to establish testing protocol for Boiler 7
0510003-007-AC	03/22/1999	Minor permit revision for Boiler 4
0510003-008-AC	06/14/1999	Minor revision for sugar mill log
0510003-009-AC	11/19/1999	PSD Permit PSD-FL-272 to modify Boiler 4, Part I; superseded by PSD-FL-272A
0510003-010-AC	03/08/2001	PSD Permit PSD-FL-272A to modify Boiler 4, Part II
0510003-011-AC	06/12/2000	Construct new bagasse handling system; superseded by Permit 0510003-015-AC
0510003-012-AC	02/20/2001	Administrative correction
0510003-015-AC	03/07/2002	Modify bagasse handling system; superseded by Permit PSD-FL-333
<i>In addition to the previous air construction permits, the following air construction permits were incorporated into renewal Permit 0510003-032-AV.</i>		
0510003-016-AC	N/A	Withdrawn
0510003-018-AC	06/06/2003	Burner modifications to Boilers 4 and 7 to fire distillate oil; superseded by Permit 0510003-029-AC
0510003-019-AC	N/A	Withdrawn
0510003-020-AC	01/15/2003	Modification for alternate steam conditions for Boiler 3; Boiler 3 is permanently shutdown
0510003-021-AC	11/21/2003	PSD Permit PSD-FL-333 to construct Boiler 8; superseded by PSD-FL-333A
0510003-022-AC	06/03/2003	Off season repairs for Boilers 1 – 7; only incorporate off-season record keeping and reporting requirements
0510003-023-AC	N/A	Withdrawn
0510003-024-AC	11/04/2004	Revision to Boiler 8 (PSD-FL-333A) for shakedown and DAF material; superseded by Permit PSD-FL-333B
0510003-025-AC	12/21/2004	Construct salt silo for molasses plant
0510003-026-AC	02/01/2005	PSD Permit PSD-FL-346 to construct new white sugar dryer 2; superseded by Permit

**SECTION 4. APPENDIX F**

**Permit History**

Permit No.	Issued	Project Description
		0510003-038-AC
0510003-027-AC	02/24/2005	Burner modifications for Boilers 1 and 2 to fire distillate oil; superseded by Permit 0510003-036-AC
0510003-028-AC	N/A	Exempt
0510003-029-AC	04/01/2005	Revision to extend burner modifications to Boiler 4; superseded by Permit 0510003-039-AC for Boiler 4
0510003-030-AC	04/07/2006	PSD revision (PSD-FL-333B) for Boiler 8 to add final NEHSAP DDDDD provisions; superseded by Permit PSD-FL-333C
0510003-031-AC	(Pending)	Miscellaneous air construction permit revisions issued concurrent with Title V Permit 0510003-032-AV
0510003-033-AC	09/06/2005	Construct limestone silo
0510003-034-AC	01/20/06	Construct new lime storage and handling system
0510003-035-AC	06/19/2006	Addition of cyclone dust collector to Boiler 8; superseded by Permit PSD-FL-333C
0510003-036-AC	08/02/2006	Revision to burner modifications for Boilers 1 and 2; superseded by Permit 0510003-039-AC
0510003-037-AC	03/30/07	PSD revision (PSD-FL-333C) for Boiler 8 to increase heat input rate and modify bagasse handling system
0510003-038-AC	12/22/2006	Revision for white sugar dryer 2 to change PM standard; supersedes Permit 0510003-021-AC
0510003-039-AC	09/20/2006	Revision of oil firing systems for Boilers 1, 2 and 4; supersedes Permits 0510003-018-AC and 0510003-027-AC
0510003-040-AC	N/A	Withdrawn
0510003-041-AC	N/A	Withdrawn
0510003-043-AC	N/A	Exempt
0510003-044-AC	12/06/2007	Boiler 7 wood chip firing
0510003-045-AC	06/12/2008	Temporary refinery package boiler
0510003-046-AC	12/30/2009	Letter of authorization for alternate method of monitoring flue gas moisture content
<i>In addition to the previous air construction permits, the following air construction permits were incorporated into Permit 0510003-053-AV.</i>		
0510003-047-AC	6/21/2011	Alternate method of monitoring flue gas moisture content
0510003-048-AC	9/1/2011	(PSD-FL-415) Construction of five water wells and two H <sub>2</sub> S degasification system
0510003-051-AC	10/24/2011	Construct a fifth vacuum pan in the sugar refinery
<i>In addition to the previous air construction permits, the following air construction permits were incorporated into Permit 0510003-057-AV.</i>		
0510003-054-AC	2/4/2013	Install natural gas burners in granular carbon regeneration furnace
0510003-055-AC	6/20/2013	Add a new baghouse and move existing baghouse.
0510003-056-AC	6/21/2013	Replacement of waterwalls in Boiler 7
0510003-057-AV	11/6/2014	Revised Title V Operating Permit to include 054-AC, 055-AC and 056-AC
0510003-058 AC	7/8/2014	Upgrade of the OFA for Boiler Nos. 1 and 2 to meet NESHAP (Subpart DDDDD).
0510003-059-AV	-----	Renewal of Title V Air Operating Permit No. 0510003-053-AV

**SECTION 4. APPENDIX G**  
**Fugitive Dust Precautions**

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The Clewiston sugar mill and refinery includes the following industrial activities that may generate fugitive dust emissions: sugarcane loading, unloading and handling; bagasse and wood storage and handling; boiler ash removal, storage and handling; vehicular traffic on paved and unpaved roads; the use of bagged, dry chemicals; miscellaneous outdoor painting; and construction, demolition or wrecking. Unless otherwise specified by this permit, the permittee shall take reasonable precautions to prevent the emissions of unconfined particulate matter from these and other similar activities, including:

- Using covered conveyors on the carbonaceous fuel handling systems;
- Using enclosed material transfer points where feasible;
- Minimizing the distance carbonaceous fuel is dropped during handling;
- Using windbreaks around the material handling equipment and storage piles;
- Using enclosures and curtains to reduce fugitive particulate matter emissions from painting operations;
- Using water to control dust from boiler ash handling;
- Applying water or approved dust suppressants to unpaved roads, yards, uncovered storage piles, and similar activities. Unless necessary to mitigate fire hazards or for other safety concerns, water should not be applied to bagasse or wood storage piles because these materials are used for boiler fuels;
- Applying water or approved dust suppressants to control dust from activities such as the demolition of buildings, grading roads, construction and land clearing;
- Maintenance and sweeping of paved areas to prevent re-entrainment; and
- Landscaping or planting of vegetation.

