Permit Application

TITLE V PERMIT RENEWAL APPLICATION

Okeelanta Corporation & New Hope Power Company

Okeelanta Sugar Mill and Refinery / Okeelanta Cogeneration Plant

Prepared For: Okeelanta Corporation
8001 U.S. Highway 27 South
South Bay, FL 33493

Submitted By: Golder Associates Inc.
6026 NW 1st Place
Gainesville, FL 32607 USA

Distribution: 1 electronic copy – FDEP
2 copies – Okeelanta Corporation
1 copy – Golder Associates Inc.

December 2014 **14-06216**

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FDEP FORM 62-210.900(1) - LONG FORM AIR PERMIT APPLICATION

Department of
Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Okeelanta Corporation/ New Hope Power Company**	
2. Site Name: **OkeelantaSugar Mill and Refinery / Okeelanta Cogeneration Plant**	
3. Facility Identification Number: **0990005 and 0990332**	
4. Facility Location... Street Address or Other Locator: **8001 U.S. Highway 27 South** City: **South Bay** County: **Palm Beach** Zip Code: **33493**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Matthew Capone, Director of Environmental Compliance**
2. Application Contact Mailing Address... Organization/Firm: **Okeelanta Corporation** Street Address: **One North Clematis Street, Suite 200** City: **West Palm Beach** State: **FL** Zip Code: **33401**
3. Application Contact Telephone Numbers... Telephone: (**561**) **336-5100** ext. Fax: (**561**) **992-7326**
4. Application Contact E-mail Address: **Matthew.Capone@floridacrystals.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s):	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

☐ Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.

☒ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☒ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

The purpose of this application is to renew Title V air operating permit No. 0990005-038-AV. In addition, certain changes to conditions issued in previous air construction permits for the two facilities are being requested.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
New Hope Power Company - ID No. 0990332			
001	Cogeneration Boiler A		
002	Cogeneration Boiler B		
003	Cogeneration Boiler C		
004	Cogeneration Plant - Materials Handling and Storage		
005	Cogeneration Plant - Unregulated Emissions Units		
	Cogeneration Plant -Reciprocating Internal Combustion Engines (RICE)		
Okeelanta Corporation - ID No. 0990005			
018-020, 030-032, 045-047,049	Trans-shipment Facility		
021-025, 034,035, 043, 054, 055	Sugar Refinery		
048	Paint Booth		
059	Pkg. Lines 16, 17, 18 & 19 with Baghouse		
057	300 hp Package Boiler		
033, 036, 037, 038, 039, 040, 041, 042, 044, 050, 056	Okeelanta Corp. - Unregulated Emissions Units		
	Okeelanta Corp. - Reciprocating Internal Combustion Engines (RICE)		

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( ) ext. Fax: ( )
4. Owner/Authorized Representative E-mail Address:
5. Owner/Authorized Representative Statement: *I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.* _____ _____ Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
   Jose Gonzalez, Vice President of Industrial Operations

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   ☒ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

   ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   ☐ The designated representative at an Acid Rain source or CAIR source.

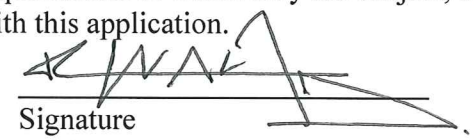
3. Application Responsible Official Mailing Address...
   Organization/Firm: **Okeelanta Corporation**
   Street Address: **8001 U.S. Highway 27 South**
   City: **South Bay** State: **FL** Zip Code: **33493**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(561) 993-1600** ext. Fax: **(561) 992-7326**

5. Application Responsible Official E-mail Address: **Jose.Gonzalez@floridacrystals.com**

6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.



Signature

11-23-14

Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **David Buff**
   Registration Number: **19011**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates Inc.****
   Street Address: **6026 NW 1st Place**
   City: **Gainesville** State: **FL** Zip Code: **32607**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 336-5600** ext. Fax: **(352) 336-6603**
4. Professional Engineer E-mail Address: **dbuff@golder.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☒, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

David A. Buff
Signature

12/1/14
Date

(seal)

* Attach any exception to certification statement.
** Board of Professional Engineers Certificate of Authorization #00001670.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **524.90** North (km) **2940.10**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **26°35′00″** Longitude (DD/MM/SS) **80°45′00″**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49/ 20**	6. Facility SIC(s): **4911/ 2062**
7. Facility Comment : **SIC Code for New Hope Power is 4911** **SIC Code for Okeelanta Corp. 2062**			

Facility Contact

1. Facility Contact Name: **Matthew Capone, Director of Environmental Compliance**
2. Application Contact Mailing Address... Organization/Firm: **Okeelanta Corporation** Street Address: **One North Clematis Street, Suite 200** City: **West Palm Beach** State: **FL** Zip Code: **33401**
3. Application Contact Telephone Numbers... Telephone: (**561**) **336-5100** ext. Fax: (**561**) **992-7326**
4. Application Contact E-mail Address: **Matthew.Capone@floridacrystals.com**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) ext. Fax: ( )
4. Facility Primary Responsible Official E-mail Address:

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☒ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter Total – PM	**A**	**N**
Particulate Matter – PM10	**A**	**N**
Particulate Matter – PM2.5	**A**	**N**
Sulfur Dioxide – SO2	**A**	**N**
Nitrogen Oxides – NOx	**A**	**N**
Carbon Monoxide – CO	**A**	**N**
Volatile Organic Compounds – VOC	**A**	**N**
Hydrogen Chloride – H106	**A**	**N**
Mercury Compounds – H114	**B**	**N**
Total Hazardous Air Pollutants – HAPs	**A**	**N**
Greenhouse Gases (GHGs)	**A**	**N**
Carbon Dioxide Equivalent (CO2e)	**A**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-FI-C1** ☐ Previously Submitted, Date:_____

2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-FI-C2** ☐ Previously Submitted, Date:_____

3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-FI-C3** ☐ Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☒ Attached, Document ID: **OC-FI-CC1** ☐ Not Applicable (existing permitted facility)

2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   ☐ Attached, Document ID:_____

3. Rule Applicability Analysis:
   ☐ Attached, Document ID:_____

4. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☒ Not Applicable (no exempt units at facility)

5. Fugitive Emissions Identification:
   ☐ Attached, Document ID:_____ ☒ Not Applicable

6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable

7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable

8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable

9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable

10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    ☐ Attached, Document ID:_____ ☒ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only)
   ☒ Attached, Document ID: **OC-FI-CV1** ☐ Not Applicable (revision application)

2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-FI-CV2**
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
   ☒ Attached, Document ID: **OC-FI-CV3**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities Onsite but Not Required to be Individually Listed
   ☒ Not Applicable

5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☒ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☒ Attached, Document ID: **OC-FI-CV6** ☒ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

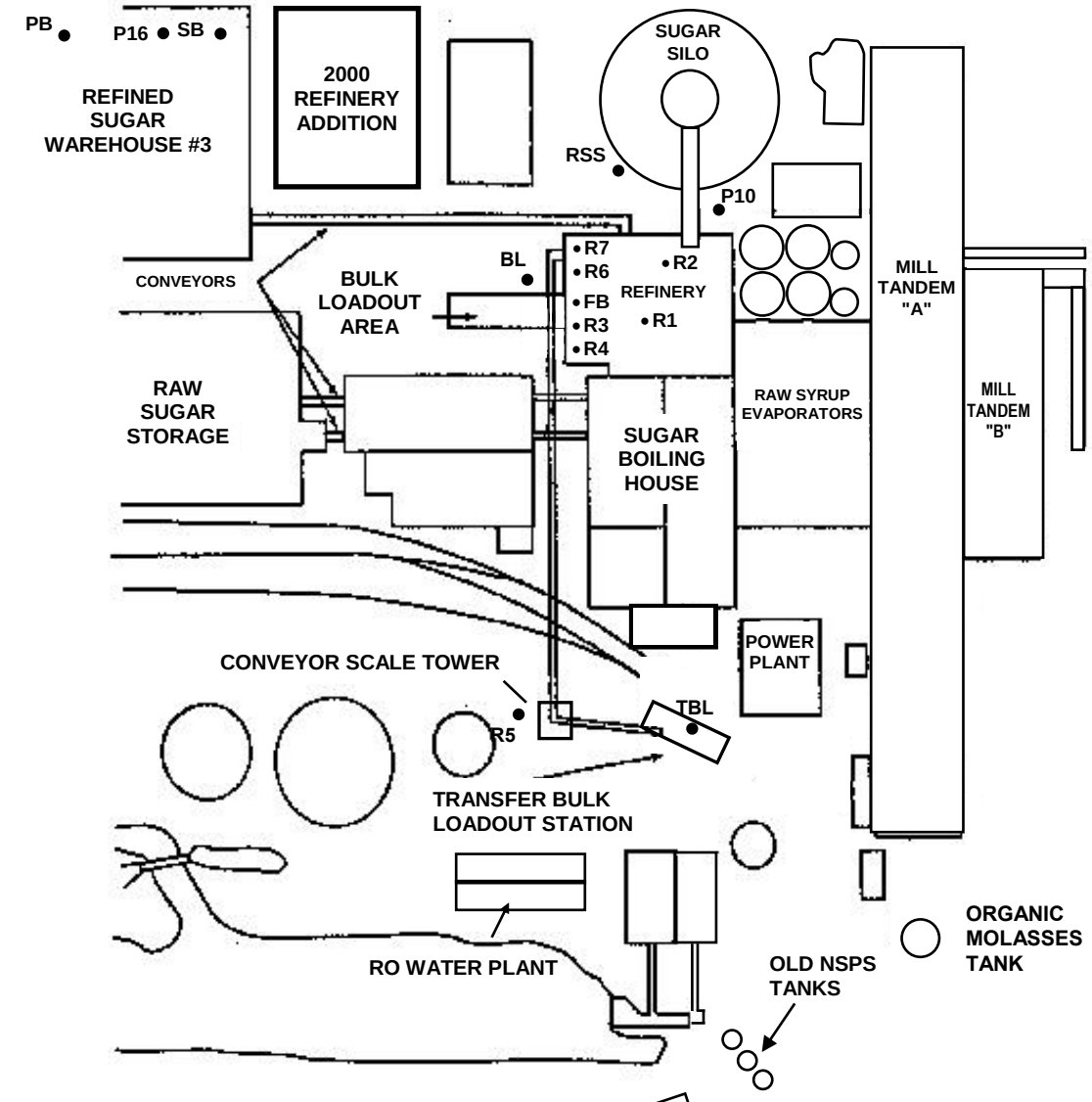
   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not a CAIR source)

Additional Requirements Comment

ATTACHMENT OC-FI-C1

FACILITY PLOT PLAN



LEGEND

R1	Wet Rotoclone No. 1 Stack (EU 021)
R2	Wet Rotoclone No. 2 Stack (EU 022)
R3	Wet Rotoclone No. 3 Stack (EU 023)
R4	Wet Rotoclone No. 4 Stack (EU 024)
FB	Fluidized Bed Dryer/Cooler Baghouse Stack (EU 025)
P10	Packaging Line 10 Dust Collector (EU 029)
BL	Bulk Loadout Baghouse Stack (EU 034)
TBL	Transfer Bulk Loadout Station (EU 035)
RSS	Refined Sugar Silo Baghouse Stack (EU 051)
R5	Wet Rotoclone No. 5 Stack (EU 052)
R6	Wet Rotoclone No. 6 Stack (EU 054)
R7	Wet Rotoclone No. 7 Stack (EU 055)
PB	Package Boiler Stack (EU 057)
SB	Sugar Bin with Dust Collector (EU 058)
P16	Packaging Lines 16-19 Baghouse Stack (EU 059)

Attacment OC-FI-C1a
Facility Plot Plan of Okeelanta Sugar Mill and Refinery

Note: Plot Plan is a general arrangement for informational purposes only. Plot plan is not to scale.
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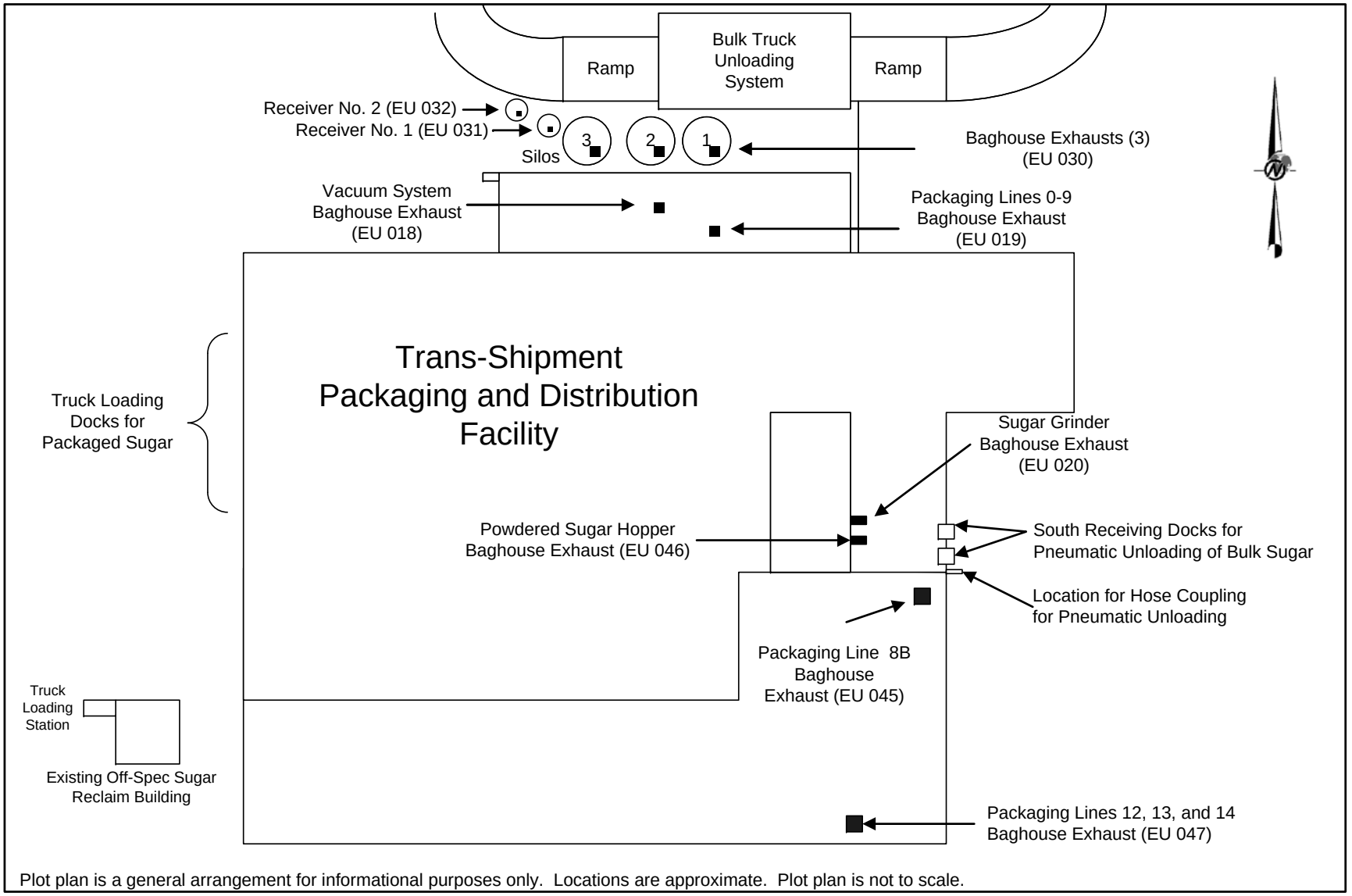

Plot plan is a general arrangement for informational purposes only. Locations are approximate. Plot plan is not to scale.

Attachment OC-FI-C1b
Trans-Shipment Packaging and Distribution
Facility Plot Plan
Okeelanta Corporation

Golder Associates

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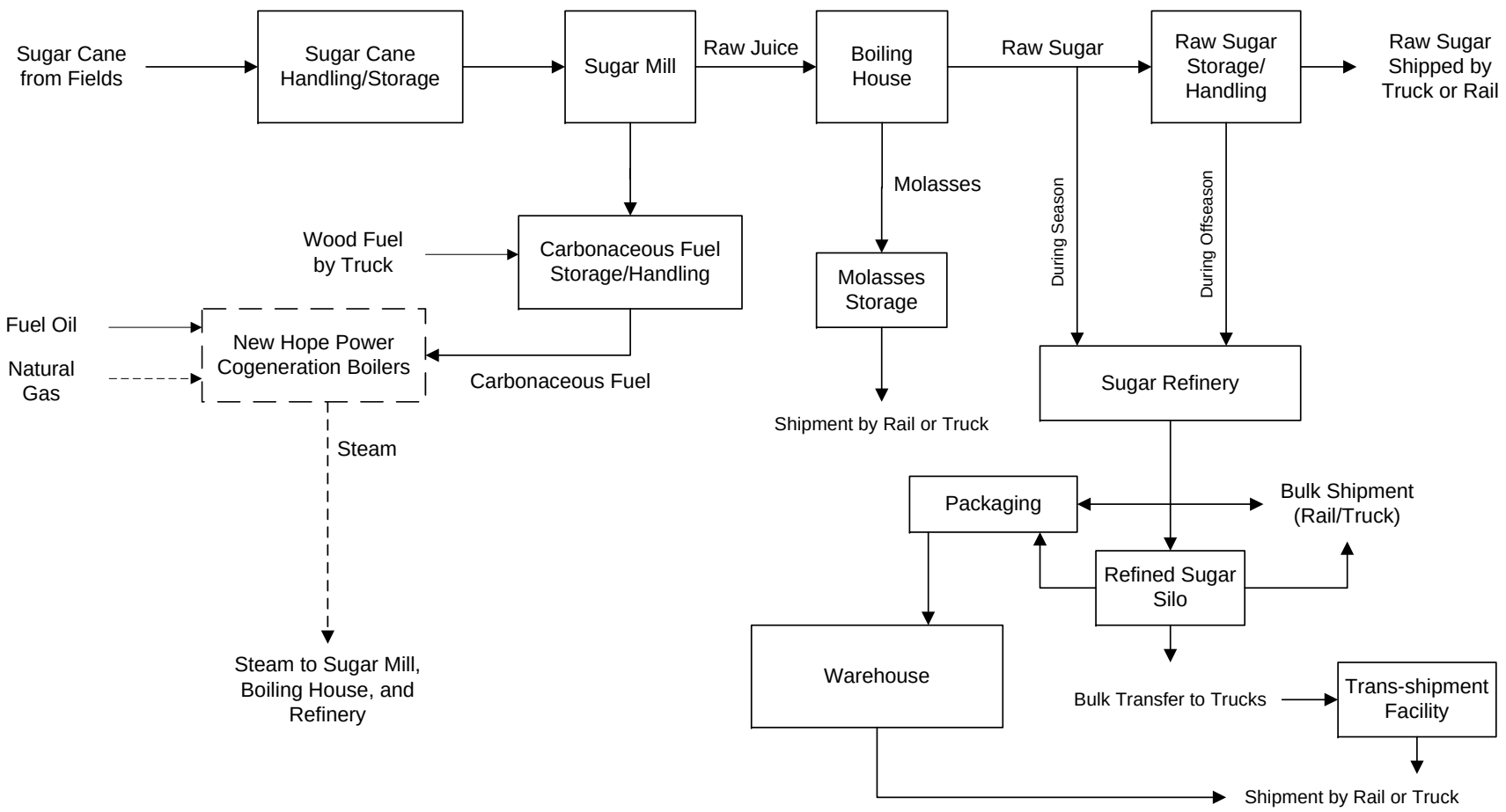
ATTACHMENT OC-FI-C2

PROCESS FLOW DIAGRAM



Attachment OC-FI-C2a
Sugar Manufacturing
Facility Process Flow Diagram
Okeelanta Corporation
South Bay, FL

Process Flow Legend
Solid/Liquid
Steam
Gas

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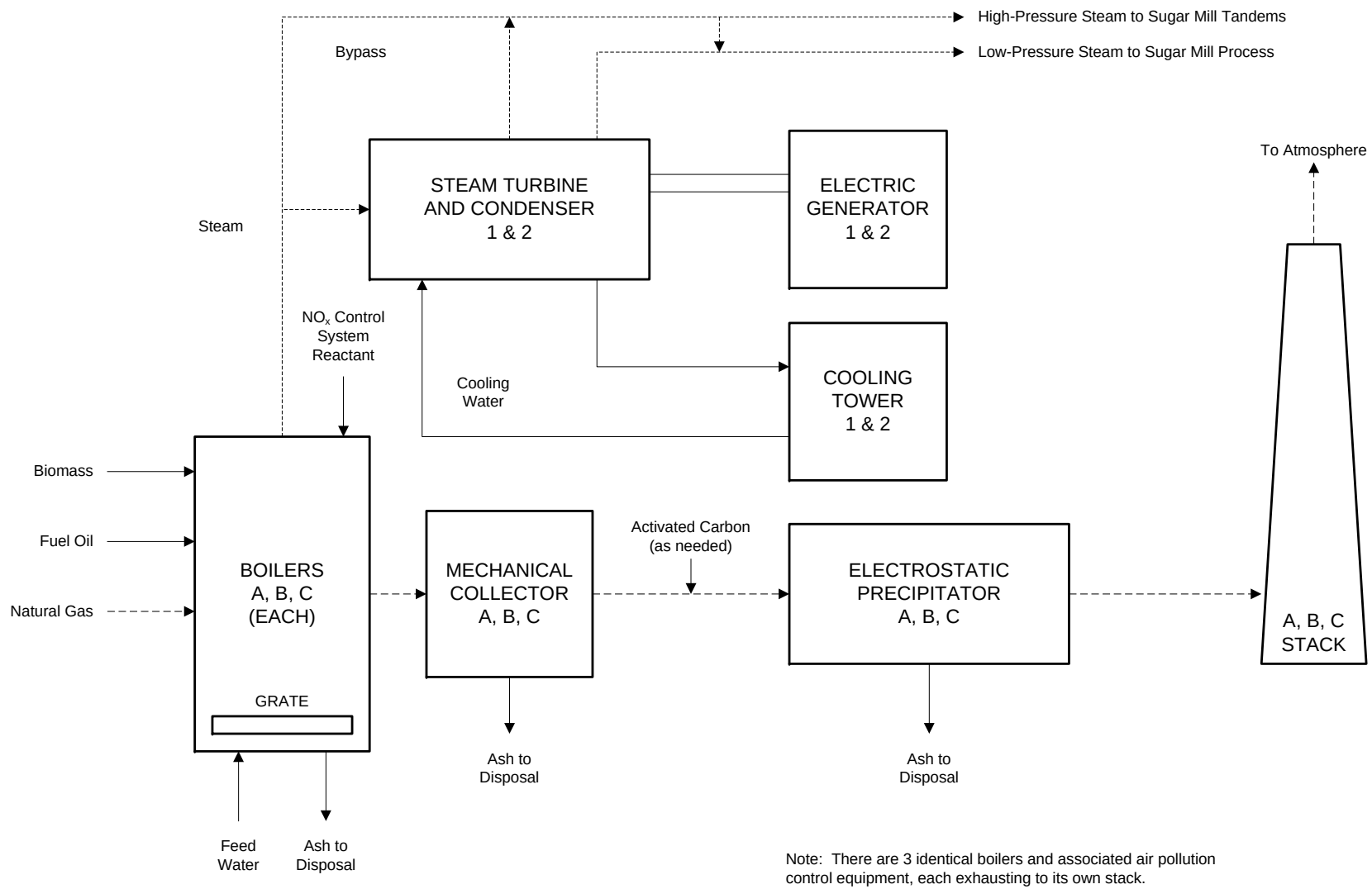

Attachment OC-FI-C2b
Simplified Flow Diagram – Existing Boilers
New Hope Power Company, Okeelanta Cogeneration Facility
South Bay, FL

Process Flow Legend
Solid/Liquid
Steam
Gas

Golder Associates

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ATTACHMENT OC-FI-C3

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT OC-FI-C3

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

The storage and handling of fuels, raw materials and products results in unconfined particulate matter emissions that must be contained, captured, and/or controlled with the use of fans, filters, pneumatic unloading/loading, ductwork, storage silos and similar equipment. The following work practices shall constitute reasonable precautions undertaken at the facility, pursuant to Rule 62-4.070(3), F.A.C., as applicable, to minimize particulate emissions.

- Where practicable, enclose or cover conveyor systems.
- Minimize drop distances of dry materials when handling.
- As necessary, provide wind breaks around material handling equipment.
- Where possible, confine abrasive blasting.
- As necessary, paving and maintenance of roads, parking areas and yards.
- As necessary, use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- As necessary, provide landscape and/or vegetation.
- 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.
- As necessary, apply water or other dust suppressants to control emission from unpaved roads, yards, and other activities such as road grading, land clearing, and the demolition of buildings.

ATTACHMENT OC-FI-CV1

LIST OF INSIGNIFICANT ACTIVITIES

ATTACHMENT OC-FI-CV1
LIST OF INSIGNIFICANT EMISSION UNITS AND/OR ACTIVITIES

An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit- specific emissions or work practice standards. The below listed emissions units and/or activities have been identified by the permittee as "unregulated emissions units". Emissions units and activities meeting the requirements in Rule 62-213.430(6)(b), F.A.C. are also considered insignificant for purposes of Title V permitting.

Okeelanta Corporation Sugar Mill and Refinery (ARMS ID No. 0990005)

The following activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

056	*Hi-Vac Industrial Vacuum System*	• *Sugar Mill and Refinery*
053	*Printing Operation*	• *Trans-shipment*

The following emission units have been determined by the Department to be <u>EXEMPT</u> from permitting.

058	*Sugar Bin with Dust Collector*	• *(Refined Sugar Warehouse # 3)*
052	*Bulk Transfer Station*	• *Wet Roto-clone No. 5*
051	*Refined Sugar Silo*	• *Baghouse*
029	*Packaging Line 10*	• *Baghouse (Located in Sugar Refinery)*

ATTACHMENT OC-FI-CV2

IDENTIFICATION OF APPLICABLE REQUIREMENTS

ATTACHMENT OC-FI-CV2
IDENTIFICATION OF APPLICABLE REQUIREMENTS
TITLE V CORE LIST

Effective: 06/15/12

(Updated by Golder Associates Inc. based on current version of FDEP and USEPA Air Rules)

[Note: The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal Rule: ***(description)***

40 CFR 60, Subpart Da: Standards of Performance for New Stationary Sources (NSPS)
40 CFR 61, Subpart M National Emission Standard for Asbestos
40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary

Reciprocating Internal Combustion Engines
40 CFR 63: National Emissions Standards for Hazardous Air Pollutants for Source Categories.
40 CFR 64: Compliance Assurance Monitoring.

State Rule: ***(description)***

CHAPTER 62-4, F.A.C.: PERMITS, effective 10-01-13

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application. 10-31-07
62-4.055, F.A.C.: Permit Processing. 8-16-98
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals. 3-16-08
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review.
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 12-31-13

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions from Permitting.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.
62-210.350, F.A.C.: Public Notice and Comment. 10-12-08.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.

62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.
62-210.360, F.A.C.: Administrative Permit Corrections and Amendments. 3-16-08
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility. 7-3-08
62-210.650, F.A.C.: Circumvention.
62-210.700, F.A.C.: Excess Emissions.
62-210.900, F.A.C.: Forms and Instructions.
62-210.900(1), F.A.C.: Application for Air Permit – Long Form, Form and Instructions. 3-11-10
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions. 7-3-08
62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source. 7-3-08

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 3-28-12

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 12/31/13

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.: Permit Content.
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield.
62-213.900, F.A.C.: Forms and Instructions.
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(2), F.A.C.: Statement of Compliance Form.
62-213.900(3), F.A.C.: Responsible Official Notification Form.

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 02-16-12

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.
62-296.320(2), F.A.C.: Objectionable Odor Prohibited.
62-296.410, F.A.C.: Carbonaceous Fuel Burning Equipment.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 02-16-12

62-297.310, F.A.C.: General Compliance Test Requirements.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 10-6-08
CHAPTER 62-257, F.A.C.: Asbestos Program, effective 10-12-08
CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

ATTACHMENT OC-FI-CV3

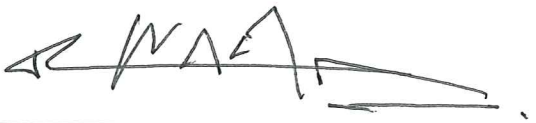
COMPLIANCE REPORT AND PLAN

ATTACHMENT OC-FI-CV3
COMPLIANCE REPORT AND PLAN

Okeelanta Corporation and New Hope Power Company certify that the Okeelanta Sugar Mill and Refinery and the Okeelanta Cogeneration Plant located in South Bay, Palm Beach County, Florida, as of the date of this application, are in compliance with each applicable requirement addressed in this Title V air permit renewal application, except as described in the attached Compliance Plan.

I, the undersigned, am the responsible official as designated in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Compliance statements for this facility will be submitted on an annual basis to Florida Department of Environmental Protection (FDEP), on or before March 1 of each year.



Signature, Responsible Official

11-28-14

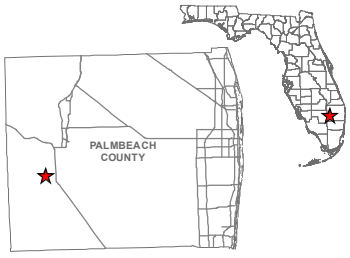
Date

ATTACHMENT OC-FI-CC1

AREA MAP SHOWING FACILITY LOCATION

LEGEND

- ★ Okeelanta & New Hope Power
- ● Sugar Cane Growers Cooperative



2 0 2 Miles

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW
0						

PROJECT

TITLE V RENEWAL APPLICATION

TITLE

SITE LOCATION

REFERENCES

1, Approximate Project Location, New Hope Power Co., Golder Associates Inc., 2012

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet
Projection: Transverse Mercator
Datum: North American 1983

Golder Associates

PROJECT No.	123-87582		FILE No.	12387582_B001	
DESIGN	JDG	13 Sep. 2012	SCALE: AS SHOWN	REV. 0	
GIS	NRL	13 Sep. 2012			
CHECK	NG	13 Sep. 2012			
REVIEW	DB	13 Sep. 2012			

OC-FI-CC1a

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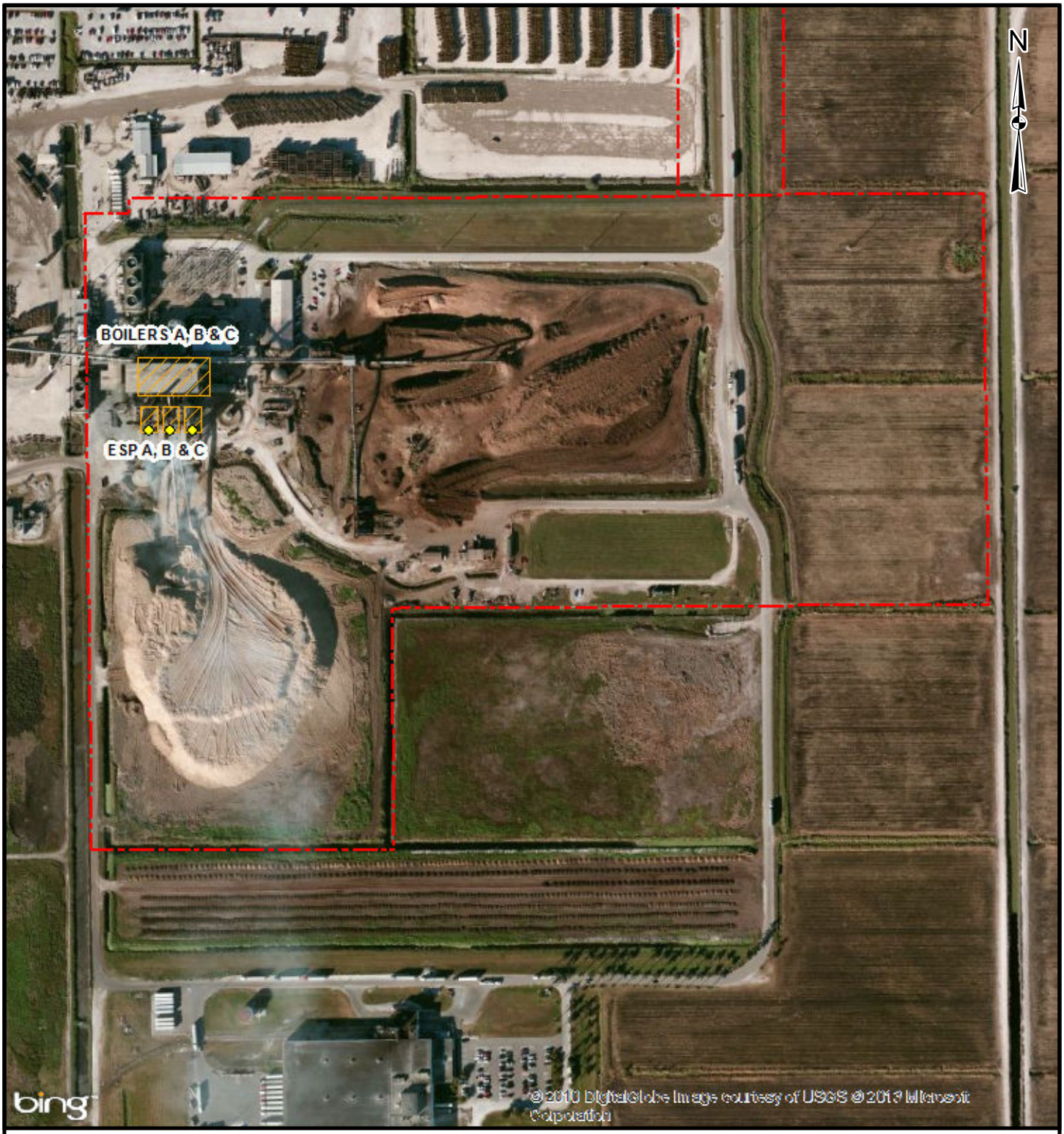


LEGEND

- Source Location
- Certified Site Boundary
- Buildings

400 0 400 Feet

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW
0						

PROJECT

TITLE V RENEWAL APPLICATION

TITLE

NHPC EXISTING CERTIFIED SITE BOUNDARY AND EXISTING BOILERS

REFERENCES

1, Approximate Project Location, New Hope Power Co., Golder Associates Inc., 2012
2. Certified Site Boundary, New Hope Power Co., 2012

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet
Projection: Transverse Mercator
Datum: North American 1983

Golder Associates

PROJECT NO. 123-87582			FILE No. 123-87582B002	
DESIGN	JDG	11 Sep. 2012	SCALE: AS SHOWN	REV. 1
GIS	NRL	10 Jan. 2013		
CHECK	NG	10 Jan. 2013		
REVIEW	DB	10 Jan. 2013		

OC-FI-CC1b

Map Document: / Modified by rlamar / Exported by rlamar

ATTACHMENT OC-FI-CV6

REQUESTED CHANGES TO TITLE V AIR OPERATION PERMIT

ATTACHMENT OC-FI-CV6

REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT

Okeelanta Corporation and New Hope Power Company (NHPC) request changes and clarifications to the specific conditions contained in Title V Permit No. 0990005-038-AV. The changes requested include:

- Minor amendments in permit language to correct inconsistencies
- Updates to NHPC's site-specific plans to reflect current operations and facility requests.

PERMIT LANGUAGE MODIFICATIONS

Section 1. Facility Information

A permitting note should be added under Regulatory Categories to clarify that EPA has not yet determined if the boilers at NHPC will be subject to 40 CFR 63, Subpart DDDDD-National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. In a recent phone discussion, EPA clarified the exemption in 63.7491(a), which states that "An electric utility steam generating unit (EGU) covered by subpart UUUUU of this part" is not subject to Subpart DDDDD. EPA stated that the exemption was meant to refer to any unit defined as an EGU in Subpart UUUUU. Since the NHPC cogeneration boilers meet the definition of EGU in Subpart UUUUU, it appears this exemption will apply and that the NHPC boilers will not be subject to Subpart DDDDD. The Subpart DDDDD regulations are currently undergoing reconsideration by EPA, and EPA states that this exemption will be clarified when the EPA reconsideration is issued. Therefore, at this time, NHPC requests that the cogeneration boilers not be listed as being subject to Subpart DDDDD.

It is also noted that the last bullet point under regulatory categories is redundant, "Units are subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A – General Provisions" is already in the list of regulations.

In Summary of Regulated Emissions Units (page 3 of 42), he following corrections are requested:

- EU 018 Central Vacuum System- the parenthetical reference to an insignificant unit should be removed, as the unit is not insignificant.
- EU 035- should be described as "Transfer Bulk Load-Out **Station**".
- EU 047 should have the description as "Sugar Packaging Lines 12, 13 and 14
- EU 049 should have the description as "Baghouse (Inactive)
- EU No. 056, Hi-Vac Industrial Vacuum System is incorrectly included in the regulated emissions units list and should be removed. EU 056 is correctly listed in the Unregulated Emissions Units and/or Activities table on page 4 of 42; therefore it should not be shown in the regulated emissions unit table.

Section 2. Facility-Wide Conditions

Condition 5 - 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. The Title V Annual Emissions Fees will be automatically calculated by the Electronic Annual Operating Report (EAOR) and are required to be submitted by April 1st of each year with the AOR. Therefore Condition 5 should be revised accordingly.

Condition 10 – The current language states "requires the use of fans, filters, ….". This sentence should be removed. Rule 62-296.420(c) contains the requirements for fugitive dust emissions, and requires that the permit specify the reasonable precautions to be taken by the facility. These precautions are spelled out in subsequent language in this condition.

Section 3. Emissions Unit Specific Conditions

Subsection A. Cogeneration Boilers.

In Emissions Unit Description (ARMS ID No. 0990332), it is requested that the boiler type currently described as "spreader stoker" be revised to "hybrid suspension-grate".

Regarding the statement of applicability of the cogeneration boilers to 40 CFR 63 Subpart DDDDD, as described above, this determination has not yet been made. Therefore, it is requested that the statement on page 12 of 42, as well as Condition 27 on page 22 of 42, be removed or a clarifying statement be added.

Specific Condition 20.b. of this section states in its second paragraph that "The CO_2 CEMS shall express the 1-hour emission average (CO_2 and O_2) in terms of 'percent by volume.'" However, since the CO_2 CEMS does not measure O_2, it is requested that the mention of the O_2 be removed from the statement.

Subsection B. Material Handling and Storage Operations - Cogeneration Plant

Specific Condition 1.a. of this section indicates that the facility has truck unloading dumps, dumps # 1 and #2. However, the facility uses three truck unloading dumps. It is requested that the sentence be revised as follows:

> "The following activities are associated with these operations: truck unloading (dumps #1, #2 and #3, unloading bay); […]"

Subsection D. Sugar Refinery

Specific Condition 6.b. of this section (page 32 of 42) lists the visible emission limit of 5 percent opacity. However, that the limit does not apply to the Bulk Transfer Station (EU 035) because the emissions unit does not have control equipment, and remains a fugitive dust source. Instead, EU 035's visible emission limit is 20% opacity (refer to previous Title V permit). Also, "fugitive emissions at the sugar refinery" should fall under the general visible emission limit in Rule 62-296.320. It is therefore requested that the

20 percent opacity limit be re-instated for EU 035 and for fugitive emission from the sugar refinery. Finally, since this condition now references Packaging Lines 16-19, the condition should also reference permit no. 0990005-037-AC.

Specific Condition 14 of this section (page 34 of 42) refers to particulate weight emission standards. The process weight table does not apply to these operations because there is no physical or chemical change to the material other than drying (removal of water).

Section E. Transshipment Facility

It was determined that Packaging Lines 5B, 6, 7, and 8A process high moisture brown sugar and therefore are not vented to Sugar Packaging Lines Baghouse (EU 019), nor he Powdered Sugar Dryer/Cooler Baghouse (EU 045). Therefore it is requested that these two emissions units are revised to reflect these changes. Please refer to Attachment OC-EU7-I7 for clarification.

Section F. Distillate Oil Storage Tanks

Specific Condition 2 of this section (page 39 of 42) requires NHPC to maintain records of the types and amounts of fuel stored in each tank. Since none of the fuel storage tanks are regulated, this condition should be revised to require records for only the 50,000 gallon storage tank at the cogeneration plant.

Section 4. Appendices

In the list of contents for this section, Appendix CP is the “Compliance Plan”, not the Compliance Assurance Monitoring Plan. An additional Appendix CAM should be included in the list, which would include the Compliance Assurance Monitoring Plan for the facility.

Appendix CP - Compliance Assurance Monitoring Plan. As previously stated, the contents from this appendix should be identified as Appendix CAM. However, the discussion beginning page CP-5 under Okeelanta Corporation Sugar Mill and Refinery (Facility ID No. 0990005) is actually the Compliance Plan, Appendix CP.

Appendix CP - Compliance Assurance Monitoring Plan. It is requested that the section discussing Sugar Packaging Lines 0-9 (EU-019) be removed since EU 019 is no longer required to have a Compliance Plan.

Appendix FM - Fuel Management Plan. According to paragraph 4 of the Wood Material Description section, the trucks will be unloaded using two hydraulically operated truck dumpers, however, as previously stated, the facility uses three truck unloading dumps. Therefore, it is requested that the sentence be revised to reflect actual operation.

Appendix SS. Summary of Standards. Please see attached Summary of Standards that reflects, in track changes the following requested revisions to the appendix.

Appendix SS-1. Summary of Standards. It is requested that the following sentence by revised to reflect "as fired" state:

> *Restrictions: Operating hours are not restricted. Combust no more than 30% by weight yard waste (yard trash) on a calendar quarter basis that is defined as a municipal solid waste (MSW) in 40 CFR 60.51a. Combust no wood material containing more than 70.7 ppm arsenic or 83.3 ppm chromium or 62.8 ppm copper* ***as fired****.*

Appendix SS-2. Summary of Standards. As previously mentioned, the cogeneration boilers at New Hope Power's Okeelanta Cogeneration Plant may not be subject to 40 CFR 63 Subpart DDDDD. Since the applicability to the rule has not yet been confirmed, it is requested to not include it in the permit at this time. Likewise, standards for the Fly Ash Silo and Activated Carbon Silo should be removed from appendix since the activated carbon system is inactive and removed from site.

Appendix SS-3. Summary of Standards. Emission Unit No. 034 in the Facility ID No. 0990005 – Okeelanta Corporation Sugar Mill and Refinery table should be revised as follows:

> "Bulk Load-Out Operation with baghouse"

Appendix UI. Unregulated and Insignificant Emissions Units and/or Activities. Emissions Unit 057, 300 hp gas-fired boiler. Although this emissions unit was previously exempt, it is now subject to the Industrial Boiler MACT rule at 40 CF 63, Subpart DDDDD.

UPDATES TO NHPC'S SPECIFIC PLANS

The requested revisions to the current site specific plans listed below are reflected in track changes and provided in Attachment OC-EU1-AR and OC-EU1-15 (O&M Plan) as part of Boiler A's supporting documentation:

- Ash Management Plan
- Fuel Management Plan
- Good Combustion Plan
- Operation and Maintenance Plan

Fuel Management Plan

NHPC is requesting that the limits on chromium, copper and arsenic in the Fuel Management Plan be clarified to be on a "wet" basis. The TV permit is not clear on this issue. On page FM-2 of the Fuel Management Plan, it is stated "Based on the analysis of a composite sample, wood material containing more than 70.7 ppm arsenic or 83.3 ppm chromium or 62.8 ppm copper shall not be burned". However, it

is not specified as to whether the concentrations are on a wet or dry basis. Since dry basis is not specified, it could be assumed that the concentrations should be on a wet, as-received basis.

On page FM-5, it is further stated "The following methods (or equivalent) will be used to analyze as-fired composite samples: Copper, Chromium and Arsenic in ppm by weight, dry (Methods 3050/6010, EPA Method SW-846)." Also, on page FM-6 it is stated "At least twice each month, the permittee shall have an analysis conducted on a representative "as-fired" wood material sample for the following: copper, chromium, and arsenic (ASTM Methods 3050/6010 or EPA Method SW-846, ppmw, dry)." Although this wording clarifies how the results of the analysis are to be reported, it does not specifically address the form of the limits (either wet or dry basis).

However, review of the calculations forming the original basis of the ppm limits verifies that the limits were indeed designed to be on a wet basis (not dry basis). The calculation is reproduced below:

- Total wood fuel = 446,471 tons/yr (this is as-fired, or wet, basis)
- Treated wood = 3% of total wood, or 13,394 tons/yr
- Untreated wood = 446,471 – 13,394 = 433,077 tons/yr

CCA in untreated wood, based on controlled emission factors, and assuming 99% control efficiency in ESP:

- As – 2.76×10^{-6} lb/MMBtu / (1 – 0.99) x 8.5 MMBtu/ton = 0.00235 lb/ton wood
- Cr – 6.18×10^{-6} lb/MMBtu / (1 – 0.99) x 8.5 MMBtu/ton = 0.00525 lb/ton wood
- Cu – 3.59×10^{-5} lb/MMBtu / (1 – 0.99) x 8.5 MMBtu/ton = 0.0305 lb/ton wood

CCA in treated wood:

- As – 2,325 ppm = 4.65 lb/ton wood
- Cr – 2,680 ppm = 5.36 lb/ton wood
- Cu – 1,610 ppm = 3.22 lb/ton wood

Total As = (433,077 tons x 0.00235 lb/ton) + (13,394 tons x 4.65 lb/ton treated wood)
= 63,300 lb As
Concentration in combined wood stream = 63,300 lb / (446,471 tons x 2000) = 70.7 ppm

Total Cr = (433,077 tons x 0.00525 lb/ton) + (13,394 tons x 5.36 lb/ton treated wood)
= 74,065 lb Cr
Concentration in combined wood stream = 74,065 lb / (446,471 x 2000) = 83.3 ppm

Total Cu = (433,077 tons x 0.0305 lb/ton) + (13,394 tons x 3.22 lb/ton treated wood)

= 56,337 lb Cu

Concentration in combined wood stream = 56,337 lb / (446,471 x 2000) = 62.8 ppm

It is therefore requested that the copper, chromium and arsenic limits for the wood fuel specified on page FM-2 be revised to specify that the limits are on a “wet” basis.

PERMIT SUBSECTION 3A - COGENERATION BOILERS

Facility ID No. 0990332 – New Hope Power's Okeelanta Cogeneration Plant

EU No.	Emissions Unit Description
001	Cogeneration Boiler A
002	Cogeneration Boiler B
003	Cogeneration Boiler C
004	Cogeneration Plant – Material Handling and Storage

Generating Capacity: Two steam turbine electrical generators (75 MW and 65 MW)

Maximum Heat Input Rate: 760 MMBtu/hour (biomass), 605 MMBtu/hour (gas), and 490 MMBtu/hour (oil)

Maximum Steam Rate: 506,100 pounds per hour at 1500 psig and 975°F

Primary Fuels: Bagasse and wood waste (clean construction and demolition wood debris, yard trash, land clearing debris, and other clean cellulose and vegetative matter)

Startup and Auxiliary Fuels: Natural gas and distillate oil (≤ 0.05% sulfur by weight)

NO_X Controls: Low-NO_X natural gas burners and a selective non-catalytic reduction (SNCR) system

Particulate Matter Controls: Mechanical dust collectors and an electrostatic precipitator (ESP)

Process Monitors: Maintain continuous monitors for fuel feed rate, heat input, steam production, steam pressure, steam temperature, net power generation, and urea injection rate (as needed).

CEMS: Maintain continuous emissions monitoring systems (CEMS) to measure and record emissions of carbon monoxide (CO), nitrogen oxides (NO_X), opacity, carbon dioxide (CO_2) in lieu of oxygen, and sulfur dioxide (SO_2).

COMS: Maintain continuous opacity monitoring systems (COMS) to measure and record stack opacity.

Restrictions: Operating hours are not restricted. Combust no more than 30% by weight yard waste (yard trash) on a calendar quarter basis that is defined as a municipal solid waste (MSW) in 40 CFR 60.51a. Combust no wood material containing more than 70.7 ppm arsenic or 83.3 ppm chromium or 62.8 ppm copper as fired. Fossil fuel firing (distillate oil and natural gas) shall be less than 25% of the total heat input to each cogeneration boiler during any calendar quarter.

Emissions Standards Summary:

Pollutant	Averaging Period	Compliance Method
CO	0.50 lb/MMBtu, 30-day rolling avg.	CEMS
	0.35 lb/MMBtu, 12-month rolling avg.	
NO_X	0.15 lb/MMBtu, 30-day rolling avg.	CEMS
SO_2	0.20 lb/MMBtu, 24-hour rolling avg.	CEMS
	0.10 lb/MMBtu, 30-day rolling avg.	
	0.06 lb/MMBtu, 12-month rolling avg.	
Opacity	20%, except for one 6-minute block per hour that is 27%	COMS and EPA Method 9

Summary of Standards

Pollutant	Averaging Period	Compliance Method
PM/PM_{10}	0.026 lb/MMBtu, 3-run test avg.	EPA Method 5 Stack Test
VOC	0.05 lb/MMBtu, 3-run test avg.	EPA Method 25A Stack Test
Mercury	5.4×10^{-06} lb/MMBtu, 3-run test avg.	EPA Method 101A or 29 or 30B

Test Notification: Provide 15 day advance notice of each test.

Test Reports: Submit test report within 45 days after conducting a test.

Annual Tests: Conduct annual stack tests for mercury, PM/PM_{10}, and VOC.