Fugitive dust may not be a concern at all times. A variety of factors may exacerbate fugitive dust emissions such as dry weather, high winds, temporarily increased activities, construction-related activities, etc. Therefore, the permittee shall take the above reasonable precautions as necessary to prevent and minimize fugitive dust emissions.

[Rules 62-4.070(3) and 62-296.320(4)(c)2, F.A.C.]

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## SECTION 4. APPENDIX H

### Compliance Assurance Monitoring Plan, General Provisions

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Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1-17 are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables.

#### 40 CFR 64.6 Approval of Monitoring

1. Plans: The attached CAM plans are approved for the purposes of satisfying the requirements of 40 CFR 64.3. [40 CFR 64.6(a)]
2. Contents: The attached CAM plans include the following information:
  - a. The indicators to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
  - b. The means or device to be used to measure the indicators (such as temperature measurement device, visual observation, or CEMS); and
  - c. The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.  
[40 CFR 64.6(c)(1)]
3. Excursions: The attached CAM plans describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to and reporting exceedances or excursions. [40 CFR 64.6(c)(2)]
4. Required Monitoring: The permittee is required to conduct the monitoring specified in the CAM plan and shall fulfill the obligations specified in the CAM plan. [40 CFR 64.6(c)(3)]

#### 40 CFR 64.7 Operation of Approved Monitoring

5. Commencement of Operation: The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit. [40 CFR 64.7(a)]
6. Proper Maintenance: At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]
7. Continued Operation: Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 64.7(c)]
8. Response to Excursions or Exceedances:
  - a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

**SECTION 4. APPENDIX H**

**Compliance Assurance Monitoring Plan, General Provisions**

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[40 CFR 64.7(d)(1) and (2)]

9. **Documentation of Need for Improved Monitoring:** If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)]

**40 CFR 64.8 Quality Improvement Plan (QIP) Requirements**

10. **Triggering a QIP:** Based on a determination that the owner or operator has not used acceptable procedures in response to an excursion or exceedance, the permitting authority may require the owner or operator to develop and implement a QIP. An accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices. [40 CFR 64.8(a)]

11. **Elements of a QIP:**

- a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
- b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
  - (1) Improved preventive maintenance practices.
  - (2) Process operation changes.
  - (3) Appropriate improvements to control methods.
  - (4) Other steps appropriate to correct control performance.
  - (5) More frequent or improved monitoring (only in conjunction with one or more of these steps).

[40 CFR 64.8(b)]

12. **QIP Notification:** If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined. [40 CFR 64.8(c)]
13. **Revised QIP:** Following implementation of a QIP, upon any subsequent determination that the owner or operator has not used acceptable procedures in response to an excursion or exceedance, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
- a. Failed to address the cause of the control device performance problems; or
  - b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. **Compliance and QIP Implementation:** Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. [40 CFR 64.8(e)]

**40 CFR 64.9 Reporting And Recordkeeping Requirements**

15. **General Reporting Requirements:**

- a. Commencing from the effective date of this permit, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.

**SECTION 4. APPENDIX H**

**Compliance Assurance Monitoring Plan, General Provisions**

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- b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
  - (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - (3) A description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

**16. General Recordkeeping Requirements:**

- a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

**40 CFR 64.10 Savings Provisions**

**17. Savings Provisions:** It should be noted that nothing in this appendix shall:

- a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
- b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
- c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

## SECTION 4. APPENDIX I

### Fuel Monitoring

The following conditions specify the applicable requirements for sampling and analyzing the authorized fuels at these facilities. These are enforceable conditions of the permit.

#### BAGASSE

Bagasse is fired in the boilers to provide process steam and heat for the sugar mill and refinery. Bagasse is the fibrous byproduct remaining from sugarcane after the juice is extracted in the milling process. Typically, the bagasse has a moisture content of 49% to 55% by weight, a maximum sulfur content of 0.03% to 0.07% by weight and a heating value of approximately 3600 Btu per pound of wet bagasse. Bagasse is stored on site in large, uncovered stockpiles.

1. Bagasse - Sampling and Analysis: A representative sample of bagasse shall be taken during each calendar quarter bagasse is fired and analyzed for the following: heating value (Btu/lb, as fired and dry); moisture content (percent by weight); sulfur content (percent by weight, as fired and dry); and ash content (percent by weight, as fired and dry). If no bagasse was fired during a quarter, the report shall indicate that no bagasse was fired as boiler fuel during the given quarter. Records of the results of these analyses shall be maintained on site and made available upon request. [Permit No. PSD-FL-333C]
2. Bagasse Firing Records: For the Annual Operating Report, the permittee shall calculate and record the annual bagasse firing rate. [Rules 62-4.070(3) and 62-213.440(1)(b)1.b, F.A.C.]

#### WOOD CHIPS

Boilers 7 and 8 are authorized to fire wood chips as an auxiliary fuel to supplement bagasse. In general, wood chips would be commingled and fired with bagasse to extend bagasse through the refinery season. Typically, the wood chips have a moisture content of 38% to 40%, a maximum sulfur content of 0.05% by weight, and a heating value of approximately 4070 Btu per pounds of wet wood. Wood chips are generally sized to 3" or less and stored in large, uncovered stockpiles.