Fuel Records: Maintain a daily log of the amounts and types of fuels used. For each fuel oil delivery, maintain the amount, heating value, and sulfur content. For each calendar month, record the actual monthly SO_2 emissions and the 12-month rolling total SO_2 emissions.

Quarterly Reports: Within 30 days following each calendar quarter, submit to the Compliance Authority a report summarizing operation of each required continuous emissions and opacity monitoring system in accordance with the requirements specified in the "Quarterly Report" included in Appendix QR of this permit. Report shall also include a summary of the fuel analyses, fuel usage, and equipment malfunctions. For each malfunction, the report shall identify the cause (if known), and corrective actions taken.

~~*Federal Regulations*: NSPS Subpart A (General Provisions), Units are subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart A – General Provisions and 40 CFR 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. [Rule 62-213.440, F.A.C.], Subpart Da (Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978) and NSPS Subpart Ea (Applicability for Standards of Performance for Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or Before September 20, 1994)~~

CAM: PM/PM_{10} emissions controlled by multi-cyclones and ESP

PERMIT SUBSECTION 3B - MATERIAL HANDLING & STORAGE OPERATIONS, COGENERATION PLANT

Facility ID No. 0990332 - New Hope Power's Okeelanta Cogeneration Plant

EU No.	Emissions Unit Description
004	Material Handling and Storage Operations includes unloading operations, stockpiles, transfer operations, conveyors, screens, crushers, hoppers and silos. Hours of operation are not restricted.

~~Fly Ash Silo and Activated Carbon Silo:~~

~~*Controls*: Baghouses ≤ 0.01 grains per acfm (design specification for new and replacement bags).~~

~~*Opacity Standard*: Visible emissions ≤ 5% opacity based on a 6-minute average.~~

~~*Compliance Tests*: Conduct EPA Method 9 for opacity annually for each silo that is loaded with ash or carbon.~~

~~*Test Notification*: Provide 15 day advance notice of each test.~~

~~*Test Reports*: Submit test report within 45 days after conducting a test.~~

~~*CAM*: No~~

Fugitive Dust:

Controls: As necessary, take reasonable precautions to prevent fugitive dust.

PERMIT SUBSECTION 3C - SUGAR MILL & REFINERY

Facility ID No. 0990005 – Okeelanta Corporation Sugar Mill and Refinery

EU No.	Emissions Unit Description
EU-014	*Boiler 16 – DELETED (Permit No. 0990005-032-AV)*

PERMIT SUBSECTION 3D - SUGAR REFINERY

Facility ID No. 0990005 – Okeelanta Corporation Sugar Mill and Refinery

EU No.	Emissions Unit Description
021	*Wet Roto-clone No. 1 (Rotary Dryer)*
022	*Wet Roto-clone No. 2 – "B" System*
023	Cooler No. 1 with Roto-clone No. 3
024	Cooler No. 2 with Roto-clone No. 4
025	Fluidized Bed Dryer/Cooler with Baghouse
034	Bulk Load-Out Operation with Baghouse
035	Transfer Bulk Load-out Station
043	Sugar Refinery Alcohol Usage
054	*Wet Roto-clone No. 6 – "A" System (Permit No.0990005-027-AC)*
055	*Wet Roto-clone No. 7 - "C" System (Permit No. 0990005-027-AC)*

Permitted Capacities: Hours of operation are not restricted. Refined sugar production shall not exceed 490,000 tons/consecutive 52 weeks. Sugar refinery equipment is limited as follows:

Fluidized Bed Dryer (EU-025) ≤ 490,000 tons of refined sugar/consecutive 52 weeks.

Rotary Dryer/Cooler System ≤ 130,000 tons of refined sugar/consecutive 52 weeks.

Bulk Load-Out Operation (EU-034) ≤ 139,000 tons of refined sugar/consecutive 52 weeks.

Transfer Bulk Load-Out Station (EU-035) ≤ 351,000 tons of refined sugar/consecutive 52 weeks.

Sugar refinery alcohol usage (EU-043) ≤ 78,040 pounds/consecutive 52 weeks.

Particulate Matter (PM) Emission Standard: The sum of emissions from all emission units shall NOT exceed 22.15 TPY of PM2.5 and 3.00 TPY of PM10.

Opacity Standard: ≤ 5% opacity from each controlled exhaust point (EU-021, 022, 023, 024, 025).

Compliance Tests: Conduct EPA Method 9 for opacity each year for each controlled exhaust point.

Test Notification: Provide 15 day advance notice of each test.

Test Reports: Submit test report within 45 days after conducting a test.

Operational Records: Maintain records sufficient to demonstrate compliance with each permitted capacity.

CAM: No

PERMIT SUBSECTION 3E - TRANSSHIPMENT FACILITY

Facility ID No. 0990005 – Okeelanta Corporation Sugar Mill and Refinery

ID	Emission Unit Description	ID	Emission Unit Description
018	Central vacuum system No. 1	045	Powdered sugar dryer/cooler, packaging Line 8A and 8B
019	Sugar packaging Lines 0-9, including 8A and 8B	046	Powdered sugar hopper
020	Sugar grinder	047	Sugar packaging lines (12-14)
030	Sugar silos Nos. 1, 2, and 3 (Points #1101-1103)	049	Baghouse (Currently inactive).
031	Railcar sugar unloading receiver No. 1		
032	Railcar sugar unloading receiver No. 2		

Permitted Capacity: The maximum sugar packaging rate is 1300 tons/day. Hours of operation of are not restricted.

Controls: All units are controlled by baghouses that must meet the following design specification for new and replacement bags:

≤ 0.0005 grains per acfm for baghouse controlling EU-020

≤ 0.01 grains per acfm for baghouses controlling EU-018, 019, 045, 046, and 047

≤ 0.02 grains per acfm for baghouses controlling EU-030, 031, 032 and 049

Opacity Standard: Visible emissions ≤ 5% opacity from each baghouse exhaust point.

Compliance Tests: Conduct EPA Method 9 for opacity annually.

Test Notification: Provide 15 day advance notice of each test.

Test Reports: Submit test report within 45 days after conducting a test.

CAM: No

PERMIT SUBSECTION 3F - DISTILLATE OIL STORAGE TANKS

Facility ID No. 0990332 - New Hope Power's Okeelanta Cogeneration Plant

EU No.	Emissions Unit Description
005	Cogeneration Plant – Miscellaneous Support Equipment

Operational Records: Tanks shall store distillate oil. Maintain records of the types and amounts of fuel stored.

Facility ID No. 0990005 - Okeelanta Corporation's Sugar Mill and Refinery

EU No.	Emissions Unit Description
015	*DELETED - Distillate Oil Storage Tank (29,500 gallons)*
016	*DELETED - Distillate Oil Storage Tank (29,500 gallons)*
017	*DELETED - Distillate Oil Storage Tank (29,500 gallons)*

Operational Records: Tanks shall store distillate oil. Maintain records of the types and amounts of fuel stored.

PERMIT SUBSECTION 3G - PAINT SPRAY BOOTH, FARM OPERATIONS

Facility ID No. 0990005 - Okeelanta Corporation's Sugar Mill and Refinery

EU No.	Emissions Unit Description
048	Paint Booth

Permitted Capacity: The maximum throughput rate of paint, thinners and cleanup solvents shall not exceed 4950 gallons/consecutive 12-month period. Hours of operation are not restricted.

Fugitive VOCs: All equipment, pipes, hoses, lids, fittings, etc., shall be operated and maintained in such a manner as to minimize leaks, fugitive emissions, and spills of materials containing volatile organic compounds (VOC).

VOC Emissions: VOC $\leq$ 9.40 tons/consecutive 12-months

Opacity Standard: $\leq$ 20% opacity

Operational Records: Maintain monthly records of the following: actual hours of operation of the paint booth; dates of operation; amounts and types of coatings, thinners and cleanup solvents used; and a monthly calculation of VOC/HAP emissions. VOC/HAP emissions shall be calculated by assuming all VOC/HAP in the coatings, thinners and cleanup solvents evaporate. The mass fraction of VOC /HAP from each solvent-containing material shall be determined from the Material Safety Data Sheets (MSDS) supplied by the vendors. The permittee shall maintain a file of MSDS for each solvent-containing material that indicates the composition of the VOC/HAP. Solvent-containing materials include, but are not limited to, powder coatings, solvent coatings, thinners, and cleanup solvents. The file must be maintained on site and made available for inspection upon request. The permittee shall have until the last day of the following month to complete these records.

COGENERATION BOILER A

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [1]
Cogeneration Boiler A

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Cogeneration Boiler A

3. Emissions Unit Identification Number: **001**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: **Zurn** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Boiler A is a hybrid suspension grate unit fired by biomass (bagasse/wood) as the primary fuel. Distillate oil and/or natural gas is fired during startup and shutdown when necessary to ensure good combustion, to supplement biomass fuel, and during times when the biomass supply is interrupted.

EMISSIONS UNIT INFORMATION
Section [1]
Cogeneration Boiler A

Emissions Unit Control Equipment/Method: Control **1** of **3**

1. Control Equipment/Method Description: **Electrostatic Precipitator – High Efficiency**
2. Control Device or Method Code: **010**

Emissions Unit Control Equipment/Method: Control **2** of **3**

1. Control Equipment/Method Description: **Selective Noncatalytic Reduction for NOx**
2. Control Device or Method Code: **107**

Emissions Unit Control Equipment/Method: Control **3** of **3**

1. Control Equipment/Method Description: **Multiple Cyclone without Fly Ash Reinjection**
2. Control Device or Method Code: **076**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **506,100 lb/hr steam (average)**	
3. Maximum Heat Input Rate: **760** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum rates based on Permit No. 0990005-038-AV. Maximum heat input rate based on burning biomass. The maximum heat input rate from distillate oil is 490 MMBtu/hr. The maximum heat input rate from natural gas is 400 MMBtu/hr. Boiler operating pressure and temperature: 1,500 psig, 975°F. See Attachment OC-EU1-B6.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Boiler A**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **199** feet	7. Exit Diameter: **10** feet
8. Exit Temperature: **348**°F	9. Actual Volumetric Flow Rate: **320,433** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters based on 2014 compliance test data.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Bagasse**		
2. Source Classification Code (SCC): **1-01-011-01**	3. SCC Units: **Tons burned (all solid fuels)**	
4. Maximum Hourly Rate: **105.56**	5. Maximum Annual Rate: **924,667**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **1.0**	9. Million Btu per SCC Unit: **7.2**
10. Segment Comment: **Based on 760 MMBtu/hr and 8,760 hr/yr. See Attachment OC-EU1-B6.**		

Segment Description and Rate: Segment **2** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Wood-fired Boiler**		
2. Source Classification Code (SCC): **1-01-009-03**	3. SCC Units: **Tons burned (all solid fuels)**	
4. Maximum Hourly Rate: **89.41**	5. Maximum Annual Rate: **783,247**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.3**	8. Maximum % Ash: **9.0**	9. Million Btu per SCC Unit: **8.5**
10. Segment Comment: **Based on 760 MMBtu/hr and 8,760 hr/yr. See Attachment OC-EU1-B6.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment **3** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Distillate Oil – Grades 1 and 2 Oil**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **3.551**	5. Maximum Annual Rate: **11,309**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **138**
10. Segment Comment: **Based on 490 MMBtu/hr heat input and heating value of 138,000 Btu/gal for No. 2 fuel oil. Maximum annual rate based on permit condition (Permit No. 0990005-034-AV), which limits oil firing to less than 25% of total heat input. See Attachment OC-EU1-B6.**		

Segment Description and Rate: Segment **4** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Natural Gas**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million standard cubic feet burned**	
4. Maximum Hourly Rate: **0.3891**	5. Maximum Annual Rate: **1,518**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,028**
10. Segment Comment: **Maximum hourly rate based on 400 MMBtu/hr. Maximum annual rate based on gas firing to be less than 25% of total heat input. See Attachment OC-EU1-B6. Natural gas will be burned for flame and load stabilization, as well as during periods of startup, shutdown, and malfunction. Additionally, natural gas may be fired alone at certain times to the full natural gas firing capacity.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**076**	**010**	**EL**
PM10	**076**	**010**	**EL**
PM2.5	**076**	**010**	**NS**
SO2			**EL**
NOx	**107**		**EL**
CO			**EL**
VOC			**EL**
Mercury Compounds (H114)			**EL**
Hydrochloric Acid (H106)			**NS**
Total HAPs			**NS**
Lead (Pb)	**076**	**010**	**NS**
Fluoride (F)			**NS**
Sulfuric Acid Mist (SAM)			**NS**
GHGs			**NS**
CO2e			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **19.8** lb/hour **86.55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.026 lb/MMBtu x 760 MMBtu/hr = 19.8 lb/hr** **19.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 86.55 TPY** **See Attachment OC-EU1-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.026 lb/MMBtu**	4. Equivalent Allowable Emissions: **19.8** lb/hour **86.55** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Basis for allowable emissions code: BACT. Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **22.8** lb/hour **99.86** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(b), F.A.C., and 40 CFR 60.42a.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **19.8** lb/hour **86.55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.026 lb/MMBtu x 760 MMBtu/hr = 19.8 lb/hr** **19.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 86.55 TPY** **See Attachment OC-EU1-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.026 lb/MMBtu**	4. Equivalent Allowable Emissions: **19.8** lb/hour **86.55** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Basis for allowable emissions code: BACT. Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **228.0** lb/hour **199.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.06 lb/MMBtu (12-month rolling average)** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

3-hour maximum: 0.30 lb/MMBtu x 760 MMBtu/hr = 228 lb/hr

24-hr rolling CEMS average: 0.20 lb/MMBtu x 760 MMBtu/hr = 152 lb/hr

30-day rolling CEMS average: 0.10 lb/MMBtu x 760 MMBtu/hr = 76.0 lb/hr

12-month rolling CEMS average: 0.06 lb/MMBtu x 760 MMBtu/hr = 45.6 lb/hr

Annual: 0.06 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 199.7 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:
Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.20 lb/MMBtu (24-hour rolling average)**	4. Equivalent Allowable Emissions: **152.0** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.10 lb/MMBtu (30-day rolling average)**	4. Equivalent Allowable Emissions: **76.0** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions = 0.10 lb/MMBtu, 30-day average. Based on biomass firing.**	

Allowable Emissions Allowable Emissions **3** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.06 lb/MMBtu (12-month rolling average)**	4. Equivalent Allowable Emissions: lb/hour **199.7** tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **4** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.05 percent sulfur**	4. Equivalent Allowable Emissions: lb/hour **39.01** tons/year
5. Method of Compliance: **Fuel analysis and limiting fuel oil burning to 24.9 percent.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on No. 2 fuel oil firing and BACT.**	

Allowable Emissions Allowable Emissions **5** of **6**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **1.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **912** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(c), F.A.C., and 40 CFR 60.43a(d)(2). Limit is for solid fuels. Based on biomass firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions **6** of **6**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **98** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(c), F.A.C., and 40 CFR 60.43a(d)(2). Limit is for liquid or gaseous fuels. Based on No. 2 fuel oil firing at 490 MMBtu/hr.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **152.0** lb/hour **499.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.15 lb/MMBtu (30-day rolling average)** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

3-hour maximum: 0.20 lb/MMBtu x 760 MMBtu/hr = 152.0 lb/hr

30-day rolling average: 0.15 lb/MMBtu x 760 MMBtu/hr = 114.0 lb/hr

Annual: 0.15 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 499.3 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **4**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.15 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **114.0** lb/hour **499.3** tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing as 30-day rolling average.**	

Allowable Emissions Allowable Emissions **2** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.60 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **456** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on solid fuel firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions **3** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.3 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **147** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on liquid fuel firing at 490 MMBtu/hr.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **80** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on gas firing at 400 MMBtu/hr.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1,462.5** lb/hour **1,165.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **6.5 lb/MMBtu (1-hr max)** Reference: **CEM data and Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Cold start-up: 225 MMBtu/hr x 6.5 lb/MMBtu = 1,462.5 lb/hr

30-day rolling average: 0.50 lb/MMBtu x 760 MMBtu/hr = 380.0 lb/hr

12-month rolling average: 0.35 lb/MMBtu x 760 MMBtu/hr = 266.0 lb/hr

Annual: 0.35 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1,165.1 TPY

See Attachment OC-EU1-F1.10 for calculations.

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions occur under cold-start-up conditions. Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.50 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **380.0** lb/hour tons/year
5. Method of Compliance: **Continuous CO monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.35 lb/MMBtu, 12-month rolling average**	4. Equivalent Allowable Emissions: lb/hour **1,165.1**tons/year
5. Method of Compliance: **Continuous CO monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **38.0** lb/hour **166.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.05 lb/MMBtu x 760 MMBtu/hr = 38.0 lb/hr** **38.0 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 166.4 TPY** **See Attachment OC-EU1-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.05 lb/MMBtu**	4. Equivalent Allowable Emissions: **38.0** lb/hour **166.4** tons/year
5. Method of Compliance: **Annual stack test using EPA Method 25A/18.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Mercury – H114**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.0041** lb/hour **0.018** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **5.4×10^{-6} lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Hourly: 5.4×10^{-6} lb/MMBtu x 760 MMBtu/hr = 0.0041 lb/hr

Annual: 0.0041 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.018 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **5.4×10^{-6} lb/MMBtu**	4. Equivalent Allowable Emissions: **0.0041** lb/hour **0.018** tons/year
5. Method of Compliance: **Stack test using EPA Method 101A or 29, conducted annually.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **Continuous opacity monitor, or EPA Method 9.**	
5. Visible Emissions Comment: **40 CFR 60, Subpart Da, and Permit No. 0990332-020-AC/PSD-FL-196Q.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **5**

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Durag** Model Number: **D-R290**	Serial Number: **31019**
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

Continuous Monitoring System: Continuous Monitor **2** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **42I**	Serial Number: **42D-52618-292**
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov. 17-21, 2014**
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor **3** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **43I** Serial Number: **43B-51400-292**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov. 17-21, 2014**
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor **4** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **48I** Serial Number: **48-45334-273**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov. 17-21, 2014**
7. Continuous Monitor Comment:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor **5** of **5**

1. Parameter Code: **CO2**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Yokogawa** Model Number: **ZA8C**	Serial Number: **JJ113MA345**
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I3** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I4** ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I5** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **April 2014**
   Test Date(s)/Pollutant(s) Tested: **03/28/2014 – PM, VOC, Hg**
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU1-IV1**
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: **CAM PLAN** ☐ Not Applicable
3. Alternative Methods of Operation: ☒ Attached, Document ID: **OC-EU1-IV3** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

See Attachment OC-EU1-AR for Ash Management Plan, Fuel Management Plan, and Good Combustion Plan.

ATTACHMENT OC-EU1-B6

MAXIMUM HEAT INPUT AND FUEL USAGE RATES

Attachment OC-EU1-B6a. Maximum Hourly Heat Input and Fuel Usage Rates, Boilers A, B, and C
New Hope Power Company Cogeneration Facility

Fuel	Heat Input to Boiler	Heat Transfer Efficiency %	Heat Output to Steam	Fuel Firing Rate	
	Maximum Short-Term				
	(MMBtu/hr)		(MMBtu/hr)		
Biomass					
- Bagasse	760	68	516.8	105.56	tons/hr, dry [a]
- Wood	760	68	516.8	89.41	tons/hr, dry [b]
No. 2 Fuel Oil	490	85	416.5	3,551	gal/hr
Natural Gas	400	85	340.0	389,105	scf/hr
Max Fuel Oil + Bagasse					
Bagasse	147.5	68	100.3	20.49	tons/hr, dry [a]
No. 2 Fuel Oil	490.0	85	416.5	3,551	gal/hr
Natural Gas	0.0	85	0.0	0	scf/hr
Total	**637.5**		**516.8**		
Max Fuel Oil + Wood					
Wood	147.5	68	100.3	17.35	tons/hr, dry [b]
No. 2 Fuel Oil	490.0	85	416.5	3,551	gal/hr
Natural Gas	0.0	85	0.0	0	scf/hr
Total	**637.5**		**516.8**		
Max Natural Gas + Bagasse					
Bagasse	260	68	176.8	36.11	tons/hr, dry [a]
No. 2 Fuel Oil	0	85	0.0	0	gal/hr
Natural Gas	400	85	340.0	389,105	scf/hr
Total	**660**		**516.8**		
Max Natural Gas + Wood					
Wood	260	68	176.8	30.59	tons/hr, dry [a]
No. 2 Fuel Oil	0	85	0.0	0	gal/hr
Natural Gas	400	85	340.0	389,105	scf/hr
Total	**660**		**516.8**		

[a] Based on bagasse firing.

[b] Based on wood firing.

Notes:

Total steam production required = 506,100 lb/hr @ 1500 psig, 975°F.

Fuels may be burned in combination, not to exceed total heat outputs.

Based on fuel heating values as follows:

Bagasse, dry - 3,600 Btu/lb
Wood, dry - 4,250 Btu/lb
No. 2 Fuel Oil - 138,000 Btu/gal
Natural gas - 1,028 Btu/scf

All values are based on a single boiler.

Attachment OC-EU1-B6b. Maximum Annual Heat Input and Fuel Usage Rates, Boilers A, B, and C
New Hope Power Company Cogeneration Facility

Fuel	Heat Input to Boiler (MMBtu/yr)	Heat Transfer Efficiency %	Heat Output to Steam (MMBtu/yr)	Annual Fuel Firing Rate [a]	
Normal Operations (100% Bagasse)					
Bagasse	6,657,600	68	4,527,168	924,667	tons/yr, dry
No. 2 Fuel Oil	0	85	0	0	gal/yr
Natural gas	0	85	0	0	MMscf/yr
Total	6,657,600		4,527,168		
Normal Operations (100% Wood)					
Wood	6,657,600	68	4,527,168	783,247	tons/yr, dry
No. 2 Fuel Oil	0	85	0	0	gal/yr
Natural gas	0	85	0	0	MMscf/yr
Total	6,657,600		4,527,168		
24.9% Oil Firing					
Biomass	4,706,856	68	3,200,662	653,730	tons/yr, dry [b]
No. 2 Fuel Oil	1,560,595	85	1,326,506	11,308,662	gal/yr
Natural gas	0	85	0	0	MMscf/yr
Total	6,267,451		4,527,168		
24.9% Natural Gas Firing					
Biomass	4,706,856	68	3,200,662	653,730	tons/yr, dry [b]
No. 2 Fuel Oil	0	85	0	0	gal/yr
Natural gas	1,560,595	85	1,326,506	1,518	MMscf/yr
Total	6,267,451		4,527,168		

[a] Based on 8,760 hr/yr operation.

[b] Based on heat content for bagasse.

Notes:

Total steam production required = 506,100 lb/hr @ 1500 psig, 975°F.

Fuels may be burned in combination, not to exceed total heat outputs.

Based on fuel heating values as follows:

Bagasse, dry - 3,600 Btu/lb
Wood, dry - 4,250 Btu/lb
No. 2 Fuel Oil - 138,000 Btu/gal
Natural gas- 1,028 Btu/scf

All values are based on a single boiler.

ATTACHMENT OC-EU1-F1.10

EMISSIONS CALCULATIONS

Attachment OC-EU1-F1.10a. Maximum Short-Term Emissions for Boilers A, B and C
New Hope Power Company Cogeneration Facility

Regulated Pollutant	Biomass				No. 2 Fuel Oil				Natural Gas				Max Fuel Oil, [b] Remainder Biomass Hourly Emissions (lb/hr)	Max Natural Gas, [c] Remainder Biomass Hourly Emissions (lb/hr)	Highest Hourly Emissions (lb/hr)
	Emission Factor (lb/MMBtu)	Ref	Activity Factor (MMBtu/hr)	Hourly Emissions (lb/hr)	Emission Factor (lb/MMBtu)	Ref	Activity Factor (MMBtu/hr)	Hourly Emissions (lb/hr)	Emission Factor (lb/MMBtu)	Ref	Activity Factor (MMBtu/hr)	Hourly Emissions (lb/hr)			
Particulate (PM)	0.026	1	760	19.8	0.026	1	490	12.7	0.0074	2	400	2.96	16.58	9.72	19.8
Particulate (PM_{10})	0.026	3	760	19.8	0.026	3	490	12.7	0.0074	2	400	2.96	16.58	9.72	19.8
Sulfur Dioxide (SO_2)															
- 3-hr Average	0.30	4	760	228	0.052	8	490	25.5	0.0006	2	400	0.23	44.3	78.0	228.0
- 24-hr Rolling	0.20	1	--	152.0	0.052	8	490	25.5	0.0006	2	400	0.23	55.0	52.2	152.0
- 30 day rolling average	0.10	1	760	76.0	0.052	8	490	25.5	--		--	--			
Carbon Monoxide															
- 1-hr Average (cold-startup) [a]	6.5	4	225	1,462.5	1.0	4	490	490	--		--	--	958.7	--	1,462.5
- 30 day rolling average	0.50	1	760	380.0	0.5	1	490	245	0.082	5	400	32.68	318.8	162.7	380.0
Nitrogen Oxides (NO_x)															
- 3 hr Average	0.20	4	760	152.0	0.2	1	490	98.0	0.2	1	400	80.0	29.5	29.5	152.0
- 30 day Rolling Average	0.15	1	760	114.0	0.15	1	490	73.5	0.15	1	400	60.0	95.6	99.0	114.0
Volatile Organic Compounds (VOC)	0.05	1	760	38.0	0.05	1	490	24.50	0.0054	2	400	2.16	31.9	15.2	38.0
Mercury (Hg)	5.40E-06	1	760	0.0041	3.00E-06	6	490	1.47E-03	2.55E-07	7	400	1.02E-04	0.0023	0.0015	0.0041

All values are based on a single boiler.

Notes:

[a] Under cold startup conditions, each boiler is limited to 150,000 lb/hr of steam. Heat input rate is based on this limited steam rate.

[b] Based on 490 MMBu/hr of fuel oil and 147.5 MMBtu/hr of biomass.

[c] Based on 400 MMBtu/hr of Natural gas and 260 MMBtu/hr of biomass

[d] Based on emission factor for bagasse which results in worst case emissions.

References:

1 Based on Permit No. 0990332-020-AC/PSD-FL-196(Q).

2 AP-42, Table 1.4-2 for natural gas firing.

3 Based on Permit No. 0990332-020-AC/PSD-FL-196(Q), Specific Condition No. 16(e). PM_{10} emissions assumed to be 100 percent of PM.

4 Based on CEMS data.

5 AP-42, Table 1.4-1, controlled gas combustion in low-NO_x burners.

6 AP-42, Table 1.3-10 for distillate oil firing.

7 AP-42, Table 1.4-4 for natural gas firing: 2.6E -04 lb/10^6 scf. Heating value: 1,020 Btu/scf.

8 Based on 0.05% S, 7.2 lb/gal and 138,000 Btu/gal.

Attachment OC-EU1-F1.10b. Maximum Annual Emissions for Boilers A, B and C
New Hope Power Company Cogeneration Facility

Regulated Pollutant	Biomass Emission Factor (lb/MMBtu)	Ref	Biomass Activity Factor (MMBtu/yr)	Biomass Annual Emissions (TPY)	Alternate Fuel Emission Factor (lb/MMBtu)	Ref	Alternate Fuel Activity Factor (MMBtu/yr)	Alternate Fuel Annual Emissions (TPY)	Total Annual Emissions (TPY)
100% Biomass									
Particulate Matter (PM)	0.026	1	6,657,600	86.55	--	--	--	--	86.55
Particulate Matter (PM_{10})	0.026	1	6,657,600	86.55	--	--	--	--	86.55
Sulfur dioxide [a] (SO_2)	0.06	2	6,657,600	199.73	--	--	--	--	199.7
Nitrogen oxides [b] (NOx)	0.15	1	6,657,600	499.32	--	--	--	--	499.3
Carbon monoxide [a] (CO)	0.35	2	6,657,600	1165.08	--	--	--	--	1,165.1
Volatile Organic Compounds (VOC)	0.05	1	6,657,600	166.44	--	--	--	--	166.4
Mercury (Hg)	5.40E-06	1	6,657,600	0.018	--	--	--	--	0.018
75.1% Biomass / 24.9% Fuel Oil									
Particulate Matter (PM)	0.026	1	4,706,856	61.19	0.026	1	1,560,595	20.29	81.48
Particulate Matter (PM_{10})	0.026	1	4,706,856	61.19	0.026	1	1,560,595	20.29	81.48
Sulfur dioxide [a] (SO_2)	0.06	2	4,706,856	141.21	0.05	2	1,560,595	39.01	180.22
Nitrogen oxides [b] (NOx)	0.15	1	4,706,856	353.01	0.15	1	1,560,595	117.04	470.06
Carbon monoxide [a] (CO)	0.35	2	4,706,856	823.70	0.35	2	1,560,595	273.10	1,097
Volatile Organic Compounds (VOC)	0.05	1	4,706,856	117.67	0.050	1	1,560,595	39.01	156.69
Mercury (Hg)	5.40E-06	1	4,706,856	0.013	3.00E-06	1	1,560,595	2.34E-03	0.015
75.1% Biomass / 24.9% Natural Gas									
Particulate Matter (PM)	0.026	1	4,706,856	61.19	0.0074	1	1,560,595	5.77	66.96
Particulate Matter (PM_{10})	0.026	1	4,706,856	61.19	0.0074	1	1,560,595	5.77	66.96
Sulfur dioxide [a] (SO_2)	0.06	2	4,706,856	141.21	0.00058	1	1,560,595	0.46	141.66
Nitrogen oxides [b] (NOx)	0.15	2	4,706,856	353.01	0.15	2	1,560,595	117.04	470.06
Carbon monoxide [a] (CO)	0.35	1	4,706,856	823.70	0.082	1	1,560,595	63.75	887
Volatile Organic Compounds (VOC)	0.05	1	4,706,856	117.67	0.0054	1	1,560,595	4.21	121.88
Mercury (Hg)	5.40E-06	1	4,706,856	0.013	2.55E-07	1	1,560,595	1.99E-04	0.013

Maximum Annual Emissions	
Particulate Matter (PM)	86.55
Particulate Matter (PM_{10})	86.55
Sulfur dioxide [a] (SO_2)	199.73
Nitrogen oxides [b] (NOx)	499.32
Carbon monoxide [a] (CO)	1,165.1
Volatile Organic Compounds (VOC)	166.44
Mercury (Hg)	0.018

All values are based on a single boiler.

Notes:

[a] Based on 12-month rolling average.

[b] Based on 30-day rolling average.

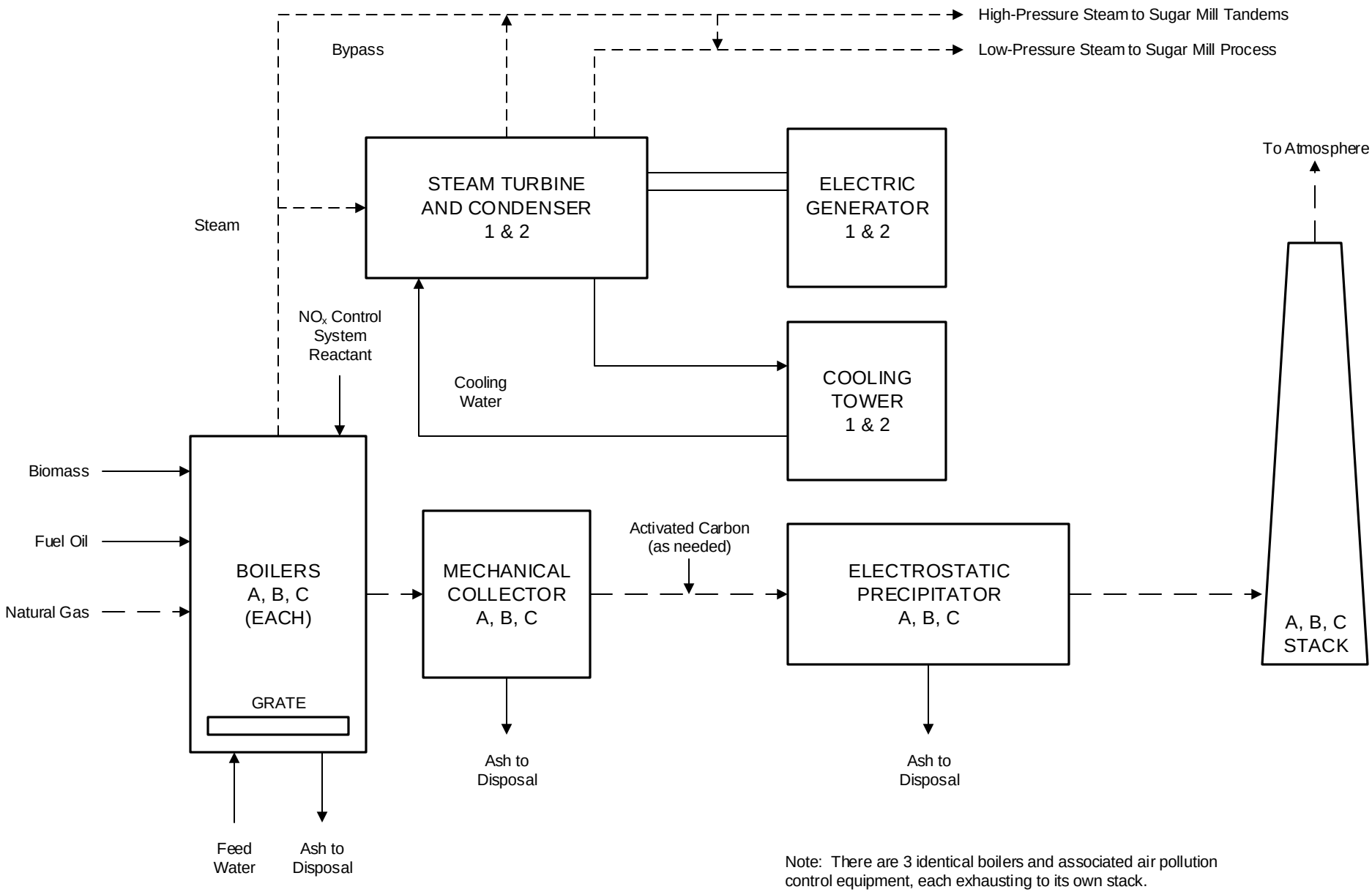
References:

1 Refer to Attachment OC-EU1-F1.10a.

2 Based on Permit No. 0990332-020-AC/PSD-FL-196(Q).

ATTACHMENT OC-EU1-I1

PROCESS FLOW DIAGRAM



OC-EU1-I1
Simplified Flow Diagram
New Hope Power Company, Okeelanta Cogeneration Facility
South Bay, FL

Process Flow Legend
Solid/Liquid
Steam
Gas

Golder Associates

ATTACHMENT OC-EU1-I2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT OC-EU1-I2

DESIGN FUEL SPECIFICATIONS[a] FOR THE NEW HOPE POWER COMPANY COGENERATION FACILITY

Parameter	Bagasse	Wood Waste	No. 2 Fuel Oil	Natural Gas
Specific Gravity			0.865	
Heating Value (Btu/lb)	3,600	4,250	19,175	
Heating Value (Btu/gal)			138,000	
Heating Value (Btu/scf)				1,028
Ultimate Analysis (dry basis percentage):				
Carbon	48.93	49.58	87.01	68.37
Hydrogen	6.14	5.87	12.47	21.82
Nitrogen	0.25	0.40	0.02	9.80
Oxygen	43.84	40.90	0.00	
Sulfur	0.03	0.07	0.05	
Ash/Inorganic	1.0	9.0	0.00	
Moisture	52	37	–	

[a] Represents average fuel characteristics.

Sources: New Hope Power Partnership, 2002; Combustion Engineering, 1981.

ATTACHMENT OC-EU1-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT OC-EU1-I3
DETAILED DESCRIPTION OF CONTROL EQUIPMENT

The cogeneration facility utilizes several emission control techniques to reduce emissions. A selective non-catalytic reduction (SNCR) system is used to reduce NO_x emissions. Further, the cogeneration boilers minimize CO and VOC through proper furnace design and good combustion practices, including: control of combustion air and combustion temperature; distribution of fuel on the combustion grate; and controls over the furnace loads and transient conditions. Particulate emissions are controlled by an ESP. Multiple cyclones were installed during the 2000 calendar year to improve control of particulate emissions. Mercury emissions are controlled through the ESP system. In the event that two boilers fail the required annual mercury compliance test, an activated carbon injection system (or equivalent) will be brought on-site for additional mercury control. The system may be a rental unit. The activated carbon injection system is addressed below.

Mercury Control System

In the event that an activated carbon injection system (or equivalent) must be used to control mercury emissions from the boilers, an activated carbon injection system will be brought on-site. A volumetric feeder with an integral supply hopper will be used to meter activated carbon for injection at a point in the ductwork between the ESP and the ID fan. This will promote turbulent mixing and provide adequate residence time. A blower system will then transport the carbon to the injection point. The ESP will effectively capture the activated carbon particles along with the boiler fly ash (which also contains some carbon). The system will be designed to inject activated carbon into the flue gases of each boiler, consistent with the engineering report resulting from mercury emissions testing.

See Attachment OC-EU1-I5 for detailed data.

ATTACHMENT OC-EU1-I4

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT NHPC-EU1-I4

PROCEDURES FOR STARTUP AND SHUTDOWN NHPC COGENERATION BOILERS

During startup and shutdown of the boiler, excess emissions for more than 2 hours in a 24-hour period are possible. Pursuant to Rule 62-210.700(1), F.A.C., the following procedures and precautions are taken to minimize the magnitude and duration of excess emissions during startup and shutdown.

Startup Procedures

1. Check to ensure all the boiler doors/registers are closed.
2. The CEM system is started, propane supply to the gun is opened and compressed air is admitted to atomizing system.
3. The start switch is turned on to activate the startup sequence. Once oil firing is established, minimum fire (10%) is maintained for 30 minutes on and 30 minutes off for approximately 2 hours.
4. Continuous firing is established and steam pressure increased to about 150 psig. Firing continues on low fire until operating pressure (350 psig) is available on the line (about 5 hours after initial firing). Atomization is changed to steam.
5. Once consistent steam flow to user(s), e.g., turboalternator, is established, boiler controls are placed in automatic.

Shutdown Procedures

1. Control is turned off and the fuel pump is shut off.
2. The atomizing steam valve is closed. The FD fan is shut off.
3. After about 3 hours, the drum level is set at maximum level.

ATTACHMENT OC-EU1-I5

OPERATION AND MAINTENANCE PLAN

NEW HOPE POWER COMPANY (Facility ID No. 0990332)

Permit No. PSD-FL-196 (as modified) requires the permittee to develop and maintain operation and maintenance plans (O&M) for the cogeneration boilers and pollution control equipment. To the extent practicable, plant personnel will follow the procedures identified in this O&M plan to ensure good operation and control of emissions. Operation outside of the specified range for any monitored parameter would not be a violation by itself. However, continued operation outside of a specified operating range without corrective action may be considered circumvention of the air pollution control equipment or methods.

Cogeneration Boilers A, B and C (EUs 001, 002 and 003)

General Description: The cogeneration boilers combust biomass (bagasse and wood) to generate steam and electricity. Distillate oil and natural gas are fired as startup and supplemental fuels. The cogeneration facility supplies the adjacent Okeelanta sugar mill with process steam during the sugarcane grinding season (approximately October through March) and also supplies the associated Okeelanta sugar refinery with process steam year around.

Key Design and Operating Parameters: The key design and operating parameters for the cogeneration boilers are the power generation rate, steam rate, heat input rate, and combustion efficiency. The design rates for these are provided below. The DCS (Distributed Control System) is a computer operated system that continuously monitors the operation of key parameters for the boilers, mechanical collectors, ESPs and SNCR system on each boiler. In addition, this system monitors the CEMs, which measure the boiler flue gas for oxygen and the stack flue gas for SO_2, NO_X and CO. The system will trigger an alarm if any operating conditions are outside of recommended or regulatory ranges.

Capacity: Each cogeneration boiler has a maximum heat input rate of 760 MMBtu/hr when combusting biomass, 400 MMBtu/hr when combusting natural gas, and 490 MMBtu/hr when combusting distillate oil. Each cogeneration boiler has a maximum steam production rate of 506,100 lb/hr at 1500 psig and 975°F. The thermal combustion efficiencies are 68% for biomass and 85% for natural gas and distillate oil. The three cogeneration boilers supply steam to one nominal 75 MW (net) steam-electrical generator and one nominal 65 MW (net) steam-electrical generator.

Good Operating Practices: See Appendix GC of this permit for good combustion practices.

Startup and Shutdown: See Section 3A of this permit for the startup and shutdown plan.

Air Pollution Controls: Particulate emissions are controlled from each boiler by mechanical collectors followed by an electrostatic precipitator. Nitrogen oxide emissions are controlled by the injection of urea in a selective non-catalytic reduction system. Mercury emissions are controlled, as needed, through a carbon injection system and the ESP. These controls are described below in more detail.

Pollutant Emission Rates: The potential annual controlled annual emission rates in tons per year (TPY) for all three cogeneration boilers combined are as follows: 3495 tons/year of CO; 108 pounds per year of Hg; 1498 tons/year of NO_X; 260 tons/year of PM; 260 tons/year of PM_{10}; 37 tons/year of SAM; 599 tons/year of SO_2; and 499 tons/year of vOC.

Mechanical Dust Collectors

General Description: The cyclone dust collectors were supplied by Barron Industries, Model 460 Tube Base III 9K15-2023AU. These are mechanical dust collectors which remove larger PM prior to the ESP. There are 460 cyclone tubes in all.

Capacity: The mechanical dust collectors are designed for a flow rate of 359,506 acfm and an exhaust temperature of 450° F.

Design Efficiency: The mechanical dust collectors are designed for a control efficiency of 85% of the particulate matter greater than 10 microns in size (assuming a specific gravity of 2.00).

Key Design and Operating Parameters and Good Operating Practices: The following parameters are monitored by the DCS for the mechanical dust collectors:

Operation of ash hopper screw conveyors to monitor if any plugging has occurred.

Amperage on elevating screw conveyor: if amperage is high, plugging may have occurred and is therefore checked.

In addition, during each outage of the boilers, the dust collector tubes are inspected for damage and wear. Tubes are replaced as necessary.

Electrostatic Precipitators (ESPs)

General Description: Each boiler is equipped with a single ESP for particulate control. Each ESP consists of one chamber with three fields in the direction of flow. Each field has one bus section for a total of three bus sections per chamber. Each bus section is electrically energized by one transformer/rectifier set mounted at the roof level.

Key Design and Operating Parameters: Each ESP is manufactured by Flakt, Inc. with the following design specifications:

Chambers = 1

Collecting Plate = 12.30 ft L x 39.37 ft H

Fields/Chamber = 3

Specific Collection Area = 200 ft2/1,000 acfm (minimum)

Gas Velocity = < 4 ft/s

Pressure Drop = less than 2.8 inches H_2O

Operating Temperature = 350° F

Ash Handling = Trough hopper with screw conveyor

Design Control Efficiency: 98% or greater for particulate matter.

O&M Practices: The ESP is designed as a static piece of equipment employing a minimum of moving parts. The preventative maintenance plan for the ESP includes the following:

Daily

- Each shift, an inspection of the ESP is conducted to check for any unusual conditions that may exist. An operations log sheet is used by plant personnel to record shift operational activities. The log sheet is reviewed daily by the plant operations manager. The following operational parameters are inspected each shift and any unusual conditions are logged:
- All electrical readings of the ESP and related equipment. In addition, any unusual conditions such as circuit breaker trip are recorded and investigated immediately.
- Process operating conditions, including firing rates, steam production (lb/hr), flue gas temperature, and flue gas composition. Any unusual operating conditions are investigated and corrected immediately.
- Gear motors and transformer/rectifiers are checked for oil leaks. Oil leaks are repaired immediately and oil levels are adjusted as necessary.
- Any unusual or excessive noises coming from motors, or control equipment. Any unusual conditions are corrected immediately.
- Inspection of doors / stuffing boxes to detect gas and air leaks.

In addition, as described above, continuous emission monitor (CEM) data is recorded continuously and is monitored by plant operators. All CEM data for all pollutants (NOx, SO2, CO, and opacity) are stored via electronic files. The ESP operating temperature and transformer/rectifier primary current and voltages are also monitored and recorded continuously. If unusual data is recorded, the source of the problem is investigated and corrected immediately.

In addition to the daily shift log completed above, the following additional inspections are made, and repairs performed as necessary, on a monthly, quarterly, semi-annual and annual schedule:

Monthly: Clean and inspect the ESP cold roof.

Quarterly

Stuffing boxes for rapper drives and dampers are adjusted for leaks and replaced if necessary.

Rapping drive mechanisms are inspected for excessive noise and wear. If out-of-spec operating conditions exist the mechanisms are repaired or replaced.

Visually check transformer/rectifier for oil level in tank. Oil is added if necessary.

Semiannually: Rapping drive gearmotor oil is sampled and changed, if contaminated.

Annually/During Shut Down

All ESP internals are inspected.

Insulators are cleaned and checked for dust, cracks, or evidence of current leakage.

Transformers/Rectifiers are checked for proper liquid level, dielectric strengths and for formation of deposits.

If any equipment is not operating within specifications the component will be replaced or repaired.

During annual ESP shutdown, a thorough inspection of all ESP components is performed. The checklist includes the following ESP equipment:

1. Transformer/Rectifier (T/R) Set
   a. Transformer Liquid
   b. Ground Connections
   c. High Tension Bus Duct
   d. Conduits
   e. Alarm Connections
   f. Ground Switch Operation
   g. High Voltage Connections
   h. Surge Arrestors

2. T/R Control Panel
   a. Wire Terminations
   b. Ground Connections
   c. Circuit Breakers Trip
   d. Mechanism
   e. Meter Terminations
   f. Air Filters, For Cleanliness

7. Gas Distribution Plates
   a. Buildup
   b. Corrosion

8. Inspection Doors
   a. Gasket
   b. Locking Arrangement
   c. Corrosion

9. Through Hopper
   a. Build-up
   b. Corrosion
   c. Leaks
   d. Access Doors

10. Rappers
    a. Seals
    b. Bearings
    c. Clearance to Supports
    d. Shaft Alignment
    e. Free Rotation of

12. Discharge Electrodes
    b. Support Tubes and Insulators
    c. Electrodes
    d. Alignment
    e. Corrosion
    f. Build-up

13. Collecting Electrodes
    a. Supports
    b. Alignment
    c. Corrosion
    d. Buildup

14. Gas Sneakage Baffles
    a. Buildup
    b. Properly Located

15. Screw Conveyors
    a. Lubrication
    b. Gear Box Lubrication

g. Fans

3. Control Panels
   a. Indicator Lights
   b. Locked Cabinets
   c. Meters Recorded

4. Insulator Compartment System
   a. Bushing
   b. Sealings

5. Casing, Nozzles, & Inlet Duct
   a. Buildup
   b. Corrosion

6. Stacks
   a. Buildup
   b. Corrosion

Hammers
f. Shaft Insulators
g. Hammer/Anvil Alignment
h. Inner Arm Wear
i. Hammer Attached

11. Rapper Motors
   a. Motor/Lubrication
   b. Sequencing
   c. Noise
   a.

c. Condition of Screw
d. Pluggage (Inlet & Outlet)
e. Belt Tension

16. Rotary Air Locks
   a. Lubrication
   b. Gear Box Lubrication
   c. Condition of Rotor
   d. Pluggage (Inlet and Outlet)
   e. Belt Tension

Any equipment or component that is not operating properly or is excessively worn is replaced or repaired prior to ESP operation.

Selective Non-Catalytic Reductions (SNCR) System

General Description: A urea injection system manufactured by Nalco-FuelTech is installed for NO_X control. The technology is a selective non-catalytic reduction (SNCR) process, which reduces NO_X emissions through chemical reactions with urea. In this process, urea is injected into the flue gas stream and reacts with NO_X to form nitrogen and water vapor. The NOx control system includes the following major components: carrier air compressors, urea tank, urea/air flow controls, control panel, injection manifolds, injectors, valves and instrumentation. A single urea storage tank system supplies urea to the boilers. Two injection zones are used to provide injection at full and part load conditions. The first zone has six injectors and the second zone has six injectors, for a total of twelve injectors per boiler. Zone switching valves direct the urea/carrier mixture to the appropriate injection zone.

Key Design and Operating Parameters: The urea injection system is designed to meet a maximum NO_X emission rate of 0.15 lb/MMBtu when firing biomass or No. 2 fuel oil. At maximum capacity, the Urea injection rate is approximately 65 GPH and the ammonia slip may be as high as 25 ppmvd. The NOx design removal efficiency is 40%.

O&M Practices:

Each shift, the plant operator completes an inspection of the urea injection system. The inspection includes the urea pressure, urea flow and air pressure for each injector. Once per shift, the air and chemical valves are closed simultaneously to check each injector for fouling. Pressures and flows are adjusted as necessary. At a minimum of once per week the injector nozzles are inspected and cleaned. Any unusual conditions are repaired and noted.

The urea metering module and urea circulation modules are also inspected once per shift. The operating conditions recorded on the metering module for each boiler include dilution water pressure, NO_X pump in service, NO_X gallons per minute, water pump flow, and water pump discharge pressure. The urea circulation

module parameters recorded on a shift basis include the urea tank level, circulation pump condition, and the strainer differential pressure. If any of the parameters listed above are not operating within the normal range, repairs are initiated and recorded in the logbook. The logbook is reviewed daily by the plant operations and maintenance manager.

Injectors

The distribution module flows and pressures are inspected at least once per shift.

The injectors are pulled from the boiler and cleaned of built up scale on a weekly schedule.