3. Wood Chips - Sampling and Analysis: A representative sample of wood chips shall be taken during each calendar quarter wood chips are fired and analyzed for the following: heating value (Btu/lb, as fired and dry); moisture content (percent by weight); sulfur content (percent by weight, as fired and dry); and ash content (percent by weight, as fired and dry). Records of the results of these analyses shall be maintained on site and made available upon request. If no wood chips were fired during a quarter, the report shall indicate that no wood chips were fired as boiler fuel during the given quarter. Analytical results shall be determined and available for review within 30 days of the end of each calendar quarter. [Permits PSD-FL-333C and PSD-FL-389]
4. Wood Chips Firing Records: For each delivery of wood chips to the storage area, the permittee shall log the amount of wood chips delivered. For the Annual Operating Report, the permittee shall calculate the annual wood chips firing rate based on the difference between the total wood chips delivered and the amount of wood chips remaining. The total annual heat input rate from firing wood chips shall be calculated based on the annual firing rate and the measured heating values as determined from the sampling and analyses conducted throughout the year. [Rules 62-4.070(3) and 62-213.440(1)(b)1.b, F.A.C.]

#### DISTILLATE OIL

Combustion units at these facilities include the mill boilers, the rental refinery boiler and the afterburner for the granular carbon regenerative furnace. Permitted units may only fire distillate oil with a maximum sulfur content of 0.05% by weight.

5. Distillate Oil Sampling and Analyses:
  - a. For each oil delivery, the permittee shall maintain records of: the date, the gallons delivered, and a certified fuel oil analysis from the vendor including the heating value (Btu/lb), density (pounds/gallon) and sulfur content (percent by weight).
  - b. The following methods are approved analytical methods for determining these characteristics: ASTM Method D-129, ASTM D-1552, ASTM D-2622, and ASTM D-4294. Other equivalent ASTM methods or Department-approved methods are also acceptable.
  - c. At least once during each federal fiscal year, the permittee shall have a representative sample taken from each oil storage tank and analyzed in accordance with the authorized methods. Results of the analysis shall be submitted to the Compliance Authority within 45 days of sampling.

[Rules 62-4.070(3) and 62-213.440(1)(b)1.b, F.A.C.; and Permits 0510003-018-AC, 0510003-039-AC and PSD-FL-333C]

**SECTION 4. APPENDIX I**

**Fuel Monitoring**

6. Distillate Oil Firing Records: Within three working days following each month, the permittee shall observe the integrator on the oil flow meter of each combustion unit and record the amount oil fired for the previous month. To determine compliance with oil firing restrictions and caps, the permittee shall also calculate and record the 12-month rolling total oil firing rate. When requested by the Department or Compliance Authority, these records shall be available within 3 days of such request. This information shall also be used for the Annual Operating Report. The total annual heat input rate from oil firing shall be calculated based on the annual firing rate and the measured heating values as determined from the sampling and analyses conducted throughout the year. [Rules 62-4.070(3) and 62-213.440(1)(b)1.b, F.A.C.]

**INCIDENTAL AMOUNTS OF ON-SPECIFICATION USED OIL FUEL**

The facility generates small amounts of on-specification used oil consisting mostly of hydraulic fluids and lubrication oils (<< than 10,000 gallons per year). Leaks or spills of these fluids are removed from the work areas by absorbing with bagasse and/or wood chips and then adding to the common biomass conveyor for firing in any of the boilers. The amount of oil is incidental and would not affect emissions.

7. On-Spec Used Oil Firing:
- a. The permittee may fire incidental amounts of bagasse/on-specification oil with other authorized fuels in any of the mill boilers. To the extent practicable, the bagasse/on-specification oil shall be commingled with bagasse and/or wood chips in the existing conveyor system and distributed among the operational boilers. [Rule 62-4.070, F.A.C. and Permit PSD-FL-333C]
  - b. The permittee may fire on-specification used oil generated on site in the temporary rental refinery package boiler.
8. On-Spec Used Oil Specifications: Incidental amounts of used oil to be fired in the boilers shall be on-specification used oil generated on site at this facility. The permittee shall maintain records sufficient to document that the used oil meets the following requirements:
- a. Only “on-specification” used oil containing a polychlorinated biphenyls (PCB) concentration of less than 50 ppm shall be fired at this facility.
  - b. The used oil shall meet the following EPA specifications for “on-specification used oil” in Subpart B of 40 CFR 279:

<b>Constituent/Property</b>	<b>Allowable Level</b>
Arsenic	5.0 ppm, maximum
Cadmium	2.0 ppm, maximum
Chromium	10.0 ppm, maximum
Lead	100.0 ppm, maximum
Total Halogens	1000.0 ppm, maximum
Flash point	100° F, minimum

Used oil which fails to comply with any of these specification levels is considered “off-specification” used oil. The firing of off-specification used oil at this facility is prohibited.

- c. On-specification used oil with a PCB concentration of 2 ppm to less than 50 ppm shall be fired only at normal unit operating temperatures and shall not be fired during periods of startup or shutdown.
  - d. On-specification used oil with a PCB concentration of 2 ppm or less may be fired at any time.
  - e. On-specification used oil shall meet the maximum sulfur content specified in the permit.
- [Rule 62-4.070, F.A.C.; Subpart B, 40 CFR 279; and Permit PSD-FL-333C and Permit 0510003-045-AC]
9. On-Spec Used Oil Records: The permittee shall keep records sufficient to document compliance with the above requirements. The records shall be made available when requested by the Compliance Authority. Annual usage of on-specification used oil shall be reported in the Annual Operating Report. [Rule 62-4.070, F.A.C. and Permit PSD-FL-333C and Permit 0510003-045-AC]

**SECTION 4. APPENDIX J**  
**Good Combustion Practices for All Boilers**

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**Purpose**

The purpose of this plan is to summarize the operational, maintenance and monitoring procedures that will promote good combustion in the sugar mill boilers. Careful attention to the mixing of fuel and combustion air will result in efficient combustion and minimize CO, PM and VOC emissions while optimizing NO<sub>x</sub> emissions. Adequate maintenance will promote effective combustion and ensure reliable operation throughout the crop season. See the permit subsections for other specific requirements regarding good combustion practices.