During injector cleaning the chamber cap and atomization chamber are removed and the orifices inspected and cleaned to assure that partial plugging has not occurred.

Mechanical Components: Bi-annually a general inspection of mechanical components is performed to check for evidence of corrosion, loosening or shifting parts due to vibration or wear, or any evidence of overheating. Any component showing evidence of damage, breakage, or wear is replaced.

Circulation and Water Boost Pumps: Visual inspections are performed on a daily basis looking for early signs of wear and/or failure of pump and seal components. If a defective part is discovered, the mechanical component is replaced.

Metering Pumps:

Visual inspections are performed on a daily basis looking for early signs of wear and/or failure of the metering pump and seal components. If a defective part is discovered, the mechanical component is replaced.

The drive housing oil is changed when contaminated.

The metering pump DC motor and DC drive are checked monthly.

Valves: On at least a weekly basis each valve is exercised fully open and closed and checked for proper operability and leak tightness. Packing, seals, ball valves and other valve components are replaced if signs of wear are found.

Regulators: Upon discovery of erratic regulator operations the regulators are cleaned. Erratic regulator operations are usually caused by dirt accumulation in the disk area.

Strainers: Strainer baskets on the circulation module and metering module are replaced when wear becomes evident. The baskets are cleaned when the pressure differential across the strainer is greater than five (5) psig.

Pressure and Temperature Indicators: On each shift, the pressure indicator is inspected for soundness and validity. If the instrument is suspect, the equipment is either recalibrated or replaced as necessary. Each instrument is calibrated a regular basis. The pressure indicators have a root valve that can be closed to isolate the pressure indicator from the system. The indicator can then be removed for calibration without shutting the system down.

Flow Meters: On each shift, the flow meter is checked for soundness and validity. If the instrument calibration is suspect, the flow indicators are re-calibrated or replaced. Periodically, the electrical and mechanical fitting are inspected for looseness or separation. If an out-of-spec condition exists the problem is corrected or the component is replaced.

Metering Module Control Panels: The panel is maintained free of dirt and cleaned periodically. Occasional blowing out with dry air is performed on the panels. All control panel devices (i.e., timer, relay, contactor, lamp or other device) are inspected and if found to be defective are replaced.

Alternate NOx Emissions Control Plan

This alternate NO_X control plan identifies the minimum urea injection rate that has demonstrated continuous

compliance with the NO_X emissions limit at various load conditions. The purpose of this plan is to monitor compliance with the NO_X standards when the CEM for NO_X is not operating. If a CEM for NO_X is out of service, New Hope Power Company will continue to inject urea at a rate consistent with the other operating boilers. This rate is generally in the range of 50 to 75 gal/hr of urea per boiler. If a monitor goes out of service, and no other boiler is operating, New Hope Power Company will continue to inject urea into the boiler at the injection rate that existed just prior to the monitor outage. It is noted that historically, the NO_X monitors at New Hope Power Company have had downtimes of less than 1 percent. As a result, the alternative NO_X monitoring plan will likely be utilized very infrequently in the future.

Activated Carbon Injection – Mercury Control System

General Description: The mercury control system consists of a volumetric feeder with an integral supply hopper that meters activated carbon for flue gas injection. The injection point is located between the boiler and the ESP. A blower system transports the carbon to the injection point. The ESP effectively captures the activated carbon particles along with boiler flyash (which contains some carbon). The system is designed to inject up to 13 lb/hr of activated carbon into the flue gases of each boiler. The activated carbon is manufactured specifically for removal of heavy metals and mercury contaminants found in exhaust gases. It is also effective for adsorption of dioxins and other incomplete combustion byproducts. The activated carbon is a free flowing powdered carbon with minimal caking tendencies, which makes it ideal for automatic carbon injection systems. It is manufactured with a high ignition temperature to permit safe operations at elevated temperatures. The unique convoluted particle surface provides the maximum reaction surface for rapid removal of gaseous mercury vapors. *{Permitting Note: At the issuance of this permit, the activated carbon system was inactive and removed from site. ~~t~~The cogeneration units demonstrated compliance with the mercury standard without injecting activated carbon and will rent or permanently install a unit if reactivation becomes necessary in the future.~~.~~}*

Key Design and Operating Parameters: The system is designed to inject up to 13 lb per hour of activated carbon into the flue gases of each boiler. Due to the very low mercury emissions from the New Hope Power Company boilers, and the presence of unburned carbon in the flue gas of the boilers, it is not possible to establish a design removal efficiency for the mercury injection system. The carbon feed system consists of the following equipment: storage silo/hopper, feeder motor, feeder gear reducers, feeder vibrator, knifegate valves, educators, solenoid valves, pressure gages, an air line regulator and a strainer/filer. Listed below are operation and maintenance procedures for safe and effective operation of the mercury control system.

O&M Procedures

Normal Activated Carbon Filling Operations

- The hopper is visually inspected for leaks of activated carbon. If leakage occurs, a silicone sealant or stiff epoxy is applied to the area.
- The inside of the hoppers are inspected and any foreign matter present is removed.
- The flexible connector is replaced and the bands are inspected. The knifegate valves above the screw feeders are closed.
- The pressure-vacuum relief valve is closed, and all coupling bolts on the pneumatic valves are inspected for tightness.
- The main panel disconnect is placed in the on position.
- The main control panel hopper low, intermediate, and high level light illumination is inspected.
- The fill line cap from any of the fill lines is removed to energize the dust collector blower. The blower should be running when loading carbon.
- The transfer pressure from truck loading is monitored and should not exceed 10 psig. If excessive pressure

is required to load the hoppers the target boxes and fill lines are checked for an unacceptable accumulation of carbon and cleaned as required.

Blower Checks, Line Pressure, and Flow

During each shift, the operator checks that the feeder/blower is in service and checks the % feed rate of activated carbon. If the equipment or % feed rate is out of specification, repairs and adjustments are made immediately. In addition, all blower discharge pressure gauges should read approximately 14 psig. If the pressure is less than 14 psig the blower shaft is adjusted and checked against the nameplate speed. More pressure is acceptable; the blower is protected by an inline relief valve. The relief valve is set to 15 psig.

The flow of air at each line's termination point is checked. Velocities should be approximately 3000 feet per minute and pressures close to atmospheric. If a low velocity is detected, all elements of the line are checked for debris and water.

Feeder Calibration: The CHEMCO screw driver is designed to deliver a minimum of 1.5 pounds of carbon per hour and a maximum of 13 pounds. Periodically, samples of carbon from the feeder discharge spout are collected in order to calibrate the feeder. If necessary, the feeder is recalibrated and/or the malfunctioning equipment is replaced.

Hopper Fluidizing System Checks

The fluidizing timers within the main control panel are set to a frequency range of 5 to 15 minutes depending on the rate of carbon fed. The higher the feed rate the more frequent the solenoids must be energized to pulse the hopper cones with air.

The bypass valve must be cracked open and pressurized anytime carbon is in the hoppers.

Carbon Educators.

The capability of the educator to ingest solids is dependent upon the position of the nozzle relative to the throat of the educator. The nozzle tip should be pushed in so that it is near the center of the educator suction opening.

Air admitted to the educator on the screw feed end (suction air) can be controlled using the valves located on the mixing funnel. There are no means provided for measuring the amount of air required for a given feed rate; however, there are two valves provided on the top of each funnel for the purposes of adjusting the suction air flow. The valves may need to be adjusted under certain plant specific operating conditions and both valves should be adjusted to the same setting to prevent an unsymmetrical air-flow into the funnel.

Reactivation Plan: If two or more cogeneration boilers exceed the annual mercury emission limit, the carbon injection system will be activated for all three boilers within 30 days of the stack test report due date.

ATTACHMENT OC-EU1-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

PERMITTEE

New Hope Power Company (NHPC)
Okeelanta Cogeneration Plant
8001 U.S. Highway 27 South
South Bay, Florida 33493

Authorized Representative:
Mr. Jose Gonzalez, General Manager & Vice President

Air Permit No. 0990332-019-AC
Permit Expires: December 31, 2013
SIC No. 4911
Cogeneration Boiler A
Installation of Natural Gas Burners
Palm Beach County

PROJECT

The Okeelanta Cogeneration Plant is located off U.S. Highway 27 South approximately six miles south of South Bay in Palm Beach County, Florida. The UTM coordinates of the facility are Zone 17, 524.9 kilometers (km) East and 2940.1 km North. The project is the installation four natural gas burners in Cogeneration Boiler A. Each natural gas burner will have a rating of 100 million British thermal units per hour.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida
Electronic Signature

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Jose Gonzalez, NHPC: Jose_Gonzalez@floridacrystals.com
Mr. Micah Leis, NHPC: Micah_Leis@floridacrystals.com
Mr. Ricardo Lima, Okeelanta Corporation: Ricardo_Lima@floridacrystals.com
Mr. David Buff, P.E., Golder Associates: dbuff@golder.com
Mr. Lennon Anderson, DEP SED: Lennon.Anderson@dep.state.fl.us
Ms. Cindy Mulkey, DEP Siting Office: cindy.mulkey@dep.state.fl.us
Ms. Heather Ceron, EPA Region 4: ceron.heather@epa.gov
Ms. Lynn Scearce, DEP PC Reading File: lynn.scearce@dep.state.fl.us
Ms. Barbara Friday, DEP Reading File: 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.
Electronic Signature

FACILITY DESCRIPTION

The facility consists of two adjacent plants. The Okeelanta Corporation operates a sugar mill and a sugar refinery (ARMS Facility I.D. No. 0990005) including packaging and transshipment activities. New Hope Power Company (the permittee) operates a 140 megawatts cogeneration plant (DEP File No. 0990332) that provides process steam for the sugar mill/refinery and generates electricity for sale to the power grid. The cogeneration plant, sugar mill, and sugar refinery are all considered a single facility for purposes of the Prevention of Significant Deterioration (PSD) and Title V regulatory programs. The facility is located off U.S. Highway 27 South, approximately six miles south of South Bay in Palm Beach County, Florida. The UTM coordinates of the facility are Zone 17, 524.9 kilometers (km) East and 2940.1 km North.

PROJECT DESCRIPTION

The following emission unit (EU) is affected by this permitting action.

EU ID No.	Emission Unit Description
001	Cogeneration Boiler A (760 MMBtu/hour)

Cogeneration Boiler A currently burns biomass (bagasse and wood) as its primary fuel and No. 2 fuel oil (maximum sulfur content of 0.05 percent by weight) as a supplemental fuel to generate steam. The permittee requests authorization to install four natural gas burners in Cogeneration Boiler A. The natural gas burners will be installed in each of the four corners of the boiler. Each natural gas burner will have a rating of 100 million Btu per hour (MMBtu/hour) for a total natural gas firing capability of 400 MMBtu/hour.

Cogeneration Boiler A was previously permitted to burn natural gas (Permit Nos. 0990332-013-AC/PSD-FL-196L through 0990332-017-AC/PSD-FL-196P); however, the natural gas burners were never installed in the boiler. Once the burners are installed, natural gas will be burned as a supplemental fuel, similar to the manner in which No. 2 fuel oil is currently burned. Biomass will remain the primary fuel. Natural gas will be used as for flame and load stabilization, as well as during periods of startup, shutdown, and malfunction. Additionally, natural gas may be fired alone at certain times up to the full natural gas firing capability. As already required by an existing permit (Permit No. 0990032-017-AC/PSD-FL-192P), fossil fuels will not be burned for more than 25 percent of the heat input to the boiler during any calendar quarter.

The permittee plans to install the natural gas burners prior to the beginning of the 2012 sugar cane crop season, which will begin in approximately October 2012. The following equipment will be installed:

- Burner elements, including tilting air nozzles and gas injectors;
- Natural gas pilots;
- Flame scanners for main burners;
- Main and pilot piping module assembly;
- Burner gas shutoff and vent valves;
- Flexible gas hoses to burners;
- Burner management system; and
- Interconnecting piping, tubing, conduit, and wiring.

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does **not** operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the PSD of Air Quality.

- The facility operates units that are subject to the New Source Performance Standards (NSPS) in Part 60, Title 40 of the Code of Federal Regulations (CFR) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Part 60, Title 40 of the CFR.

PREVIOUS APPLICABLE REQUIREMENTS

The conditions of this permit supplement all previously issued air construction and operation permits for this emission unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Air Resource Section of the Department's South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549. The telephone number is 239/344-5651 and the fax number is 850/412-0590. Copies shall be sent to each agency identified under Compliance Authority.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549. The telephone number is 239/344-5651 and the fax number is 850/412-0590. Copies of all such documents shall also be submitted to the Air Pollution Control Section of the Palm Beach County Health Department at P.O. Box 29, West Palm Beach, Florida 33402-0029 (Telephone No. 561/837-5900 and Facsimile No. 561/837-5295).

3. Appendices: The following Appendix is included in Section 4 of this permit:

   - Appendix A: Citation Formats and Glossary of Common Terms;
   - Appendix B: General Conditions: and
   - Appendix C: Common Conditions.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

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

9. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

   a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; 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 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

   b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

      1) The name, address and telephone number of the owner or operator of the major stationary source;

      2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

      3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

      4) Any other information that the owner or operator wishes to include in the report.

   c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

   For this project, the permit requires the annual reporting of actual NO_X, CO and SO_2 emissions for the following units: Cogeneration Boiler A (EU 001).

   [Application 0990332-019-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

This section of the permit addresses the following emission unit.

EU ID No. 001	Cogeneration Boiler A

Description: This unit is a biomass-fired spreader stoker steam boiler manufactured by Zurn and designed to produce approximately 506,100 pounds per hour of steam at 1500 pounds per square inch, gage (psig) and 975 degrees Fahrenheit (°F).

Fuels and Capacity: The primary fuel is biomass (760 MMBtu/hour), which includes bagasse from the adjacent sugar mill and clean wood material delivered to the plant by area subcontractors. The auxiliary fuels are natural gas (400 MMBtu/hour) as a result of this permitting action and very low sulfur distillate oil (490 MMBtu/hour).

Controls: Pollution control equipment includes low nitrogen oxide (NO_X) burners for gas firing, a selective non-catalytic reduction system to reduce NO_X emissions, mechanical dust collectors and an electrostatic precipitator to reduce particulate matter (PM) emissions, and an activated carbon injection system to reduce potential mercury emissions. Good combustion practices and the efficient combustion of clean, low sulfur fuels minimize emissions of carbon monoxide (CO), sulfuric acid mist (SAM), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Stack Parameters: Exhaust gases exit a 10 feet diameter stack that is at least 199 feet tall and with a volumetric flow rate of approximately 319,000 actual cubic feet per minute (acfm) at 352 °F.

CONSTRUCTION DETAILS

1. New Construction: This minor permit modification authorizes the addition of four 100 MMBtu/hour low NO_X natural gas burners to Cogeneration Boiler A for a total natural gas firing capacity of 400 MMBtu/hour. The natural gas burners will be installed in each of the four corners of the boiler. This will match the existing natural gas burning capability of Cogeneration Boilers B and C (EU 002 and 003). The natural gas burners will be installed at the location of the existing overfire air ports. Two of the five port nozzles in each corner will be replaced with the natural gas burners. Within 10 days of establishing commercial operation utilizing the natural gas burners, the permittee shall notify the Compliance Authority. The notification shall include the date of commercial startup and identify any substantial changes in the final equipment that differ from the application. [Design; Rule 62-4.070(3), F.A.C.]

OPERATIONAL RESTRICTIONS

2. Permitted Capacity: The maximum heat input rate to Boiler A shall not exceed 400 MMBtu/hour when burning 100 percent natural gas. [Application; Rules 62-212.400 and 62-4.070(3), F.A.C.]
3. Auxiliary Fuel: Boiler A is authorized to fire pipeline quality natural gas as a startup and auxiliary fuel. [Application; Rules 62-212.400 and 62-4.070(3), F.A.C.]
4. Fossil Fuel Limitation: The firing of fossil fuels shall be less than 25 percent of the total heat input to Boiler A during any calendar quarter. [Application; Rules 62-212.400 and 62-4.070(3), F.A.C.]
5. Fuel Records: The permittee install a natural gas flow meter on Boiler A to determine the fuel consumption rate. [Application; Rules 62-212.400 and 62-4.070(3), F.A.C.]

APPLICABLE NSPS

6. NSPS Subpart Da: Boiler A is subject to the requirements of NSPS 40 CFR 60, Subpart Da - Standards of Performance for Electric Utility Steam Generating Units. This standard has emission limits for PM, SO_2 and NO_X applicable to Boiler A when firing natural gas. [NSPS 40 CFR 60, Subpart Da]

EMISSION LIMITS

7. PM Emission Limits: The NSPS Subpart Da PM limit is 0.03 lb/MMBtu of heat input for all fuels. Compliance is shown by a three run stack test average. Meeting the previously set PM BACT emission limit of 0.026 lb/MMBtu by a three run stack test average ensures compliance with the NSPS Subpart Da emission limit. [NSPS 40 CFR 60, Subpart Da and PSD-FL-196L]

8. SO_2 Emission Limits: The NSPS Subpart Da SO_2 limit is 0.20 lb SO_2/MMBtu of heat input for liquid and gaseous fuels not derived from solid fuel. Compliance is by a continuous emission monitoring system (CEMS) on a 30-day rolling average basis. Meeting the previously set SO_2 BACT emission limit of 0.20 lb/MMBtu on a 24-hour rolling average basis ensures compliance with the NSPS Subpart Da emission limit. [NSPS 40 CFR 60, Subpart Da and PSD-FL-196L]

9. NO_X Emission Limits: The NSPS Subpart Da NO_X limit is 0.20 lb/MMBtu of heat input for gaseous fuels not derived from coal. Compliance is by a CEMS on a 30-boiler operating day rolling average basis. Meeting the previously set NO_X BACT emission limit of 0.15 lb/MMBtu on a 30-boiler operating day rolling average basis ensures compliance with the NSPS Subpart Da emission limit. [NSPS 40 CFR 60, Subpart Da and PSD-FL-196L]

MONITORING AND REPORTING

10. Monitoring while Firing Natural Gas: Monitoring while firing natural gas to show that PSD significant emission rates (SER) were not exceeded as a result of this project shall be performed in accordance with the procedures given in **Specific Conditions 29.d and 29.e** of permit PSD-FL-196L. [Application; Rules 62-212.400 and 62-4.070(3), F.A.C]

Florida Department of Environmental Protection
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

PERMITTEE

New Hope Power Company
Okeelanta Cogeneration Plant
8001 U.S. Highway 27 South
South Bay, Florida 33493

Authorized Representative:
Mr. Jose Gonzalez, General Manager & Vice President

Air Permit No. 0990332-020-AC
PSD-FL-196Q
SIC No. 4911
Cogeneration Boilers A, B and C
Modification of ACI Requirement
Palm Beach County, Florida

PROJECT

The Okeelanta Cogeneration Plant is located off U.S. Highway 27 South approximately six miles south of South Bay in Palm Beach County, Florida. The UTM coordinates of the facility are Zone 17, 524.9 kilometers (km) East and 2940.1 km North. The project involves the modification of the requirement to install activated carbon injection (ACI) systems on Cogeneration Boilers A, B and C. Since the existing facility has been constructed, no expiration date is provided in this minor modification to the existing PSD permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. The original project was subject to preconstruction review in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality; however, this minor modification is only subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida
(Electronic Signature)

FINAL PERMIT

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Draft Air Permit package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Jose Gonzalez, NHPC: Jose_Gonzalez@floridacrystals.com
Mr. Micah Leis, NHPC: Micah_Leis@floridacrystals.com
Mr. David Buff, P.E., Golder Associates: dbuff@golder.com
Mr. Lennon Anderson, DEP SED: Lennon.Anderson@dep.state.fl.us
Ms. Cindy Mulkey, DEP Siting Office: cindy.mulkey@dep.state.fl.us
Ms. Heather Ceron, EPA Region 4: ceron.heather@epa.gov
Ms. Lynn Scearce, DEP OPC Reading File: lynn.scearce@dep.state.fl.us
Ms. Barbara Friday, DEP OPC Reading File: 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.
(Electronic Signature)

FACILITY DESRIPTION

The facility consists of two adjacent plants. The Okeelanta Corporation operates a sugar mill and a sugar refinery (ARMS No. 0990005) including packaging and transshipment activities. The permittee, New Hope Power Company (NHPC) operates a 140-megawatt cogeneration plant (ARMS No. 0990332) that provides process steam for the sugar mill/refinery and generates electricity for sale to the power grid. The cogeneration plant, sugar mill and sugar refinery are all considered a single facility for purposes of the Prevention of Significant Deterioration (PSD) and Title V regulatory programs. The facility is located off U.S. Highway 27 South, approximately six miles south of South Bay in Palm Beach County, Florida. The UTM coordinates of the facility are Zone 17, 524.9 kilometers (km) East and 2940.1 km North.

PROJECT DESCRIPTION

The following emission units are affected by this permitting action.

EU No.	Emission Unit Description
001	Cogeneration Boiler A
002	Cogeneration Boiler B
003	Cogeneration Boiler C

Project No. 0990332-020-AC (PSD-FL-196Q): Currently each cogeneration boiler at the NHPC has a mercury (Hg) emission limit of 5.4×10^{-6} pounds per million British thermal units (lb/MMBtu) of heat input as listed in Specific Condition 16 of Section III of Air Construction Permit No. 0990332-017-AC (PSD-FL-196P). In addition, if two or more cogeneration boilers exceed the annual mercury emission limit, activated carbon injection (ACI) systems must be installed on all three units and a mercury testing protocol must be submitted to the Department that is designed to establish an effective carbon injection rate to control Hg emissions and meet the emission standard. Since no boiler has failed the annual mercury compliance test, this revision modifies the permit to remove the ACI systems while stipulating that the systems must be re-installed, if necessary.

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does **not** operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the PSD of Air Quality.
- The facility operates units that are subject to the New Source Performance Standards (NSPS) in Part 60, Title 40 of the Code of Federal Regulations (CFR) and the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Part 60, Title 40 of the CFR.

PREVIOUS APPLICABLE REQUIREMENTS

The conditions of this permit supplement all previously issued air construction and operation permits for these emission units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

SECTION II. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Air Resource Section of the Department's South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549. The telephone number is 239/344-5651 and the fax number is 850/412-0590. Copies shall be sent to each agency identified under Compliance Authority.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549. The telephone number is 239/344-5651 and the fax number is 850/412-0590. Copies of all such documents shall also be submitted to the Air Pollution Control Section of the Palm Beach County Health Department at P.O. Box 29, West Palm Beach, Florida 33402-0029 (Telephone No. 561/837-5900 and Facsimile No. 561/837-5295).

3. Appendices: The following Appendix is included in Section 4 of this permit:
   - Appendix A: Citation Formats and Glossary of Common Terms;
   - Appendix B: General Conditions: and
   - Appendix C: Common Conditions.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. *{Permitting Note: The application to revise the Title V permit for the changes to the ACI system may be coordinated with the project to install gas burners on Cogeneration Boiler A.}* [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

This section of the permit addresses the following emissions units.

EU ID No. 001, 002 and 003	Cogeneration Boilers A, B, and C

Description: Each boiler is a biomass-fired spreader stoker steam boiler manufactured by Zurn and designed to produce approximately 506,100 pounds per hour of steam at 1500 pounds per square inch, gage (psig) and 975degrees Fahrenheit (°F).

Fuels and Capacity: The primary fuel is biomass at a heat input rate of 760 million British thermal units per hour (MMBtu/hr). The biomass includes bagasse from the adjacent sugar mill and clean wood material delivered to the plant by area subcontractors. Auxiliary fuels include natural gas and very low sulfur distillate oil.

Controls: Pollution control equipment includes low-NOx burners for gas firing, a selective non-catalytic reduction system to reduce nitrogen oxides emissions, and mechanical dust collectors and an electrostatic precipitator to reduce particulate matter emissions. Good operating practices and the efficient combustion of clean, low-sulfur fuels minimizes emissions of carbon monoxide, sulfuric acid mist, sulfur dioxide, and volatile organic compounds.

Stack Parameters: Exhaust gases exit a 10 feet diameter stack that is at least 199 feet tall and with a volumetric flow rate of approximately 319,000 acfm at 352° F.

CONSTRUCTION DETAILS

1. New Construction: The existing cogeneration plant includes a nominal 75 MW steam turbine electrical generator and a mechanical draft cooling tower. This PSD modification authorizes the addition of a nominal 65 MW steam turbine electrical generator and the addition of a 2-cell mechanical draft cooling tower. Within 10 days of establishing commercial operation of the new steam turbine electrical generator, the permittee shall notify the Bureau of Air Regulation and Compliance Authorities. The notification shall include the date of commercial startup and identify any substantial changes in the final equipment that differ from the application. [Design; Rule 62-4.070(3), F.A.C.] *{Permitting Note: Upon completion of the additional steam turbine-generator project, the cogeneration plant will have a nominal generating capacity of 140 MW. Therefore, the project subjects the facility to the power plant site certification requirements of the Department. Any subsequent modifications must also be made in accordance with appropriate site certification requirements. Project No. 0990332-020-AC represents a minor modification to the original PSD air construction permit and no new construction is authorized.}*

2. Boiler Design: The cogeneration boilers shall consist of spreader stoker units designed to fire biomass as the primary fuel with pipeline natural gas and distillate oil as auxiliary fuels. Natural gas and distillate oil are fired at startup and shutdown, when necessary to ensure good combustion, to supplement biomass fuel, and for periods when the biomass fuel supply is interrupted. No other fuels are authorized. *{Permitting Note: Each boiler was originally designed to fire low sulfur coal as an emergency backup fuel, but no transfer, crushing, or storage systems were ever installed. The permittee shall obtain a permit modification before firing any other fuel (including coal) not specifically authorized by this permit.}*

3. Stack: Each boiler shall have an individual stack that is at least 199 feet tall. The permanent stack sampling facilities for each stack must comply with Rule 62-297.345, F.A.C.

4. Process Monitors: Each boiler shall be equipped with instruments to measure the fuel feed rate, heat input, steam production, steam pressure, and steam temperature. Appendix E identifies minimum requirements for monitoring equipment.

5. Control Equipment: Each boiler shall be equipped with:
   - Low-NOx natural gas burners rated for no more than 0.15 pounds of NOx per MMBtu of heat input. Four burners are installed with one in each corner of the boiler. The maximum heat input rate from all

four burners is 400 MMBtu per hour. {Permitting note: For Boilers B and C, four 100 MMBtu/hour gas burners have been installed. Permit No. 0990332-019-AC authorizes construction to add four 100 MMBtu/hour burners to Boiler A.}

- Mechanical dust collectors consisting of four, large diameter, multi-tube modules with airfoil vanes or equivalent equipment. The mechanical dust collectors shall be installed and maintained as pre-control devices prior to each electrostatic precipitator and designed for a removal efficiency of at least 85% of the particulate matter greater than 10 microns in size (assuming a specific gravity of 2.00).
- An electrostatic precipitator (ESP) designed for at least 98 percent removal of particulate matter.
- A selective non-catalytic reduction (SNCR) system designed for at least 40 percent removal of NOx.

6. Continuous Monitors: For each cogeneration boiler, the permittee shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) and continuous opacity monitoring systems (COMS) to measure and record emissions of carbon monoxide (CO), nitrogen oxides (NOx), opacity, oxygen (O_2), and sulfur dioxide (SO_2) in a manner sufficient to demonstrate compliance with the standards of this permit. The opacity monitor shall be placed in the ductwork between the electrostatic precipitator and the stack or in the stack. Appendix E identifies minimum requirements for monitoring systems.

7. Good Combustion Practices: An oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously optimize air/fuel ratio parameters. Depending on the fuel quality and existing combustion conditions, the operator shall provide sufficient excess air to ensure good combustion within the boiler. The application to revise the Title V operation permit shall identify "good combustion practices" for the cogeneration boilers to minimize pollutant emissions during startup, operation, and shutdown. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" shall be used as a guide. Good combustion controls shall also include the following:

   - Maintain improved combustion controls to provide efficient tuning of air/fuel control instrumentation.
   - Maintain rotary pocket-style wood feeders with efficient air seal to minimize intrusion of ambient air.
   - Maintain effective water level controls in bottom ash system to prevent intrusion of ambient air.
   - Mix biomass fuel to provide a consistent fuel blend.
   - Maintain the flue gas oxygen content to provide efficient combustion for the existing conditions.
   - When necessary to enhance poor combustion, reduce the biomass feed rate below the maximum rate.
   - When necessary to enhance poor combustion, co-fire natural gas or distillate oil.

8. O&M Plans: The application to revise the Title V operation permit shall include an operation and maintenance plan consisting of at least the following items.

   a. For the cogeneration boilers, electrostatic precipitators (ESP), selective non-catalytic reduction (SNCR) systems, and silo fabric filters, identify: the capacities, design efficiencies, pollutant emission rates, general operational description of equipment, key design and operating parameters, expected operating range of each key parameter, monitoring of key parameters, frequency of monitoring (instantaneous, continual, or continuous), and actions taken to return key parameters to within the expected operating ranges. The plan shall also specify good operating practices to promote efficient boiler combustion, startup and shutdown procedures for the boilers and control systems to minimize emissions, and precautions to prevent fugitive particulate matter emissions. *{Permitting Note: Operation outside of the specified operating range for any monitored parameter would not be a violation by itself. However, continued operation outside of a specified operating range without corrective action may be considered circumvention of the air pollution control equipment or methods.}*

   b. For the selective non-catalytic reduction (SNCR) systems identify an alternate NOx emissions control plan based on previous monitoring data that shall be implemented in case the NOx monitoring system is

down. The plan shall identify the minimum urea injection rate that has demonstrated continuous compliance with the NOx emissions standard at various load conditions.

9. Materials Handling Controls: For the fly ash handling and mercury control system reactant storage systems (if required to be installed by condition 16.g. below):

   a. The particulate matter filter control system for the storage silos shall be designed to achieve an outlet dust loading of no greater than 0.01 grains per actual cubic feet of exhaust.

   b. The fly ash handling system (including transfer points and storage bin) shall be enclosed. The ash shall be wetted in the ash conditioner to minimize fugitive dust prior to discharging to the disposal bin.

OPERATIONAL RESTRICTIONS

10. Permitted Capacity: The cogeneration boilers shall be constructed and operated in accordance with the capabilities and specifications described in the application. The maximum heat input rate to each cogeneration boiler shall not exceed 760 MMBtu/hr when burning 100 percent biomass, 400 MMBtu/hr when burning 100 percent natural gas, and 490 MMBtu/hr when burning 100 percent very low sulfur distillate oil. The steam production of each boiler shall not exceed an average of 506,100 pounds per hour at 1,500 psig and 975°F. The operating hours of the cogeneration boilers are not restricted (8760 hours per year).

11. Primary Fuel: The primary fuel for the plant shall be biomass, which shall consist of bagasse and authorized wood material. Bagasse is the fibrous vegetative residue remaining after the sugarcane milling process. Authorized wood material is clean construction and demolition wood debris, yard trash, land clearing debris, and other clean cellulose and vegetative matter. Each cogeneration boiler shall combust no more than 30% by weight yard waste (yard trash) on a calendar quarter basis that is defined as a municipal solid waste (MSW) in 40 CFR 60.51a. The biomass fuel used at the cogeneration plant shall not contain hazardous substances, hazardous wastes, biomedical wastes, or garbage. The fuel used at the cogeneration plant shall not contain special wastes, except wood, lumber, trees, tree remains, bagasse, cane tops and leaves, and other clean vegetative and cellulose matter. The permittee shall perform a daily visual inspection of any wood material or similar vegetative matter that has been delivered to the plant for use as fuel. Any shipment observed to contain prohibited materials shall not be used as fuel, unless such materials can be readily segregated and removed from the wood material and vegetative matter.

    The permittee shall design and implement a management and testing program for the wood material and other materials delivered to the plant for fuel. The program shall be designed to keep painted and chemically treated wood, household garbage, toxic or hazardous non-biomass and non-combustible waste material, from being burned at this plant. The program shall provide for the routine inspection and/or testing of the fuel at the originating wood yard sites as well as at the cogeneration site, to ensure that the quantities of painted or chemically treated wood in the fuel are minimized. Based on the analysis of a composite sample, wood material containing more than 70.7 ppm arsenic or 83.3 ppm chromium or 62.8 ppm copper shall not be burned. Fuel scheduled for burning shall be inspected daily. At a minimum, the fuel management program shall include the following sampling and analyses:

    a. At least twice each month, the permittee shall have separate analyses conducted on an as-fired wood sample and an as-fired bagasse sample for the following: heating value (modified ASTM D3286, Btu/lb, dry), carbon content (modified ASTM D5373, percent by weight, dry), sulfur content (modified ASTM D4239 Method C, percent by weight, dry), and moisture content (modified ASTM D3173, percent by weight). In addition the wood sample shall be analyzed for copper, chromium, and arsenic in accordance with Methods 3050/6010 (EPA Method SW-846) and reported in ppm by weight, dry. Samples shall be taken at least two weeks apart.

    b. At least once each month, the permittee shall have an analysis conducted on a composite sample of fly ash and bottom ash for arsenic, copper, and chromium in accordance with the procedures described in

EPA Method SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (40 CFR 261, Appendix III). The analytical results from ash testing shall be used in conjunction with those from the as-fired wood samples to evaluate the effectiveness of the fuel management program in removing chemically treated wood from the biomass fuel. The permittee shall dispose of all ash generated on site in accordance with the applicable state and federal regulations.

c. Analytical results of the as-fired biomass fuels and ash sampling shall be summarized and provided in the quarterly report to the Compliance Authority.

The ash and fuel management program shall become part of the Title V operation permit.

12. Auxiliary Fuel: The cogeneration boilers shall fire only distillate oil and pipeline natural gas as auxiliary fuels. Distillate oil shall be new No. 2 oil with a maximum sulfur content of 0.05 percent sulfur by weight as determined by the appropriate test method listed in 40 CFR 60.17. "New" oil is oil that has been refined from crude oil and that has not been used in any manner that may contaminate it. Each boiler may startup solely on pipeline natural gas or distillate oil.

13. Fossil Fuel Limitation: The firing of fossil fuels (distillate oil and natural gas) shall be less than 25 percent of the total heat input to each cogeneration boiler during any calendar quarter.

14. Fuel Records: The permittee shall maintain a daily log of the amounts and types of fuels used. The amount, heating value, and sulfur content of each fuel oil delivery shall be kept in a log for at least five years. For each calendar month, the actual monthly SO_2 emissions and the 12-month rolling total SO_2 emissions shall be determined and kept in a log.

15. Permanent Shutdown: Sugar mill boiler Nos. 4, 5, 6, 10, 11, 12, 14, and 15 shall remain permanently shutdown and rendered incapable of operation. *{Permitting Note: Okeelanta Corporation's Boiler No. 16 may operate in accordance with modified Permit No. PSD-FL-169(A).}* [Rule 62-212.400, F.A.C.]

EMISSIONS LIMITING STANDARDS

16. Emissions Standards: Based on the maximum permitted heat input to each cogeneration boiler, stack emissions shall not exceed the standards specified in the following table:

Pollutant	Averaging Period	Emissions Standards per Boiler [i]	
		lb/MMBtu	lb/hr
Carbon Monoxide (CO) [a]	30-day rolling CEMS avg.	0.50	380.0
	12-month rolling CEMS avg.	0.35	
Nitrogen Oxides (NO_X) [b]	30-day rolling CEMS avg.	0.15	114.0
Sulfur Dioxide (SO_2) [c]	24-hour rolling CEMS avg.	0.20	152.0
	30-day rolling CEMS avg.	0.10	
	12-month rolling CEMS avg.	0.06	
Stack Opacity [d]	6-minute block COMS avg. (Alternative: EPA Method 9)	≤ 20% opacity, except for one 6-minute block per hour that is ≤ 27% opacity	
Particulate Matter (PM/PM10) [e]	3-run test avg.	0.026	19.8
Volatile Organic Compounds (VOC) [f]	3-run test avg.	0.05	38.0
Mercury [g]	3-run test avg.	5.4×10^{-06}	NA
Lead and Fluorides [h]	The BACT determination for lead and fluoride emissions is the use of fuels containing low levels of these compounds (bagasse, wood, distillate oil, and natural gas) and prospective removal with the fly ash by the mechanical dust collectors and electrostatic precipitators.		

a. Compliance shall be determined by data collected from the required CO CEMS in terms of "lb/MMBtu of heat input". The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler operating days and be consistent with the NOx monitoring requirements below. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period.

b. Compliance shall be determined by data collected from the required NO_X CEMS in terms of "lb/MMBtu of heat input". The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler operating days and the requirements of 40 CFR 60.13, 60.44a, 60.46a, 60.47a, 60.48a, and 60.49a. A boiler-operating day is any day in which any authorized fuel is fired.

c. Compliance with the SO_2 standards shall be determined by data collected from the required SO_2 CEMS in terms of "lb/MMBtu of heat input". The 24-hour average shall be determined by calculating the arithmetic average of all valid hourly emission rates for 24 successive boiler-operating hours. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for 30 successive boiler-operating days and the requirements of 40 CFR 60.13, 60.43a, 60.46a, 60.47a, 60.48a, and 60.49a. Compliance with the 12-month standard shall be based on the rolling average for each consecutive 12-month period. Valid SO_2 hourly averages shall not be excluded from any compliance average. *{Permitting Note: Potential emissions of sulfuric acid mist are minimized by the effective control of SO_2 emissions with the firing of low sulfur fuels. For reporting purposes, sulfuric acid mist emissions shall be estimated as 6% of the total measured SO_2 emissions.}*

d. Continuous compliance with the opacity standard shall be determined by data collected from the required COMS in terms of "percent opacity" based on 6-minute block averages. Alternatively, compliance may also be determined by conducting EPA Method 9 observations.

e. Compliance with the particulate matter standards shall be determined by the average of three test runs conducted in accordance with EPA Method 5. For purposes of reporting PM_{10} emissions, it shall be assumed that all particulate matter emitted is PM_{10}.

f. Compliance with the VOC standards shall be determined by the average of three test runs conducted in accordance with EPA Method 25A based on propane. In addition, the permittee may choose to conduct EPA Method 18 concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions. Otherwise, all emissions measured by EPA Method 25A shall be considered "volatile organic compounds".

g. Compliance with the mercury standards shall be determined by the average of three test runs conducted in accordance with EPA Method 101A or 29. Emissions in excess of this standard shall be a violation of the permit. In addition, if two or more cogeneration boilers exceed the annual mercury emission limit, the permittee shall install and operate a carbon injection system (or equivalent) for all three units within 30 days of the stack test report due date. The minimum carbon injection rate shall be at least 7 pounds per hour. Within 60 days of the stack test report due date, the permittee shall submit to the permitting and compliance authorities a mercury testing protocol designed to establish an effective carbon injection rate to control mercury emissions. Within 60 days of receiving approval for the mercury testing protocol by the permitting authority, the permittee shall begin the approved testing program. At a minimum, the permittee shall submit a full engineering report summarizing the uncontrolled emissions, controlled emissions, fuels, operating capacities, and recommending a minimum activated carbon injection rate to control mercury emissions.

h. The particulate matter standard is also a surrogate standard for lead emissions. *{Permitting Note: For reporting purposes, average lead emissions are expected to be 2.6×10^{-05} lb/MMBtu and average fluoride emissions are expected to be 1.9×10^{-04} lb/MMBtu when firing bagasse/wood.}*

i. Each boiler shall comply with the standards when firing any combination of authorized fuels. The "lb/hour" rates are based on the highest emission standard shown for that pollutant. Required

compliance tests shall be performed in accordance with the requirements of Condition No. 19. The cogeneration boilers are also subject to the new source performance standards (NSPS Subpart Da) for new electric utility steam generating units. These requirements include the general provisions of Subpart A in 40 CFR 60, as well as the following source-specific applicable requirements: 60.40a (Applicability and Designation of Affected Facility); 60.41a (Definitions); 60.42a (Standards for Particulate Matter); 60.43a (Standard for Sulfur Dioxide); 60.44a (Standard for Nitrogen Oxides); 60.46a (Compliance Provisions); 60.47a (Emissions Monitoring); 60.48a (Compliance Determination Procedures and Methods); and 60.49a (Reporting Requirements). The cogeneration boilers are also subject to Rule 62-296.405(2), F.A.C. (Fossil Fuel Steam Generators with more than 250 MMBtu per Hour of Heat Input), Rule 62-296.410, F.A.C. (Carbonaceous Fuel Burning Equipment), and Rule 62-296.570, F.A.C. (Reasonably Available Control Technology Requirements for Major VOC and NOx Facilities).

{Permitting Note: Appendix D identifies the final BACT determinations for the cogeneration boilers.}

17. Material Handling: The following conditions apply to the biomass, ash, and activated carbon handling facilities.

    a. All conveyors and conveyor transfer points shall be enclosed to preclude PM emissions (except those directly associated with the stacker/reclaimer, for which enclosure is operationally infeasible).

    b. Water sprays, chemical wetting agents, and/or stabilizers shall be applied to storage piles, handling equipment, unenclosed transfer points, etc. during dry periods and as necessary to prevent visible emissions. When adding, moving or removing material from the storage pile, visible emissions of no more than 20% opacity are allowed.

    c. In the event that an ACI system is required to meet the permitted mercury emission limit, the mercury control system reactant storage silo(s) shall be maintained at a negative pressure while operating with the exhaust vented to a filter control system. Visible emissions from any storage silo shall not exceed 5 percent opacity based on a 6-minute block average. A visible emissions test (EPA Method 9) shall be performed at least annually for each silo that is loaded with carbon during the federal fiscal year.

STARTUP, SHUTDOWN, AND MALFUNCTION

18. Startup, Shutdown, and Malfunction Requirements: The permittee shall comply with the following requirements regarding periods of startup, shutdown, and malfunction for each cogeneration boiler.

    a. *Definitions*

        1) Excess emissions are emissions of pollutants in excess of those allowed by any applicable air pollution rule of the Department, or by a permit issued pursuant to any such rule or Chapter 62-4, F.A.C. The term applies only to conditions that occur during startup, shutdown, or malfunction. [Rule 62-210.200(106), F.A.C.]

        2) Startup is the commencement of operation of a boiler which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which may result in excess emissions. Periods of startup for each boiler shall end once steam generation reaches 150,000 pounds per hour. A cold startup is a startup after the boiler has been shutdown for 24 hours or more. A warm startup is a startup after the boiler has been shutdown for less than 24 hours.

        3) Shutdown is the cessation of the operation of a boiler for any purpose after steam generation drops below 150,000 pounds per hour.

        4) Malfunction is any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner. [Rule 62-210.200(160), F.A.C.]

b. *Prohibition*: Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. Emissions data recorded during such preventable periods shall be included in the compliance averages. [Rule 62-210.700(4), F.A.C.]

c. *Monitoring Data Exclusion*: Each continuous monitoring system shall operate and record data during all periods of operation (including startup, shutdown, and malfunction) except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Provided the operators implement best operational practices to minimize the amount and duration of emissions, the following conditions apply. Pursuant to Rules 62-210.700(1) and (5), F.A.C., these conditions consider the variations in operation of the cogeneration boilers.

1) Natural gas or distillate oil shall be fired during startup prior to energizing the electrostatic precipitator (ESP). Once the operating temperature recommended by the ESP manufacturer is maintained (approximately 340° F to 350 ° F), it shall be placed on line and the boiler shall comply with the opacity standard specified in Condition No. 16. The ESP shall be on line and functioning properly before firing any biomass. The opacity limit does not apply when the ESP is off line due to warm startup, cold startup, or shutdown. No more than twenty 6-minute block averages of opacity monitoring data shall be excluded in a 24-hour period due to documented malfunctions.

2) Hourly CO and NOx emission rate values collected during startup, shutdown, or documented malfunction may be excluded from the 30-day and/or 12-month compliance averages. No more than six hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a cold startup. No more than three hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a warm startup. No more than two hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a malfunction. No more than two hourly emission rate values (CO or NOx) shall be excluded in a 24-hour period due to a shutdown. For each cogeneration boiler, no more than 183 hourly emission rate values shall be excluded during any calendar quarter.

3) All valid hourly SO_2 emission rate values shall be included in all of the compliance averages. [40 CFR 60.46a and 60.49a]

4) To "document" a malfunction, the operator shall notify the Compliance Authority within one working day of the malfunction by phone, facsimile, or electronic mail. The notification shall include the date and time of malfunction, a description of the malfunction and probable cause, steps to taken to minimize emissions, and actions taken to correct the problem. [Rules 62-210.700(6) and 62-4.130, F.A.C.]

d. *Reporting*: In conjunction with the annual operating report, the permittee shall identify the number of startups, the number of shutdowns, and the number of malfunctions that occurred during the year for each boiler. For each boiler's CO and NOx monitors, the report shall identify the annual hours of emission data excluded from the compliance determination due to each type of incident (startups; shutdowns; and documented malfunctions).

[Rule 62-210.700, F.A.C.; Rule 62-4.070(3), F.A.C.; 40 CFR 60.8; and 40 CFR 60.46a]

COMPLIANCE METHODS AND REPORTING

19. Stack Test Requirements

a. *Initial Tests*: Initial tests were initially required for emissions of mercury, particulate matter, and volatile organic compounds. The Department may require these initial tests to be repeated if major physical or operational changes are made that affect main components such as the boiler, fuels, and/or pollution control equipment.

b. *Annual Tests*: At least once during each federal fiscal year, the permittee shall conduct compliance tests for emissions of mercury, particulate matter, and volatile organic compounds.

c. *Renewal Tests*: Within the 12-month period prior to submitting an application to renew the Title V air operation permit, the permittee shall conduct compliance tests for emissions of, mercury, particulate matter, and volatile organic compounds. Tests shall be conducted at five-year intervals.

d. *Test Procedures*: The emission compliance tests shall be conducted in accordance with the provisions of Chapter 62-297, F.A.C., 40 CFR 60.46a (NSPS Subpart Da), and as summarized in Appendix C of this permit. The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. The biomass fuel feed for each test run shall consist of at least 45% wood materials by weight. Testing of emissions shall be conducted with each cogeneration boiler operating at permitted capacity, which is defined as a heat input rate between 684 and 760 MMBtu/hour and firing 100% biomass. If it is impracticable to test at permitted capacity, a cogeneration boiler may be tested at less than the maximum permitted capacity; in this case, subsequent operation is limited to 110 percent of the test rate until a new test is conducted. Within three days of completing a test below permitted capacity, the permittee shall provide written notification of the restricted operational capacity to the Compliance Authority. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(7)(a)9, F.A.C. and 40 CFR 60.7, 60.8]

e. *Test Methods*: Compliance with the emission limits specified in this permit shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

EPA Method	Description
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emission limits
3A	Gas analysis when needed for calculation of molecular weight or percent O2
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits
5	Particulate matter emissions
6 or 6C	Sulfur dioxide emissions
7 or 7E	Nitrogen oxide emissions
9	Visible emissions determination of opacity *{Permitting Note: Although each unit is required to monitor opacity with a COMS, visible observations may also be used to demonstrate compliance.}*
10	Carbon monoxide emissions
12	Inorganic lead emissions
19	Calculation of sulfur dioxide and nitrogen oxide emission rates
25A	Volatile organic compounds emissions *{Permitting Note: EPA Method 18 may be conducted concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions. Otherwise, all emissions measured by EPA Method 25A shall be considered "volatile organic compounds".*
29	Multiple metals emissions
101A	Particulate and gaseous mercury emissions

No other methods may be used to demonstrate compliance unless prior written approval is received from the Department. Other applicable testing requirements are included in Appendix C of the permit. The permittee shall use CEMS and COMS data to demonstrate compliance with the emissions standards for CO, NOx, opacity, and SO_2. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

20. Continuous Monitor Requirements: The permittee shall demonstrate compliance with the emissions standards for CO, NOx, opacity, and SO_2 based on data collected from the continuous emissions monitoring systems (CEMS) and continuous opacity monitoring systems (COMS) required for each cogeneration boiler. Appendix E specifies the minimum requirements for monitoring equipment.

21. Quarterly Reports: For each cogeneration boiler, the permittee shall submit a quarterly report for each required continuous emissions and opacity monitoring system in accordance with the requirements specified in Appendix E of this permit. The permittee shall also submit a quarterly summary of the fuel analyses, fuel usage, and equipment malfunctions. For each malfunction, the report shall identify the cause (if known), and corrective actions taken. The quarterly reports and summaries shall be submitted to the Compliance Authority no later than 30 days following each calendar quarter.

22. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

NESHAP REQUIRMENTS

23. Subpart DDDDD Applicability: The cogeneration boilers are subject to the applicable provisions for existing units of NESHAP Subpart DDDDD in 40 CFR 63 for Industrial, Commercial, and Institutional Boilers and Process Heaters for major sources of HAP.

    {Permitting Note: On January 9, 2012, the U.S. District Court for the District of Columbia vacated EPA's stay of the final Subpart DDDDD provisions (dated March 21, 2011). Currently, the cogeneration boilers will have to meet the applicable requirements of the March 21st version by March 21 2014, which specifies emissions limits for PM, hydrogen chloride (HCl), mercury (Hg), CO and dioxin/furans (D/F). However, the EPA is reconsidering the requirements in Subpart DDDDD, and it is currently finalizing a revised (proposed) version of Subpart DDDDD (dated December 23rd, 2011). If the requirements in Subpart DDDDD are revised and issued as final rules as a result of the reconsideration process, the biomass boilers will have to meet these revised requirements, which may specify emission limits for PM, HCl, Hg, and CO with dioxin/furan emissions controlled by work practice standards. For the December 21, 2011 proposed (reconsidered) NESHAP, it is likely that the boilers must come into compliance with the emission limits for PM, HCl, Hg and CO three years after the date of publication of the final reconsideration of the rule.}

    [NESHAP 40 CFR 63, Subpart DDDDD]

ATTACHMENT OC-EU1-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT NHPC-EU1-IV3

ALTERNATIVE METHODS OF OPERATION
COGENERATION BOILERS A (EU-002), B (EU-002) AND C (EU-003)

The cogeneration boilers are permitted to burn biomass as a primary fuel, and fire distillate oil or natural gas as auxiliary fuels.