**Training**

Power plant operators are certified by the National Institute for the Uniform Licensing of Power Engineers (NIULPE) as 4<sup>th</sup> Class Engineers or better. The rate of pay is based on a sliding scale that encourages higher certification up to 1<sup>st</sup> Class Engineer. Other training requirements accompany this outside certification including all aspects of good combustion practices as well as the proper operation of the boiler and control equipment to minimize emissions.

**Requirements**

1. Maintenance and Repair Activities: Off season routine maintenance activities are intended to maintain the boilers at current operational levels and reliability for the upcoming cane milling seasons. Replacements shall be made with “functionally equivalent” components that serve the same purpose as the component being replaced. Routine maintenance activities shall not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. In addition, such activities shall not increase the emission rates of any boiler or the cane milling capacity of the plant. The permittee shall consult well in advance with the Department regarding any unusually large, expensive or infrequent maintenance efforts that may not be considered routine. [Permit 0510003-022-AC]
2. Maintenance Summary Report: Within 60 days of beginning the crop season, the permittee shall submit a report to the Department’s Bureau of Air Regulation and the Compliance Authority that summarizes the following information: a general description of the routine maintenance and repair work performed on each boiler during the previous off season; a summary of the off season maintenance inspections; and a revised schedule of routine maintenance and repair activities for the next off season based on the recent inspections and schedule. [Permit 0510003-022-AC]
3. Off Season Preparations: Before each crop season, the permittee shall conduct the following activities as necessary to ensure proper operation of the boilers and control equipment.
  - Inspect, clean and repair the boiler, air ductwork, air heaters, wet scrubbers, cyclones and electrostatic precipitators.
  - Inspect and repair damaged refractory and boiler casing.
  - Inspect and remove loose scale, sand and other debris from the outer surfaces of the boiler and tubes.
  - Inspect and clean settling chambers in the furnace, breeching and heat traps, where cinders can accumulate.
  - Inspect, clean and repair boiler grates to ensure proper mechanical operation and maintain open air holes.
  - Inspect, repair and adjust the combustion control settings and linkages to fuel feeders, forced-draft fan and over-fire air fan.
  - Inspect, clean and repair all oil burners and related oil piping, atomizing steam and air registers.
  - Inspect, clean and repair all fans, blades and motors.
  - Inspect and repair all pumps and pump drives.
  - Identify the proper skirt level of each wet impingement scrubber and mark a permanent reference on the outside.
  - Inspect, calibrate and repair all instruments for boiler operation and control, including the oxygen and carbon monoxide process monitors. Record in repair log at the instrument shop.
4. Operational Practices: The permittee shall employ the following practices to promote good combustion.
  - To the extent practicable, maintain the bagasse moisture content at 55% by weight or less.
  - To the extent practicable, maintain fuel and excess air in the proper proportion to promote good combustion and minimize smoke.

**SECTION 4. APPENDIX J**  
**Good Combustion Practices for All Boilers**

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- As necessary, remove ash present in the ash pits to minimize any furnace draft upsets.
  - For boilers with stacks monitored by closed circuit television, view the stack video monitor at least once per hour to visually confirm that good combustion is occurring. If an abnormal plume is observed, take corrective actions.
  - Several times per shift, examine the boiler grates and feeders for proper distribution and adjust operations as necessary.
  - Once per shift, inspect and clean burners if needed.
  - Once per day, conduct a walk-around inspection of the boiler area and check the following: fans, pumps, casings, ductwork, scrubbers and ESP. Repair as needed and in coordination with the production schedule.
5. Outage Inspections and Repair: During an outage, the permittee shall conduct the following activities.
- When the furnace has cooled, inspect the interior components of the fuel grates. As necessary, remove slag or other obstructions to the openings of the grates.
  - Inspect the boiler periodically for any air leaks that may have developed between the grates and walls of the boiler. Repair as needed.
  - As operating experience dictates for the stoker boilers, stop the stoker and forced draft fan and clean out the siftings chambers. After the siftings chambers have been cleaned, tightly close and seal all access doors and ash pit doors to minimize air leakage.
  - At regular intervals, inspect all air swept fuel distributor spout joints and between spout and mounting plate for air leaks. Repair as necessary.
  - At regular intervals, inspect the air supply duct, damper housing and fuel distributor spouts for air leaks. Repair as necessary.

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**SECTION 4. APPENDIX K**  
**Startup and Shutdown Plans for Boilers**

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**General Training**

All operators and supervisors shall be properly trained to operate and maintain the boilers as well as the pollution control and monitoring equipment in accordance with the guidelines and procedures established by the manufacturer and permit. The training shall include good operating practices as well as methods of minimizing excess emissions during startups, shutdowns, and malfunctions. [Rule 62-210.700(1), F.A.C.]

**Boilers 1 and 2**

Cold Startup

1. Start the feedwater pump and check for proper lubrication and vibration.
2. Fill the scrubber to the proper starting level and set the delta P controller to “+8”.
3. Open the spray nozzles in the scrubber and start water flow to the scrubber.
4. Align fuel, gas and air atomization lines.
5. Start the fuel pump and burner sequence.
6. As the boiler heats up, adjust the scrubber delta P as needed to maintain proper amps.
7. Start the distributor and over fire fan. Once equipment is properly operating, adjust over fire fan, forced draft fan, and under-grate air to 50%. Start feeding bagasse.
8. Once fire is established, start all slurry water, grates and adjust all dampers as needed.
9. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
10. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Warm Startup

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner and continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
7. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Slowly reduce the feeders until boiler is offline. Once boiler is offline, stop the feeders.
2. After all bagasse has burned out of the furnace, stop the over-fire air fans, stop the distributor air fans, and adjust the over-fire air to 50%.
3. The scrubber is turned off after the fire in the boiler is extinguished.
4. When the furnace temperature reaches 250° F, stop the forced draft fan, adjust the damper and under-grate damper to 50% and then stop the induced draft fan.