OC-EU1-AR

ASH MANAGEMENT PLAN, FUEL MANAGEMENT PLAN, GOOD COMBUSTION PLAN

ASH MANAGEMENT PLAN

This Appendix identifies and describes the practices for managing, sampling, and analyzing ash generated from the boilers operating at this plant. Enforceable "permit conditions" are specified at the end of this Appendix.

Ash from Bagasse and Wood Combustion

Bottom Ash

Bottom ash is discharged continuously from each boiler into three, water-submerged drag chain conveyors. Each conveyor consists of a wet upper compartment and a dry lower compartment. The upper compartment has a water-tight steel trough designed to contain the water required for quenching and cooling the bottom ash to 140º F and is sized to accommodate and store up to two hours of bottom ash generated from the wood or bagasse.

The submerged chain conveyor has a removal rate of 8 TONS/HOUR (TPH). An integrated water supply and recirculation system is used. Over flow water from the submerged dry chain conveyor trough, hopper seal trough, and dewatered ash storage pile is piped back to a recirculation sump equipped with an overflow weir and a return sump pump. Make-up water is added to the recirculation sump to replace water lost in the dewatered ash and through evaporation. The bottom ash in then transferred to an enclosed mixed ash belt conveyor for transfer to the mixed ash bunker.

Fly Ash

Fly ash consists of ash collected in air heater hoppers, dust collector hoppers, and from ESP hoppers. Fly ash is transferred by screw conveyors from each system and is wetted prior to transfer to the enclosed mixed ash belt conveyor that transfers it to the mixed ash bunker. All of the fly ash and dust collector ash conveyors are enclosed.

Mixed Ash Bunker

The mixed ash bunker is a 3-sided bunker sized to accommodate about a seven-day ash capacity. At this point the ash is extremely wet. Under normal operating procedures, the ash is removed from the bunker in a wetted condition. If it is determined that the bottom ash in storage has become dry, it will be sprayed with water. A front-end loader is used to reclaim and load the stored ash into trucks.

Ash Disposal

All ash generated by the facility is taken to a Class I landfill for disposal.

Quality Control Measures

Samples of mixed bottom and fly ash are obtained from the storage bunker weekly for four weeks. Each weekly sample is a composite of mixed ash grab samples from three to five locations of the ash piles in the storage bunker. After collection of the composite sample in the fourth week, the monthly sample is prepared for analysis by mixing equal portions of the four weekly mixed ash samples. A portion of the monthly composite mixed ash sample is retained as a control sample for verification of the lab test results, if necessary.

~~If the fly ash is being collected in the silo, weekly fly ash grab samples are obtained from the transfer point between the collecting fly ash chain conveyor and the bucket elevator conveyor, as ash is loaded into the silo. Additionally, grab samples of the bottom ash are obtained weekly from the bottom ash piles in the storage bunker. The individual sample size for the bottom ash and fly ash grab samples is approximately one pound each.~~

Prior to releasing the ash samples for outside lab analysis, a "combined ash sample" for the facility is also produced by blending a portion of the individual weekly bottom and fly ash samples (approximately 8, 1 lb samples per month) into a homogeneous composite (fly and bottom ash) ash sample. A portion of the remaining individual fly ash, bottom ash, and combined ash samples is retained on site as control samples for

verification of lab test results, if necessary.

The monthly ash samples are analyzed for copper, chromium, and arsenic in accordance with appropriate analytical procedures per 40 CFR 261, Appendix III, described in SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. Laboratory results on the sample are typically be available to the plant Environmental Coordinator or Fuels Manager within one to two weeks after receipt of the sample at the lab. Any results on the representative monthly composite ash sample which indicate the burning of wood material with concentrations of copper, chromium and/or arsenic above of the air permit limits are investigated by the plant Environmental Coordinator or Fuels Manager. Retesting of the control ash sample will be performed to verify the original lab test results. Comparison of the ash sample results with the corresponding fuel test results will also be performed to ensure that existing material segregation and sampling procedures for the wood material provide for an accurate representation of the composition of the wood material burned at the facility.

Correlation of Wood/Ash Analytical Results

In conjunction with the analytical results of the mixed ash samples, results from the wood samples shall be used to evaluate the effectiveness of the fuel management program in removing chemically treated wood (e.g., copper, chromium and arsenic) from the biomass fuel.

Air Permit Conditions

1. Ash - Sampling and Analysis: At least once each month, the permittee shall have an analysis conducted on a composite sample of fly ash and bottom ash (mixed ash) for arsenic, copper, and chromium in accordance with the procedures described in EPA Method SW-846, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (40 CFR 261, Appendix III). The analytical results from ash testing shall be used in conjunction with those from the as-fired wood samples to evaluate the effectiveness of the fuel management program in removing chemically treated wood from the biomass fuel. The permittee shall dispose of all ash generated on site in accordance with the applicable state and federal regulations. [Permit No. PSD-FL-196(P); Rule 62-4.070(3), F.A.C.]

2. Ash - Quarterly Reports: Within 30 days following each calendar quarter, the permittee shall submit to the Compliance Authority a summary of the monthly mixed ash analyses and a summary of the ultimate disposal of any off-specification material. [Rule 62-4.070(3), F.A.C.]

Palm Beach County Zoning Requirements for Ash Management

3. The Zoning Plan approved by Palm Beach County requires that New Hope Power Company revise the ash management plan to incorporate the revised testing procedures for the ash as submitted to the Palm Beach County Health Department. The New Hope Power Company must also request that the revised ash management plan be included in the Title V operating permit (Petition DOA 1992-014B and Condition 11 of Resolution R-2004-1372). This Appendix AM of the Title V permit satisfies the County requirement.

FUEL MANAGEMENT PLAN

This Appendix identifies and describes the practices for managing, sampling, and analyzing authorized fuels at this plant. Enforceable "permit conditions" are specified at the end of this Appendix.

BAGASSE

Description

Bagasse is the fibrous vegetative residue remaining after the sugarcane milling process. It is collected and transported by conveyor to the cogeneration plant for use as a fuel in a process which generates both steam and electricity. The mill will supply bagasse to the cogeneration project during the grinding or "crop" season, which is normally from mid-October to April of the following year.

During grinding season, the sugar mill will provide the cogeneration facility with bagasse at an average daily rate of approximately 6,500 tons per day (TPD) and a maximum hourly rate of 270 tons per hour (TPH). The bagasse will be transferred from the mill to the cogeneration facility via the Bagasse Transfer Conveyor, at the design rate of 270 TPH. The Bagasse Transfer Conveyor is equipped with a belt scale designed to monitor and record the rate and quantity of bagasse flowing to the facility. Approximately 50% of the bagasse generated during the grinding season will be fired directly in the cogeneration boilers, while the remaining portion will be stockpiled for use in the off-season.

A system of Chain Distribution Conveyors receive the bagasse at the boiler area and transfer the material to the boiler feeders or to the bagasse bypass and recycle subsystem which conveys the bagasse to a storage area on the site. The fuel from the Chain Distribution Conveyors will be bottom discharged into the boiler feed system via discharge chutes. Each chute is provided with shut off gates which are manually operated.

In the bagasse storage area, front-end loaders are used to reclaim the bagasse fuel and perform pile maintenance. Bagasse fuel is reclaimed from the bagasse storage area by a front-end loader at a design rate of up to 175 tons per hour through the use of one under-pile chain reclaimer. The reclaim conveyor transfers the bagasse to the bagasse Boiler Feed Conveyor that deposits the fuel onto one of two chain distribution conveyors for delivery to the cogeneration boilers.

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

The bagasse pile will be in the location noted on the site plan as fuel storage area. The bagasse will contain moisture in excess of 50%, minimizing the incidence of fugitive emissions. During periods when the pile surface dries out, the pile will be sprayed with water if necessary to comply with fugitive dust control requirements.

The pile will be spread, compacted and rotated to minimize the number of air pockets in the pile and the risk of fire. Also, as explained above, the pile ~~will~~ may be dampened when viewed to be dry. During operation of the plant, fuel pile management personnel will be on site 24 hours a day. Telephone communication will be used to contact the local fire department upon the occurrence of a fire incident. The plant operation maintenance manual will incorporate instructions on fire protection and fighting procedure and personnel will be given classroom instructions.

Permit Conditions

1. Bagasse - Sampling and Analysis: At least twice each month, the permittee shall have an analysis conducted on a representative "as-fired" bagasse sample for the following: heating value (modified ASTM D3286, Btu/lb, dry), carbon and ash content (modified ASTM D5373, percent by weight, dry), sulfur content (modified ASTM D4239 Method C, percent by weight, dry), and moisture content (modified ASTM D3173, percent by weight). Samples shall be taken ~~at least~~ approximately two weeks apart. Records of the results of these analyses shall be maintained on site and made available upon request. [Permit No. PSD-FL-196(P); Rule 62-4.070(3), F.A.C.]

2. Bagasse - Quarterly Report: Within 30 days following each calendar quarter, the permittee shall submit to the Compliance Authority a summary of the analytical results for the "as-fired" bagasse samples taken during the calendar quarter. [Permit No. PSD-FL-196(P); Rule 62-4.070(3), F.A.C.]

3. Bagasse - Firing Records: For the Annual Operating Report, the permittee shall calculate the annual bagasse firing rate based on the following: the summation of bagasse delivered from the mill to the cogeneration plant plus bagasse delivered to the bagasse reclaimer scales, minus bagasse measured on the bagasse recycle conveyor to the storage pile. Each value shall be based on the records derived from the in- line belt scale measurements. The total annual heat input rate from steam shall be based on steam production records, the net enthalpy from the steam characteristics, and the boiler thermal efficiencies. The annual heat input from distillate oil shall be based on the gallons of distillate oil fired and the fuel heating values from vendor fuel certifications and sampling/analyses conducted throughout the year. The annual heat input rate from wood shall be determined as described in the next section. [Rules 62-4.070(3) and 62-213.440(1)(b)1.b, F.A.C.]

WOOD MATERIAL

Description

During the non-grinding season, normally from April to mid October, the bagasse is no longer produced as a fuel and clean wood material is used as the primary biomass fuel. During the non-grinding season, bagasse is reclaimed from the bagasse storage pile and fed to the boilers to ensure consistent operations. Wood waste will be delivered to the facility by trucks at an approximate design rate of 3,600 tons per day. The anticipated deliveries are 6 days per week, 12 hours per day. Each truck is anticipated to have a capacity of 25 tons of wood material.

Authorized wood material is clean construction and demolition wood debris, yard trash, land clearing debris, and other clean cellulose and vegetative matter. Each cogeneration boiler shall combust no more than 30% by weight yard waste (yard trash) on a calendar quarter basis that is defined as a municipal solid waste (MSW) in 40 CFR 60.51a. The biomass fuel used at the cogeneration plant shall not contain hazardous substances, hazardous wastes, biomedical wastes, or garbage. The fuel used at the cogeneration plant shall not contain special wastes, except wood, lumber, trees, tree remains, bagasse, cane tops and leaves, and other clean vegetative and cellulose matter. The permittee shall perform a daily visual inspection of any wood material or similar vegetative matter that has been delivered to the plant for use as fuel. Any shipment observed to contain prohibited materials shall not be used as fuel, unless such materials can be readily segregated and removed from the wood material and vegetative matter.

The permittee is required to design and implement a management and testing program for the wood material and other materials delivered to the plant for fuel. The program shall be designed to keep painted and chemically treated wood, household garbage, toxic or hazardous non-biomass and non-combustible waste material, from being burned at this plant. The program shall provide for the routine inspection and/or testing of the fuel at the originating wood yard sites as well as at the cogeneration site, to ensure that the quantities of painted or chemically treated wood in the fuel are minimized. Based on the analysis of a composite sample, wood material containing more than 70.7 ppm arsenic or 83.3 ppm chromium or 62.8 ppm copper on an as fired basis shall not be burned. Fuel scheduled for burning shall be inspected daily.

The trucks will be unloaded either by utilizing ~~two~~ three hydraulically operated truck dumpers or by means of an unloading area provided to accommodate self-unloading trucks. When using the truck dumpers, the wood material will be discharged into three receiving hoppers equipped with chain conveyors which will transfer the wood to the unloading conveyor. The unloading conveyor, which is equipped with a belt scale and a magnetic separator, will convey the wood material to the screen and hog tower at a rate up to the design rate of 300 TPH.

The screen and hog tower is an open facility at which the wood material is discharged onto a disc screen which will separate the material sized less than 3" from the oversized material. The oversized material will be

discharged to the hog, which is a motor driven, size reducing piece of equipment which reduces the oversized wood to less than 3", suitable to feed into the boiler.

The sized wood material is then transferred from the screen and hog tower by a radial stacker to a wood storage area (wood yard) on the site or directed to the boilers via plant feed conveyor, which is equipped with a belt scale for monitoring and recording the quantity of fuel delivered directly to the boilers. The wood is reclaimed continuously at a rate up to the design rates of 175 TPH of wood chips by two under-pile chain reclaimers. The reclaimed fuel is transferred to the cogeneration facility via the wood Boiler Feed Conveyor and to the boiler feeders by the Chain Distribution Conveyors.

The wood delivered will have a relatively high moisture content and, as noted below, only 15% will be less than 1/4" in size. Fugitive emissions will be controlled by water spraying as necessary. The design of the fire protection system for the plant includes a fire water distribution system, designed in accordance with appropriate NFPA standards, including piping, valves and yard hydrants. Hydrants will be located in strategic areas around the fuel storage area at a spacing of approximately 250 feet along the buried yard loop or branch line piping. Hydrants will be suitable for attaching hoses for manual fire fighting. Deluge water spray systems will be used for protection of the fuel handling equipment and the conveyors.

The facility fire hydrant loop is located on the north side of the fuel storage area. The facility also has an auxiliary fire water tank, diesel powered fire water pump and fire hydrant located on the northwest corner of the bagasse fuel storage areas. Water wagons from the sugar mill supplement fire protection on the south side of the bagasse fuel storage area. The facility also utilizes a mobile diesel powered irrigation pump which is used for fire protection in the bagasse fuel storage area.

Quality Control Procedures

The management program for wood material shall be revised as necessary to keep painted and chemically treated wood, household garbage, toxic or hazardous non-biomass and non-combustible waste material, from being burned at this plant. The program provides for the routine inspection and/or testing of the fuel at the originating wood yard sites, as well as at the cogeneration site, to ensure that the quantities of painted or chemically treated wood in the fuel are minimized.

Wood waste will be supplied to the Project under long-term contracts which include quality requirements reflecting the conditions of the air permit. The wood material specification imposed on the supplier will be:

Less than 1% by volume or weight shall be plastics, rubber, glass and painted wood.

Free from chemically treated wood (e.g. chromium, copper and arsenic; creosote; or pentachlorophenol) except for incidental amounts, not to exceed 1% by volume or weight.

Less than 5% shall be sand, soil or other organic material

Moisture content shall be between 20% and 50% with a quarterly average of less than 40%.

95% shall be less than 4" in size, 15% (on an individual load) will be less than 1/4" in size.

Okeelanta may reject any load which does not meet any one of the above requirements, and the supplier will be required to remove the delivered amount from the site. However, if the wood material exceeds the specification limits for sand, soil, inorganic material or moisture content, Okeelanta may accept the material provided that the supplier reduces its handling and processing costs by a predetermined rate.

Supply Sites

As stipulated in the fuel supply contracts with the wood material suppliers, the delivered wood material must be substantially free of plastics, rubber, glass, and painted wood and contain only incidental amounts of chemically treated wood (e.g., chromium, copper, arsenic, creosote, pentachlorophenol). To help ensure that wood material delivered to the plant meets the provisions of the air permit, as well as other fuel quality specifications,

the wood material suppliers will perform inspection and material segregation operations on each load of feedstock received at their facilities. Although the plant will obtain wood material fuel from several different suppliers with a variety of sources for their unprocessed feedstock, the following description of the inspection and material segregation operations are typical of those operations performed at wood yards supplying the plant.

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

As a quality assurance measure, each fuel supplier's operations will be periodically reviewed by cogeneration plant personnel during unannounced site inspections. These visits will allow the cogeneration plant to ensure that the supplier's inspection and segregation efforts remain at acceptable levels.

Wood Fuel Storage Area

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

Sampling of the wood material will occur at the wood fuel storage yard. Samples will be taken from specified sections of the wood pile that are representative of the fuel to be reclaimed and burned during the following week of plant operation. The following sampling plan is modeled after the procedures originally specified in NESHAP Subpart DDDDD of 40 CFR 63 (now vacated) for solid fuel-fired industrial boilers. The sampling plan identifies the following steps for sampling and analysis of the wood materials:

Follow procedures to obtain five grab samples from the fuel pile for the representative composite sample;

Prepare each composite sample according to the specified procedures; and

Determine pollutant concentrations for each composite sample.

For each composite sample, identify a minimum of five sampling locations uniformly spaced over the surface of the pile. At each sampling location, take a sample at a depth of approximately 12 to 18 inches. Each grab sample will consist of approximately one gallon of wood chips or about 1.5 lb of wood chips. Each sample will be transferred to clean plastic bags. In general, the grab samples will be used to obtain the composite sample as described below:

Throughout the sample collection, compositing and delivery to the laboratories, a chain of custody will be used to document sample collection through analysis.

Thoroughly mix all of the individual grab samples and pour the entire composite sample over a clean plastic sheet.

Break sample pieces larger than 3 inches into smaller sizes.

Make a pie shape with the entire composite sample and subdivide into four equal parts.

Separate one of the quarter samples as the first subset. If a duplicate sample is to be obtained for analysis,

separate a second quarter of the sample as the second subset.

The sample subset may be ground in a mill or resized using other suitable laboratory methods in order to ensure a uniform size distribution. If a grinding mill is used, care should be taken to avoid metals contamination from the mill (use of a ceramic mill, proper cleaning and sharpening of mill prior to grinding, etc.).

If the quarter sample is too large, subdivide it further as described above.

Transfer each sample subset into a clean plastic sealable bag. Document and label each sample appropriately.

At least one sample subset of the composite sample will be retained temporarily on site for use as a control sample to verify the lab results, if necessary.

The following methods (or equivalent) will be used to analyze as-fired composite wood samples:

Heating Value reported in Btu/lb (modified ASTM D3286)

Carbon Content reported in percent by weight, dry (modified ASTM D5373)

Sulfur Content reported in percent by weight, dry (modified ASTM D4239 method C)

Moisture Content reported in percent by weight (modified ASTM D3173)

Copper, Chromium and Arsenic in ppm by weight, dry (Methods 3050/6010, EPA Method SW-846)

The composite samples will be processed by a third party vendor and/or laboratory for required analytical results. It is noted that the National Council for Air and Stream Improvement (NCASI) has identified grinding of biomass samples as a possible point of sample contamination due to the metals contained in the grinding equipment used in labs. Therefore, care must be taken to avoid or minimize metals contamination during the grinding process, including use of a non-metal grinding mill (ceramic, etc.), or use of other resizing methods and proper cleaning, maintenance, and quality control procedures.

Correlation of Wood/Ash Analytical Results

In conjunction with the analytical results of the mixed ash samples, results from the wood samples shall be used to evaluate the effectiveness of the fuel management program in removing chemically treated wood (e.g., copper, chromium and arsenic) from the biomass fuel. Results that indicate contamination of the wood fuel by copper, chromium, and/or arsenic in concentrations that exceed the specified limits in the air permit, will be investigated by the Environmental Coordinator, Shift Supervisor and/or Fuels Manager. Additional sampling, analysis and/or testing will be performed to determine the extent of the contaminated wood fuel.

Records

Records of the various wood material inspections and wood fuel and sampling and analysis procedures outlined in this Plan will be maintained at the plant for review on an as-requested basis by the Compliance Authority. The records will typically include: fuel delivery information (e.g., supplier, time/date of delivery, type of material, delivery size); written inspection reports of periodic unannounced site visits to wood fuel suppliers; and wood material and ash sampling and analysis information (e.g., time/date of sampling, locations selected for sampling, any atypical conditions, labs utilized, sample results). These records may also be used by plant personnel in investigating potential non-compliance events and verifying fuel test results.

Palm Beach County Provisions

The Zoning Plan approved by Palm Beach County requires that New Hope Power Company revise the fuel management plan to incorporate the “Inclement Weather Operating Procedures” and “Wood, Bagasse, and Ash Inspection and Testing Plan” as submitted to the Palm Beach County Health Department. New Hope Power

Company must also request that the revised fuel management plan be included in the Title V operating permit (Petition DOA 1992-014B and Condition 11 of Resolution R-2004-1372). This Appendix FM of the Title V permit satisfies the County requirement.

Permit Conditions

1. Wood Material - Sampling and Analysis: At least twice each month, the permittee shall have an analysis conducted on a representative "as-fired" wood material sample for the following: heating value (modified ASTM D3286, Btu/lb, dry), carbon and ash content (modified ASTM D5373, percent by weight, dry), sulfur content (modified ASTM D4239 Method C, percent by weight, dry), moisture content (modified ASTM D3173, percent by weight); copper, chromium, and arsenic (ASTM Methods 3050/6010 or EPA Method SW-846, ppmw, dry). Samples shall be taken at least two weeks apart. Records of the results of these analyses shall be maintained on site and made available upon request. [Permit No. PSD-FL-196(P); Rule 62-4.070(3), F.A.C.]

2. Wood Material - Prohibited Materials: Based on the analysis of a composite sample, wood material containing more than 70.7 ppm arsenic or 83.3 ppm chromium or 62.8 ppm copper on an as fired basis shall not be burned. [Permit No. PSD-FL-196(P)]

3. Wood Material - Quarterly Report: Within 30 days following each calendar quarter, the permittee shall submit to the Compliance Authority a summary of the following for the calendar quarter: analytical results for the "as-fired" wood material samples taken during the calendar quarter; analytical results that indicate exceedances of the allowable concentrations of copper, chromium, and arsenic; the ultimate disposal of any off-specification material; and a summary of any re-sampling/re-analysis of the wood material performed in the event an exceedance is indicated by the original analysis. [Permit No. PSD-FL-196(P); Rule 62-4.070(3), F.A.C.]

4. Wood Material - Firing Records: The permittee shall track the amount of wood chips delivered to the site and the amount of wood chips fired in the cogeneration boilers. 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 AND NATURAL GAS

Description

Distillate oil and natural gas are fired as startup/supplemental fuels in the cogeneration boilers and as the primary fuels for Boiler 16. Distillate oil shall be new No. 2 oil with a maximum sulfur content of 0.05% by weight. Each boiler may startup solely on natural gas or distillate oil. The firing of all fossil fuels (distillate oil and natural gas) shall be less than 25% of the total heat input to each cogeneration boiler during any calendar quarter.

The fuel oil system consists of a truck unloading facility, a 50,000 gallon fuel oil storage tank, two fuel oil transfer pumps, a fuel oil dispensing station, and associated piping, valves, and instrumentation. The fuel oil will be stored in an enclosed tank surrounded by a berm, which is sized to contain the full capacity of the tank in the event of a spill. The tank will be located at a distance from the plant in accordance with the NFPA separation requirements. The area around the fuel tank will be serviced by hydrants connected to the fire system yard loop. Any spilled oil will be collected and taken off-site for proper disposal.

Permit Conditions

1. Oil - Sampling and Analyses:

   a. For each oil delivery, the permittee shall record and retain the date, the gallons delivered, heating value and a certified fuel oil analysis from the vendor identifying the sulfur content (percent by weight) and

identification of the test method used.

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 more recent or 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 analyses shall be retained on site and made available for inspection upon a request from the Compliance Authority.

[Rules 62-4.070(3) and 62-213.440(1)(b)1.b, F.A.C.]

2. Oil - Firing Records: For the cogeneration units, the permittee shall observe the oil flow meter and record the amount oil fired for each calendar quarter within 10 days of the end of each quarter. The permittee shall also monitor and record the annual oil firing rate from the cogeneration units and Boiler 16 for use in filing 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.]

3. Natural Gas - Records: The permittee shall monitor and record the amount of natural gas combusted in each boiler on a quarterly basis within 10 days of the end of each month. [Rules 62-4.070(3) and 62-213.440(1)(b)1.b, F.A.C.]

General Procedures

Emissions of CO, PM/PM_{10}, and VOC shall be minimized by ensuring efficient combustion through the proper application of good combustion practices (GCPs). Operators will implement following measures to promote good combustion in each cogeneration boiler.