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**SECTION 4. APPENDIX K**  
**Startup and Shutdown Plans for Boilers**

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**Boiler 4**

Cold Startup

1. Start the feedwater pump and check for proper lubrication and vibration.
2. Fill the scrubber to the proper starting level and set the delta P controller to “+8”.
3. Open the spray nozzles in the scrubber and start water flow to the scrubber.
4. Align fuel, gas and air atomization lines.
5. Start the fuel pump and burner sequence.
6. As the boiler heats up, adjust the scrubber delta P as needed to maintain proper amps.
7. Start the distributor and over fire fan. Once equipment is properly operating, adjust over fire fan, forced draft fan, and under-grate air to 50%. Start feeding bagasse.
8. Once fire is established, start all slurry water, grates and adjust all dampers as needed.
9. Continue to observe the stack plume, the scrubber water level, and the carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain optimum operating conditions.
10. A cold startup is a startup after the boiler has been down for more than 4 or 5 hours. Typically, a cold startup will require 6 to 12 hours from the first fire to normal working pressure. There may be 10 cold startups per crop season (more or less) depending on excessive rain and mechanical breakdowns.

Warm Startup

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on water valves to scrubber spray nozzles to start scrubber.
3. Check the boiler and scrubber water levels, circulating pump and spray nozzles, and make sure they are functioning properly.
4. Light a burner. Continue to observe the stack plume, water levels, and burners.
5. As the carbonaceous fuel fire gets hot enough to meet demand, reduce the burner fuel until it can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
6. Continue to observe the stack plume, scrubber water level, and carbonaceous fuel level, making adjustments to drafts, fuel, and scrubber to maintain the optimum operating conditions.
7. A warm startup is a startup after the boiler has been down for less than 5 hours. Usually, the longer the boiler is down means a longer period will be needed for warm startup. Typically, a warm startup requires 1 to 5 hours depending on boiler operating conditions. There may be 5 warm startups per crop season (more or less) depending on mechanical breakdowns and mill interruptions.

Shutdown

1. Slowly reduce the feeders until boiler is offline. Once boiler is offline, stop the feeders.
2. After all bagasse has burned out of the furnace, stop the over-fire air fans, stop the distributor air fans, and adjust the over-fire air to 50%.
3. The scrubber is turned off after the fire in the boiler is extinguished.
4. When the furnace temperature reaches 250° F, stop the forced draft fan, adjust the damper and under-grate damper to 50% and then stop the induced draft fan.

**Boiler 7**

Cold Startup

1. Start the feedwater pump and check for proper lubrication and vibration.
2. Align fuel, gas and air atomization lines.

**SECTION 4. APPENDIX K**  
**Startup and Shutdown Plans for Boilers**

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3. Start the fuel pump and burner sequence.
4. Start the slurry water, skakers, submerged ash belt, electrostatic precipitator scrolls and adjust dampers as needed.
5. Start the over fire fan and once properly operating, adjust over fire fan, forced draft fan, and under-grate air. Start feeding bagasse.
6. Set up the cyclone sand separators, spray nozzles and pumps.
7. When the electrostatic precipitator meets all interlocks (oxygen level, temperature and ash scrolls), start all three fields.
8. Normally, a cold startup will require 6 to 12 hours from the first fire to normal working pressure.

Warm Startup (approximately 1 to 5 hours)

1. This type of startup is applicable when the boiler has been shutdown for a short period of time and is still hot.
2. Turn on wet sand separator.
3. Check the boiler and wet sand separator water level, and circulating pump and make sure they are functioning properly.
4. Light a burner, continue to observe the stack plume, water levels, and burners.
5. Activate electrostatic precipitator.
6. Feed carbonaceous fuel from the mill to the boiler slowly at first. As the furnace gets hotter and the carbonaceous fuel is burning better, decrease fuel oil until burners can be turned off. As the carbonaceous fuel fire gets hot enough to meet steam demand, reduce the fuel oil until the burners can be turned off. Adjust the dampers to get optimum carbonaceous fuel firing.
7. Continue to observe the stack plume, wet sand separator water level, and carbonaceous fuel level, making adjustments to drafts, fuel, wet sand separator and ESP to maintain optimum operating conditions.
8. Normally, a warm startup requires 1 to 5 hours, depending on boiler operating conditions.

Shutdown

1. Slowly reduce the feeders until boiler is offline. Once boiler is offline, stop the feeders.
2. After all bagasse has burned out of the furnace, stop the over-fire air fans, stop the distributor air fans.
3. Deactivate the electrostatic precipitator and turn off the wet sand separator.

**Boiler 8**

Startup

1. Align compressed air system and air compressors for Boiler 8 plant air and instrument air.
2. Align and start instrument air dryer.
3. Start canal water pump for wet cyclone collectors.
4. Start slurry pump.
5. Start electrostatic precipitator ash mix tank.
6. Start electrostatic precipitator hopper screw conveyors.
7. Start electrostatic precipitator purge air blowers.
8. Set up air dampers to start induced draft air fan.
9. Start induced draft air fan, over-fire air fan and distributor air fan.
10. Start an oil pump.
11. Start the desired oil burner.
12. While boiler is heating up, start the bagasse conveyors for Boiler 8 and fill bagasse feeders.

**SECTION 4. APPENDIX K**  
**Startup and Shutdown Plans for Boilers**

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13. When the boiler pressure gets above 500 psig, start introducing bagasse into the boiler.
14. Start the five electrostatic precipitator transformer-rectifiers.
15. Start the selective non-catalytic reduction system.
16. It will take approximately 4 to 5 hours to warm up the boiler, reach the minimum boiler temperature and begin firing biomass. Once biomass firing begins, the full steaming rate can be achieved in approximately 30 to 60 minutes.

Shutdown

1. Reduce boiler load to minimum.
2. Allow bagasse feeders to run empty.
3. When the fire is completely out, stop the distributor air fan.
4. Stop the over-fire air fan.
5. Turn off the electrostatic precipitator fields.
6. Turn off the selective non-catalytic reduction system.
7. Stop the grate drives.
8. Stop the primary air fans.
9. Stop the induced draft fan.
10. Shutdown the canal water pump.

PM Controls

The wet cyclone collectors will be activated before firing any fuel. Prior to activation, the ESP will be purged with ambient air for about 30 to 60 minutes. Distillate oil may be fired during startup prior to energizing the electrostatic precipitator (ESP). The ESP will be on line and functioning properly before any biomass is fired.

NO<sub>x</sub> Controls

When the SNCR manufacturer's minimum operating temperature requirement is met, the SNCR system will be activated for NO<sub>x</sub> control. For a cold startup, this temperature is generally reached within 4 - 5 hours of initial distillate oil firing. During normal operation, the SCNR control system will automatically adjust the urea injection rate and zones to meet the specified NO<sub>x</sub> standard based on the current urea injection rate, boiler load, furnace temperature, and NO<sub>x</sub> emissions. During shutdown, the SNCR system shall remain operational until the operating temperature drops below the minimum requirement.

**SECTION 4. APPENDIX L**

**NSPS Provisions**

As indicated, the following emissions units are subject to applicable New Source Performance Standards (NSPS) in Subparts A, Db, or Dc of 40 CFR 60 and adopted by reference in Rule 62-204.800(8), F.A.C.

<b>EU No.</b>	<b>Description</b>
NSPS Subparts A (General Provisions) and Db (Industrial-Commercial-Institutional Steam Generating Units)	
014	Boiler 7
028	Boiler 8
NSPS Subparts A (General Provisions) and Dc (Small Industrial-Commercial-Institutional Steam Generating Units)	
035	Rental Refinery Package Boiler

The numbering of the original rules has been preserved for ease of reference. The term “Administrator” when used in 40 CFR 60 shall mean the Department’s Secretary or the Secretary’s designee.

<b>Subpart A</b>	General Provisions
<b>Subpart Db</b>	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
<b>Subpart Dc</b>	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

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**SECTION 4. APPENDIX M**

**Title V Conditions**

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**Operation**

- TV..1.** General Prohibition. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.)]
- TV..2.** Validity. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]
- TV.3.** Proper Operation and Maintenance. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]
- TV.4.** Not Federally Enforceable. Health, Safety and Welfare. To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. [Rule 62-4.050(3), F.A.C.]
- TV.5.** Continued Operation. An applicant making timely and complete application for permit, or for permit renewal, shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, applicable requirements of the CAIR Program, and applicable requirements of the Hg Budget Trading Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of subparagraphs 62-213.420(1)(b)3., F.A.C. [Rules 62-213.420(1)(b)2., F.A.C.]
- TV.6.** Changes without Permit Revision. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:
- a. Permitted sources may change among those alternative methods of operation;
  - b. A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
    - (1) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
    - (2) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
  - c. Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.
- [Rule 62-213.410, F.A.C.]
- TV.7.** Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

**Compliance**

- TV.8.** Compliance with Chapter 403, F.S., and Department Rules. Except as provided at Rule 62-213.460, Permit Shield, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]
- TV.9.** Compliance with Federal, State and Local Rules. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any

## SECTION 4. APPENDIX M

### Title V Conditions

other such requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

- TV.10. Binding and Enforceable.** The terms, conditions, requirements, limitations and restrictions set forth in this permit, are “permit conditions” and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]
- TV.11. Timely Information.** When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]
- TV.12. Halting or Reduction of Source Activity.** It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity. [Rule 62-213.440(1)(d)3., F.A.C.]
- TV.13. Final Permit Action.** Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- TV.14. Sudden and Unforeseeable Events Beyond the Control of the Source.** A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- TV.15. Permit Shield.** Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in this condition or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program, the CAIR Program. [Rule 62-213.460, F.A.C.]
- TV.16. Compliance with Federal Rules.** A facility or emissions unit subject to any standard or requirement of 40 CFR, Part 60, 61, 63 or 65, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall comply with such standard or requirement. Nothing in this chapter shall relieve a facility or emissions unit from complying with such standard or requirement, provided, however, that where a facility or emissions unit is subject to a standard established in Rule 62-296, F.A.C., such standard shall also apply. [Rule 62-296.100(3), F.A.C.]

#### **Permit Procedures**

- TV.17. Permit Revision Procedures.** The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).
- TV.18. Permit Renewal.** The permittee shall renew its permit as required by Rules 62-4.090, 62.213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit - Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit that expires on or after June 1, 2009. No Title V permit will be issued for a new term except through the renewal process. [Rules 62-213.420 & 62-213.430, F.A.C.]
- TV.19. Insignificant Emissions Units or Pollutant-Emitting Activities.** The permittee shall identify and evaluate insignificant emissions units and activities as set forth in Rule 62-213.430(6), F.A.C.

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**TV.20. Savings Clause.** If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]

**TV.21. Suspension and Revocation.**

- a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
  - (1) Submitted false or inaccurate information in his application or operational reports.
  - (2) Has violated law, Department orders, rules or permit conditions.
  - (3) Has failed to submit operational reports or other information required by Department rules.
  - (4) Has refused lawful inspection under Section 403.091, F.S.
- d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

[Rule 62-4.100, F.A.C.]

**TV.22. Not federally enforceable. Financial Responsibility.** The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

**TV.23. Emissions Unit Reclassification.**

- a. Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- b. If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

**TV.24. Transfer of Permits.** Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. The permittee shall also comply with the requirements of Rule 62-210.300(7), F.A.C., and use DEP Form No. 62-210.900(7). [Rules 62-4.160(11), 62-4.120, and 62-210.300(7), F.A.C.]

**Rights, Title, Liability, and Agreements**

**TV.25. Rights.** As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which

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**Title V Conditions**

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are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]

**TV.26. Title.** This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.)]

**TV.27. Liability.** This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]

**TV.28. Agreements.**

- a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (1) Have access to and copy any records that must be kept under conditions of the permit;
  - (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
  - (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

[Rules 62-4.160(7), (9) and (10), F.A.C.]

**Recordkeeping and Emissions Computation**

**TV.29. Permit.** The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]

**TV.30. Recordkeeping.**

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
  - (1) The date, exact place, and time of sampling or measurements, and the operating conditions at the time of sampling or measurement;
  - (2) The person responsible for performing the sampling or measurements;

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- (3) The dates analyses were performed;
- (4) The person and company that performed the analyses;
- (5) The analytical techniques or methods used;
- (6) The results of such analyses.

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

**TV.31. Emissions Computation.** Pursuant to Rule 62-210.370, F.A.C., the following required methodologies are to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with Rule 62-210.370, F.A.C. Rule 62-210.370, F.A.C., is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.

For any of the purposes specified above, the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

- a. *Basic Approach.* The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
  - (1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
  - (2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C. but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
  - (3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- b. *Continuous Emissions Monitoring System (CEMS).*
  - (1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
    - (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
    - (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
  - (2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
    - (a) A calibrated flow meter that records data on a continuous basis, if available; or
    - (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
  - (3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or

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**SECTION 4. APPENDIX M**

**Title V Conditions**

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operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

c. *Mass Balance Calculations.*

- (1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
  - (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,
  - (b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
- (2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
- (3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

d. *Emission Factors.*

- (1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
  - (a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
  - (b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
  - (c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
- (2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

- e. *Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- f. *Accounting for Emissions During Periods of Startup and Shutdown.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- g. *Fugitive Emissions.* In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

**SECTION 4. APPENDIX M**

**Title V Conditions**

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- h. *Recordkeeping.* The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(1) & (2), F.A.C.]

**Responsible Official**

**TV.32. Designation and Update.** The permittee shall designate and update a responsible official as required by Rule 62-213.202, F.A.C.

**Prohibitions and Restrictions**

**TV.33. Asbestos.** This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

**TV.34. Refrigerant Requirements.** Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.

**TV.35. Open Burning Prohibited.** Unless otherwise authorized by Rule 62-296.320(3) or Chapter 62-256, F.A.C., open burning is prohibited.

**SECTION 4. APPENDIX N**  
**BACT Determinations for EU036**

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**PROJECT DESCRIPTION**

<b>EU No.</b>	<b>Emission Unit Description</b>
036	Two Hydrogen Sulfide (H <sub>2</sub> S) Degasification Systems

U.S. Sugar Corporation operates the existing Clewiston Sugar Mill and Refinery, which is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. U.S. Sugar previously installed and currently operates five well pumps including piping, two H<sub>2</sub>S degasification systems, three transfer pumps, a 600 gallon day tank and a 17,100 gallon horizontal storage tank for the sulfuric acid feed system.

**FINAL BACT DETERMINATION**

In accordance with Rule 62-212.400, F.A.C., the Department makes the following BACT determinations for the PSD-significant pollutants.

<b>Pollutant</b>	<b>BACT Standard</b>	<b>Compliance Method</b>
H <sub>2</sub> S	18.0 tons per consecutive 12-month rolling total	Based on monthly raw well water flow rates and quarterly water sampling to determine the H <sub>2</sub> S concentration in each of the water wells going to the degasification units.

If the facility receives valid odor complaints associated with the degasification systems as verified by the Compliance Authority, the permittee may be requested to revisit the determination of BACT for H<sub>2</sub>S emissions from degasification systems.

**SECTION 4. APPENDIX O**  
**NESHAP 40 CFR 63**

**40 CFR PART 63 - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (A.K.A. MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT))**

All of the boilers, including the rental boiler, are subject to applicable National Emission Standards for Hazardous Pollutants (NESHAP) in 40 CFR 63 Subparts A, and DDDDD adopted by reference in Rule 62-204.800(8), F.A.C.

In addition, NSPS 40 CFR 60 is applicable as follows:

EU No.	Description
NSPS Subparts A (General Provisions) and Db (Industrial-Commercial-Institutional Steam Generating Units)	
014	Boiler 7
028	Boiler 8
NSPS Subparts A (General Provisions) and Dc (Small Industrial-Commercial-Institutional Steam Generating Units)	
035	Rental Refinery Package Boiler

*Note:*

*Refinery Package Boiler: In accordance with the conditions of this subsection, the permittee is authorized to install and operate a rental package boiler rated at 300 horsepower that will fire distillate oil. The package boiler will be a rental unit and may be a different unit each year. Depending on the original manufacture date, the selected rental boiler may be subject to the applicable provisions in Subpart Dc of 40 CFR 60. It is subject to Subpart DDDDD of 40 CFR 63. [Permit No. 0510003-045-AC]*

<a href="#">Subpart A</a>	General Provisions
<a href="#">Subpart DDDDD</a> 	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

The following emissions units are subject to applicable National Emission Standards for hazardous Pollutants (NESHAP) in Subparts A, and ZZZZ adopted by reference in Rule 62-204.800(8), F.A.C.

E.U. ID No.	Brief Description
037	Emergency Reciprocating Internal Combustion Engine(RICE) (WWTP East Pump Station)
038	Emergency RICE (Fire Pump Building)
039	Emergency RICE (WWP 2 <sup>nd</sup> Floor Pump Room)
040	Emergency RICE (WTP Portable Generator)
042	Emergency RICE (Computer/IT Backup)

<a href="#">Subpart A</a>	General Provisions
<a href="#">Subpart ZZZZ</a>	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

## STATEMENT OF BASIS

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Title V Air Operation Permit Renewal  
Permit No. 0510003-059-AV

### APPLICANT

The applicant for this project is United States Sugar Corporation. The applicant's responsible official and mailing address are: Neil Smith, Senior Vice President, Sugar Manufacturing, United States Sugar Corporation, Clewiston Facility, 111 Ponce De Leon Ave., Clewiston, Florida 33440.

### FACILITY DESCRIPTION

The applicant operates the existing Clewiston facility, which is located at W.C. Owens Ave. and S.R. 832, Clewiston, Florida in Hendry County.

This facility is a sugar mill and refinery. Sugarcane is harvested in nearby cane fields and transported to the mill by train. In the mill, sugarcane is cut into small pieces and processed in a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery. Molasses is also produced as a byproduct. Molasses is stored and processed into an animal feed product for sale.

The existing facility consists of the following emissions units.

Facility ID No. 0510003	
ID No.	Emission Unit Description
<i>Sugar Mill</i>	
001	Boiler 1
002	Boiler 2
009	Boiler 4
014	Boiler 7
027	Biomass Handling and Storage
028	Boiler 8
031	Lime Storage and Truck/Rail Handling System
<i>Sugar Refinery</i>	
015	VHP Sugar Dryer
016	White Sugar Dryer No. 1
017	Granular Carbon Regeneration Furnace
018	Vacuum Pickup Systems
019	Conditioning Silos
020	Screening/Distribution and Sugar/Starch Bins
021	Alcohol Usage
022	Packaging Dust Collector
029	White Sugar Dryer No. 2
035	Rental Refinery Package Boiler

## STATEMENT OF BASIS

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<i>Facility</i>	
010	Lime Silo with Baghouse at the Water Treatment Plant
030	Limestone Storage Silo with Baghouse at the Molasses Plant
033	Salt Silo with Baghouse at the Molasses Plant
036	Two Hydrogen Sulfide (H <sub>2</sub> S) Degasification Systems
037	Emergency Reciprocating Internal Combustion Engine(RICE) (WWTP East Pump Station)
038	Emergency RICE (Fire Pump Building)
039	Emergency RICE (WWP 2 <sup>nd</sup> Floor Pump Room)
040	Emergency RICE (WTP Portable Generator)
041	Emergency RICE (WTP Plant Generator)
042	Emergency RICE (Computer/IT Backup)
043	(S-17) Baghouse – Bulk Loading

This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

### INSIGNIFICANT EMISSIONS UNITS AND ACTIVITIES

Pursuant to Rule 61-213.430(6) (b), F.A.C., an emissions unit or activity shall be considered insignificant if all of the following criteria are met:

1. Such unit or activity would be subject to no unit-specific applicable requirement.
2. Such unit or activity, in combination with other units and activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in subparagraph 62-213.420(3)©1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s).
3. Such unit or activity would neither emit nor have the potential to emit:
  - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
  - b. 1,000 pounds per year or more of any hazardous air pollutant;
  - c. 2,500 pounds per year or more of total hazardous air pollutants; or
  - d. 5.0 tons per year or more of any other regulated pollutant.

Pursuant to Rule 61-213.430(6)(a), F.A.C., all requests for determination of insignificant emissions units or activities made pursuant to paragraph 62-213.420(3)(n), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to this chapter. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of paragraph 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under this chapter shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to this rule.

The permittee identifies the following unregulated emissions units and activities for the Clewiston sugar mill and refinery.

## STATEMENT OF BASIS

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### **Agricultural Equipment Shop**

- Multiple 55-gallon contaminated diesel drums
- Diesel storage tank
- Low sulfur diesel tank
- Used oil storage tanks (4)
- Gasoline storage tank
- Kerosene storage tank
- Cane burning fuel storage tank
- Various equipment shops
- “Mart Tornado” electric parts cleaner (non-HAP)
- Used antifreeze storage tank

### **Miscellaneous Activities**

- Diesel, gasoline and fuel oil storage tanks
- Diesel fuel storage tanks (3)
- Large storage tanks in boiler house
- Used oil tanks/drums (covered)
- Pressurized LPG tanks
- Solvent recovery stills
- Molasses storage tanks
- Acid storage tanks
- Small polymer tanks (2) at water treatment plant
- Ammonia storage tanks
- Process-wide flanges and valves
- Pump vents (lube oil vents)
- Vents from hydraulic/lube oil reservoirs and pumps
- Use of cutting oils
- Painting operations
- Batch mixers (< 30 cu. ft.)
- Containers for oils/wax/grease
- Electric ovens for drying
- Gear boxes, reducers vents
- Kerosene dispenser drip pans
- Liquid loading/unloading (non-HAP)
- Oil/water separator/skimmer equipment, troughs/storage
- Scrubber water ponds and troughs
- Metallizing operations
- Wood working and metal working operations
- Locomotive repair shop
- Railroad maintenance
- Sugar warehouses
- Boiler blow-down pipes, vents sandblaster and grinder with filter in powerhouse
- Ash/lime mixing, balanced polymer tanks and chemical storage/mixing tanks for boiler feedwater plant

## STATEMENT OF BASIS

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### PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility. This also includes the addition of Air Construction Permit No. 0510003-058-AC which authorized the upgrade of the OFA (Overfire Air Systems) for Boiler Nos. 1 and 2 to meet MACT CO limits in emissions. (NESHAPS Subpart DDDDD).

### PROCESSING SCHEDULE AND RELATED DOCUMENTS

Initial Title V Air Operation Permit (0510003-032-AV) issued **August 17, 2010**  
Title V Air Operation Permit Revision (0510003-049-AV) issued **December 1, 2011**  
Title V Air Operation Permit Revision (0510003-053-AV) issued **July 13, 2012**  
Title V Air Operation Permit Revision (0510003-057-AV) issued **November 6, 2014**  
Air Construction Permit (0510003-058-AC) issued **July 8, 2014**  
Application for a Title V Air Operation Permit Renewal received **January 5, 2015**

### PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 2061 and 2062 – Sugar and Confectionery Products

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

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

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

NSPS: The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) applies, as defined in the Title V permit.

### PROJECT REVIEW

This permit renews Title V air operation permit No, 0510003-053-AV and also includes the conditions of Air Construction permit No. 0510003-058-AC that was issued on July 8, 2014.

### CONCLUSION

This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-213, F.A.C.