1. Maintain rotary pocket-style wood feeders with efficient air seal to minimize intrusion of ambient air.
2. Maintain effective water level controls in bottom ash system to prevent intrusion of ambient air.
3. Mix biomass fuel to provide a consistent fuel blend.
4. Maintain the ~~flue gas~~furnace oxygen content to provide efficient combustion for the existing conditions.
5. When necessary to enhance poor combustion, reduce the biomass fee rate below the maximum rate.
6. When necessary to enhance poor combustion, co-fire natural gas or distillate oil.

Specific Procedures

For each cogeneration boiler, operators will observe the following practices to provide reasonable assurance that GCPs are being employed. These actions may be performed by the operator or other personnel under the operations manager's supervision. The information collected shall be reported to the operations manager.

1. Operators will maintain an optimal steam production rate by controlling the biomass fuel feed into the boiler.
2. Operators will provide sufficient combustion air to promote good combustion.
3. Operators will periodically view the boiler control instrumentation to confirm that good combustion is taking place. If abnormal combustion is observed, the operator will immediately take corrective action. The control room operator will log the occurrence and duration of all such events in the boiler operation log, along with the corrective action taken.
4. At least twice per shift, operators will examine the boiler grates for proper fuel distribution and make appropriate adjustments. Unusual observations will be logged.
5. At least once per shift, operators will perform a walk-around inspection of the boiler to check the following: fans, pumps, casing, ducting, control equipment, and monitoring equipment. Adjustments and repairs will be performed as necessary.
6. At least once per shift, operators will inspect the fuel feeders and clean as necessary.
7. Operators will use the installed oxygen meter for each unit to continuously monitor a representative sample of the flue gas or furnace oxygen concentration. The oxygen monitor will be used with automatic feedback and/or manual controls to continuously optimize the air-to-fuel ratio parameters. Depending on the fuel quality and existing combustion conditions, the operator will provide sufficient excess air to ensure good combustion within the boiler. The instrument readouts are located in the boiler control room to provide real time data to the
   control room operator, and display the instantaneous and the historical average. The control room operators are instructed in the use of the O_2 flue gas process monitor for combustion control. The control room operator will periodically observe the oxygen content and adjust boiler operations consistent with GCPs. The CO and NOx CEMS are set to alarm whenever:
   a. Measured NO_X emissions exceed the allowable emission rate (0.15 lb/MMBtu as a 30-day rolling average); and
   b. Measured CO emissions exceed the allowable CO emission rate (0.50 lb/MMBtu as a 30-day rolling average and 0.35 lb/MMBtu as a 12-month rolling average).

   When an alarm is activated, the control room operator will take corrective action and adjust boiler operations consistent with GCPs. 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, or firing some fuel oil or natural gas in place of biomass. Corrective actions continue until the ~~O_2,~~ NO_X, and/or CO flue gas concentrations are returned to acceptable levels.

Use of Flue Gas Oxygen Monitor as BACT for Combustion Controls

The permittee shall install, operate and maintain a flue gas oxygen monitor that meets the requirements of Performance Specification 3 in Appendix B of 40 CFR 60. Using the certified CO and NO_X CEMS data, the permittee shall determine the influence of the flue gas oxygen content on CO and NO_X emissions throughout the range of typical operating loads. As necessary, the permittee shall adjust the flue has oxygen content in the boilers to control CO and NO_X within the permitted emissions standards.

COGENERATION BOILER B

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [2]
Cogeneration Boiler B

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Cogeneration Boiler B

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: **Zurn** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Boiler B is a hybrid suspension grate unit fired by biomass (bagasse/wood) as the primary fuel. Distillate oil and/or natural gas is fired during startup and shutdown when necessary to ensure good combustion, to supplement biomass fuel, and during times when the biomass supply is interrupted.

EMISSIONS UNIT INFORMATION
Section [2]
Cogeneration Boiler B

Emissions Unit Control Equipment/Method: Control **1** of **3**

1. Control Equipment/Method Description: **Electrostatic Precipitator – High Efficiency**
2. Control Device or Method Code: **010**

Emissions Unit Control Equipment/Method: Control **2** of **3**

1. Control Equipment/Method Description: **Selective Noncatalytic Reduction for NOx**
2. Control Device or Method Code: **107**

Emissions Unit Control Equipment/Method: Control **3** of **3**

1. Control Equipment/Method Description: **Multiple Cyclone without Fly Ash Reinjection**
2. Control Device or Method Code: **076**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **506,100 lb/hr steam (average)**	
3. Maximum Heat Input Rate: **760** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum rates based on Permit No. 0990005-038-AV. Maximum heat input rate based on burning biomass. The maximum heat input rate from distillate oil is 490 MMBtu/hr. The maximum heat input rate from natural gas is 400 MMBtu/hr. Boiler operating pressure and temperature: 1,500 psig, 975°F. See Attachment OC-EU1-B6**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Boiler B**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **199** feet	7. Exit Diameter: **10** feet
8. Exit Temperature: **345**°F	9. Actual Volumetric Flow Rate: **261,400** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters based on 2014 compliance test data.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Bagasse**		
2. Source Classification Code (SCC): **1-01-011-01**	3. SCC Units: **Tons burned (all solid fuels)**	
4. Maximum Hourly Rate: **105.56**	5. Maximum Annual Rate: **924,667**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **1.0**	9. Million Btu per SCC Unit: **7.2**
10. Segment Comment: **Based on 760 MMBtu/hr and 8,760 hr/yr. See Attachment OC-EU1-B6.**		

Segment Description and Rate: Segment **2** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Wood-fired Boiler**		
2. Source Classification Code (SCC): **1-01-009-03**	3. SCC Units: **Tons burned (all solid fuels)**	
4. Maximum Hourly Rate: **89.41**	5. Maximum Annual Rate: **783,247**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.3**	8. Maximum % Ash: **9.0**	9. Million Btu per SCC Unit: **8.5**
10. Segment Comment: **Based on 760 MMBtu/hr and 8,760 hr/yr. See Attachment OC-EU1-B6.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment **3** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Distillate Oil – Grades 1 and 2 Oil**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **3.551**	5. Maximum Annual Rate: **11,309**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **138**
10. Segment Comment: **Based on 490 MMBtu/hr heat input and heating value of 138,000 Btu/gal for No. 2 fuel oil. Maximum annual rate based on permit condition (Permit No. 0990005-038-AV), which limits oil firing to less than 25% of total heat input. See Attachment OC-EU1-B6.**		

Segment Description and Rate: Segment **4** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Natural Gas**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million standard cubic feet burned**	
4. Maximum Hourly Rate: **0.3891**	5. Maximum Annual Rate: **1,518**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,028**
10. Segment Comment: **Maximum hourly rate based on 400 MMBtu/hr. Maximum annual rate based on gas firing to be less than 25% of total heat input. See Attachment OC-EU1-B6. Natural gas will be burned for flame and load stabilization, as well as during periods of startup, shutdown, and malfunction. Additionally, natural gas may be fired alone at certain times to the full natural gas firing capacity.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**076**	**010**	**EL**
PM10	**076**	**010**	**EL**
PM2.5	**076**	**010**	**NS**
SO2			**EL**
NOx	**107**		**EL**
CO			**EL**
VOC			**EL**
Mercury Compounds (H114)			**EL**
Hydrochloric Acid (H106)			**NS**
Total HAPs			**NS**
Lead (Pb)	**076**	**010**	**NS**
Fluoride (F)			**NS**
Sulfuric Acid Mist (SAM)			**NS**
GHGs			**NS**
CO2e			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **19.8** lb/hour **86.55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.026 lb/MMBtu x 760 MMBtu/hr = 19.8 lb/hr** **19.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 86.55 TPY** **See Attachment OC-EU1-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.026 lb/MMBtu**	4. Equivalent Allowable Emissions: **19.8** lb/hour **86.55** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Basis for allowable emissions code: BACT. Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **22.8** lb/hour **99.86** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(b), F.A.C., and 40 CFR 60.42a.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **19.8** lb/hour **86.55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

0.026 lb/MMBtu x 760 MMBtu/hr = 19.8 lb/hr

19.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 86.55 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.026 lb/MMBtu**	4. Equivalent Allowable Emissions: **19.8** lb/hour **86.55** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Basis for allowable emissions code: BACT. Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **228.0** lb/hour **199.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.06 lb/MMBtu (12-month rolling average)** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

3-hour maximum: 0.30 lb/MMBtu x 760 MMBtu/hr = 228 lb/hr

24-hr rolling CEMS average: 0.20 lb/MMBtu x 760 MMBtu/hr = 152 lb/hr

30-day rolling CEMS average: 0.10 lb/MMBtu x 760 MMBtu/hr = 76.0 lb/hr

12-month rolling CEMS average: 0.06 lb/MMBtu x 760 MMBtu/hr = 45.6 lb/hr

Annual: 0.06 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 199.7 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:
Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.20 lb/MMBtu (24-hour rolling average)**	4. Equivalent Allowable Emissions: **152.0** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.10 lb/MMBtu (30-day rolling average)**	4. Equivalent Allowable Emissions: **76.0** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions = 0.10 lb/MMBtu, 30-day average. Based on biomass firing.**	

Allowable Emissions Allowable Emissions **3** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.06 lb/MMBtu (12-month rolling average)**	4. Equivalent Allowable Emissions: lb/hour **199.7** tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **4** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.05 percent sulfur**	4. Equivalent Allowable Emissions: lb/hour **39.01** tons/year
5. Method of Compliance: **Fuel analysis and limiting fuel oil burning to 24.9 percent.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on No. 2 fuel oil firing and BACT.**	

Allowable Emissions Allowable Emissions **5** of **6**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **1.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **912** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(c), F.A.C., and 40 CFR 60.43a(d)(2). Limit is for solid fuels. Based on biomass firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions **6** of **6**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **98** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(c), F.A.C., and 40 CFR 60.43a(d)(2). Limit is for liquid or gaseous fuels. Based on No. 2 fuel oil firing at 490 MMBtu/hr.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **152.0** lb/hour **499.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.15 lb/MMBtu (30-day rolling average)** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

3-hour maximum: 0.20 lb/MMBtu x 760 MMBtu/hr = 152.0 lb/hr

30-day rolling average: 0.15 lb/MMBtu x 760 MMBtu/hr = 114.0 lb/hr

Annual: 0.15 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 499.3 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **4**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.15 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **114.0** lb/hour **499.3** tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing as 30-day rolling average.**	

Allowable Emissions Allowable Emissions **2** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.60 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **456** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on solid fuel firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions **3** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.3 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **147** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on liquid fuel firing at 490 MMBtu/hr.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **80** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on gas firing at 400 MMBtu/hr.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1,462.5** lb/hour **1,165.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **6.5 lb/MMBtu (1-hr max)** Reference: **CEM data and Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Cold start-up: 225 MMBtu/hr x 6.5 lb/MMBtu = 1,462.5 lb/hr

30-day rolling average: 0.50 lb/MMBtu x 760 MMBtu/hr = 380.0 lb/hr

12-month rolling average: 0.35 lb/MMBtu x 760 MMBtu/hr = 266.0 lb/hr

Annual: 0.35 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1,165.1 TPY

See Attachment OC-EU1-F1.10 for calculations.

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions occur under cold-start-up conditions. Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.50 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **380.0** lb/hour tons/year
5. Method of Compliance: **Continuous CO monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.35 lb/MMBtu, 12-month rolling average**	4. Equivalent Allowable Emissions: lb/hour **1,165.1**tons/year
5. Method of Compliance: **Continuous CO monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **38.0** lb/hour **166.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.05 lb/MMBtu x 760 MMBtu/hr = 38.0 lb/hr** **38.0 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 166.4 TPY** **See Attachment OC-EU1-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.05 lb/MMBtu**	4. Equivalent Allowable Emissions: **38.0** lb/hour **166.4** tons/year
5. Method of Compliance: **Annual stack test using EPA Method 25A/18.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Mercury – H114**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.0041** lb/hour **0.018** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **5.4×10^{-6} lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Hourly: 5.4×10^{-6} lb/MMBtu x 760 MMBtu/hr = 0.0041 lb/hr

Annual: 0.0041 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.018 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **5.4×10^{-6} lb/MMBtu**	4. Equivalent Allowable Emissions: **0.0041** lb/hour **0.018** tons/year
5. Method of Compliance: **Stack test using EPA Method 101A or 29, conducted annually.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **Continuous opacity monitor, or EPA Method 9.**	
5. Visible Emissions Comment: **40 CFR 60, Subpart Da, and Permit No. 0990332-020-AC/PSD-FL-196Q.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **5**

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Durag** Model Number: **D-R290** Serial Number: **31019**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

Continuous Monitoring System: Continuous Monitor **2** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **42I** Serial Number: **42D-52618-292**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov 17-21, 2014**
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor **3** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **43I** Serial Number: **43B-51400-292**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov 17-21, 2014**
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor **4** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **48I** Serial Number: **48-45334-273**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov 17-21, 2014**
7. Continuous Monitor Comment:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor **5** of **5**

1. Parameter Code: **CO2**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Yokogawa** Model Number: **ZA8C**	Serial Number: **JJ113MA345**
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I3** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I4** ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I5** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **March 2014**
   Test Date(s)/Pollutant(s) Tested: **03/12/2014 – PM, VOC, Hg**
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU1-IV1**
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: **CAM PLAN** ☐ Not Applicable
3. Alternative Methods of Operation: ☒ Attached, Document ID: **OC-EU1-IV3** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

See Attachment OC-EU1-AR for Ash Management Plan, Fuel Management Plan, and Good Combustion Plan.

COGENERATION BOILER C

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [3]
Cogeneration Boiler C

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Cogeneration Boiler C

3. Emissions Unit Identification Number: **003**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: **Zurn** Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Boiler C is a hybrid suspension grate unit fired by biomass (bagasse/wood) as the primary fuel. Distillate oil and/or natural gas is fired during startup and shutdown when necessary to ensure good combustion, to supplement biomass fuel, and during times when the biomass supply is interrupted.

EMISSIONS UNIT INFORMATION
Section [3]
Cogeneration Boiler C

Emissions Unit Control Equipment/Method: Control **1** of **3**

1. Control Equipment/Method Description: **Electrostatic Precipitator – High Efficiency**
2. Control Device or Method Code: **010**

Emissions Unit Control Equipment/Method: Control **2** of **3**

1. Control Equipment/Method Description: **Selective Noncatalytic Reduction for NOx**
2. Control Device or Method Code: **107**

Emissions Unit Control Equipment/Method: Control **3** of **3**

1. Control Equipment/Method Description: **Multiple Cyclone without Fly Ash Reinjection**
2. Control Device or Method Code: **076**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **506,100 lb/hr steam (average)**	
3. Maximum Heat Input Rate: **760** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum rates based on Permit No. 0990005-038-AV. Maximum heat input rate based on burning biomass. The maximum heat input rate from distillate oil is 490 MMBtu/hr. The maximum heat input rate from natural gas is 400 MMBtu/hr. Boiler operating pressure and temperature: 1,500 psig, 975°F. See Attachment OC-EU1-B6.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Boiler C**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **199** feet	7. Exit Diameter: **10** feet
8. Exit Temperature: **361**°F	9. Actual Volumetric Flow Rate: **311,263** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters based on 2014 compliance test data.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Bagasse**		
2. Source Classification Code (SCC): **1-01-011-01**	3. SCC Units: **Tons burned (all solid fuels)**	
4. Maximum Hourly Rate: **105.56**	5. Maximum Annual Rate: **924,667**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash: **1.0**	9. Million Btu per SCC Unit: **7.2**
10. Segment Comment: **Based on 760 MMBtu/hr and 8,760 hr/yr. See Attachment OC-EU1-B6.**		

Segment Description and Rate: Segment **2** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Wood-fired Boiler**		
2. Source Classification Code (SCC): **1-01-009-03**	3. SCC Units: **Tons burned (all solid fuels)**	
4. Maximum Hourly Rate: **89.41**	5. Maximum Annual Rate: **783,247**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.3**	8. Maximum % Ash: **9.0**	9. Million Btu per SCC Unit: **8.5**
10. Segment Comment: **Based on 760 MMBtu/hr and 8,760 hr/yr. See Attachment OC-EU1-B6.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment **3** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Distillate Oil – Grades 1 and 2 Oil**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **Thousand gallons burned**	
4. Maximum Hourly Rate: **3.551**	5. Maximum Annual Rate: **11,309**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.05**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **138**
10. Segment Comment: **Based on 490 MMBtu/hr heat input and heating value of 138,000 Btu/gal for No. 2 fuel oil. Maximum annual rate based on permit condition (Permit No. 0990005-038-AV), which limits oil firing to less than 25% of total heat input. See Attachment OC-EU1-B6.**		

Segment Description and Rate: Segment **4** of **4**

1. Segment Description (Process/Fuel Type): **Electric Utility Boiler – Natural Gas**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million standard cubic feet burned**	
4. Maximum Hourly Rate: **0.3891**	5. Maximum Annual Rate: **1,518**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,028**
10. Segment Comment: **Maximum hourly rate based on 400 MMBtu/hr. Maximum annual rate based on gas firing to be less than 25% of total heat input. See Attachment OC-EU1-B6. Natural gas will be burned for flame and load stabilization, as well as during periods of startup, shutdown, and malfunction. Additionally, natural gas may be fired alone at certain times to the full natural gas firing capacity.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**076**	**010**	**EL**
PM10	**076**	**010**	**EL**
PM2.5	**076**	**010**	**NS**
SO2			**EL**
NOx	**107**		**EL**
CO			**EL**
VOC			**EL**
Mercury Compounds (H114)			**EL**
Hydrochloric Acid (H106)			**NS**
Total HAPs			**NS**
Lead (Pb)	**076**	**010**	**NS**
Fluoride (F)			**NS**
Sulfuric Acid Mist (SAM)			**NS**
GHGs			**NS**
CO2e			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **19.8** lb/hour **86.55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

0.026 lb/MMBtu x 760 MMBtu/hr = 19.8 lb/hr

19.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 86.55 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.026 lb/MMBtu**	4. Equivalent Allowable Emissions: **19.8** lb/hour **86.55** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Basis for allowable emissions code: BACT. Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 lb/MMBtu**	4. Equivalent Allowable Emissions: **22.8** lb/hour **99.86** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(b), F.A.C., and 40 CFR 60.42a.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **19.8** lb/hour **86.55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.026 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.026 lb/MMBtu x 760 MMBtu/hr = 19.8 lb/hr** **19.8 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 86.55 TPY** **See Attachment OC-EU1-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.026 lb/MMBtu**	4. Equivalent Allowable Emissions: **19.8** lb/hour **86.55** tons/year
5. Method of Compliance: **Annual stack testing using EPA Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Basis for allowable emissions code: BACT. Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **228.0** lb/hour **199.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.06 lb/MMBtu (12-month rolling average)** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

3-hour maximum: 0.30 lb/MMBtu x 760 MMBtu/hr = 228 lb/hr

24-hr rolling CEMS average: 0.20 lb/MMBtu x 760 MMBtu/hr = 152 lb/hr

30-day rolling CEMS average: 0.10 lb/MMBtu x 760 MMBtu/hr = 76.0 lb/hr

12-month rolling CEMS average: 0.06 lb/MMBtu x 760 MMBtu/hr = 45.6 lb/hr

Annual: 0.06 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 199.7 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:
Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.20 lb/MMBtu (24-hour rolling average)**	4. Equivalent Allowable Emissions: **152.0** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.10 lb/MMBtu (30-day rolling average)**	4. Equivalent Allowable Emissions: **76.0** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Allowable emissions = 0.10 lb/MMBtu, 30-day average. Based on biomass firing.**	

Allowable Emissions Allowable Emissions **3** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.06 lb/MMBtu (12-month rolling average)**	4. Equivalent Allowable Emissions: lb/hour **199.7** tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **4** of **6**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.05 percent sulfur**	4. Equivalent Allowable Emissions: lb/hour **39.01** tons/year
5. Method of Compliance: **Fuel analysis and limiting fuel oil burning to 24.9 percent.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on No. 2 fuel oil firing and BACT.**	

Allowable Emissions Allowable Emissions **5** of **6**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **1.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **912** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(c), F.A.C., and 40 CFR 60.43a(d)(2). Limit is for solid fuels. Based on biomass firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions **6** of **6**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **98** lb/hour tons/year
5. Method of Compliance: **Continuous SO2 monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(c), F.A.C., and 40 CFR 60.43a(d)(2). Limit is for liquid or gaseous fuels. Based on No. 2 fuel oil firing at 490 MMBtu/hr.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **152.0** lb/hour **499.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.15 lb/MMBtu (30-day rolling average)** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

3-hour maximum: 0.20 lb/MMBtu x 760 MMBtu/hr = 152.0 lb/hr

30-day rolling average: 0.15 lb/MMBtu x 760 MMBtu/hr = 114.0 lb/hr

Annual: 0.15 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 499.3 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **4**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.15 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **114.0** lb/hour **499.3** tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing as 30-day rolling average.**	

Allowable Emissions Allowable Emissions **2** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.60 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **456** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on solid fuel firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions **3** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.3 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **147** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on liquid fuel firing at 490 MMBtu/hr.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS (CONTINUED)

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **4** of **4**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.2 lb/MMBtu**	4. Equivalent Allowable Emissions: **80** lb/hour tons/year
5. Method of Compliance: **Continuous NOx monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(2)(d), F.A.C., and 40 CFR 60.44a. Based on gas firing at 400 MMBtu/hr.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1,462.5** lb/hour **1,165.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **6.5 lb/MMBtu (1-hr max)** Reference: **CEM data and Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Cold start-up: 225 MMBtu/hr x 6.5 lb/MMBtu = 1,462.5 lb/hr

30-day rolling average: 0.50 lb/MMBtu x 760 MMBtu/hr = 380.0 lb/hr

12-month rolling average: 0.35 lb/MMBtu x 760 MMBtu/hr = 266.0 lb/hr

Annual: 0.35 lb/MMBtu x 760 MMBtu/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1,165.1 TPY

See Attachment OC-EU1-F1.10 for calculations.

11. Potential, Fugitive, and Actual Emissions Comment:

Maximum emissions occur under cold-start-up conditions. Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.50 lb/MMBtu, 30-day rolling average**	4. Equivalent Allowable Emissions: **380.0** lb/hour tons/year
5. Method of Compliance: **Continuous CO monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.35 lb/MMBtu, 12-month rolling average**	4. Equivalent Allowable Emissions: lb/hour **1,165.1**tons/year
5. Method of Compliance: **Continuous CO monitor.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **38.0** lb/hour **166.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **0.05 lb/MMBtu x 760 MMBtu/hr = 38.0 lb/hr** **38.0 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 166.4 TPY** **See Attachment OC-EU1-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Based on biomass firing.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.05 lb/MMBtu**	4. Equivalent Allowable Emissions: **38.0** lb/hour **166.4** tons/year
5. Method of Compliance: **Annual stack test using EPA Method 25A/18.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing at 760 MMBtu/hr.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Mercury – H114**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.0041** lb/hour **0.018** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **5.4×10^{-6} lb/MMBtu** Reference: **Permit No. 0990332-020-AC/PSD-FL-196Q**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Hourly: 5.4×10^{-6} lb/MMBtu x 760 MMBtu/hr = 0.0041 lb/hr

Annual: 0.0041 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.018 TPY

See Attachment OC-EU1-F1.10.

11. Potential, Fugitive, and Actual Emissions Comment:

Based on biomass firing.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **5.4×10^{-6} lb/MMBtu**	4. Equivalent Allowable Emissions: **0.0041** lb/hour **0.018** tons/year
5. Method of Compliance: **Stack test using EPA Method 101A or 29, conducted annually.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on biomass firing.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **Continuous opacity monitor, or EPA Method 9.**	
5. Visible Emissions Comment: **40 CFR 60, Subpart Da, and Permit No. 0990332-020-AC/PSD-FL-196Q.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **5**

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Durag** Model Number: **D-R290** Serial Number: **31019**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

Continuous Monitoring System: Continuous Monitor **2** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **42I** Serial Number: **42D-52618-292**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov. 17-21, 2014**
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor **3** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **43I** Serial Number: **43B-51400-292**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov. 17-21, 2014**
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor **4** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Thermo Environmental Instruments** Model Number: **48I** Serial Number: **48-45334-273**	
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date: **Nov. 17-21, 2014**
7. Continuous Monitor Comment:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor **5** of **5**

1. Parameter Code: **CO2**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Yokogawa** Model Number: **ZA8C**	Serial Number: **JJ113MA345**
5. Installation Date: **October 1, 1995**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Da.**	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I3** ☐ Previously Submitted, Date _

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I4** ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU1-I5** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **March 2014**
   Test Date(s)/Pollutant(s) Tested: **03/11/2014 – PM, VOC, Hg**
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU1-IV1**
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: **CAM PLAN** ☐ Not Applicable
3. Alternative Methods of Operation: ☒ Attached, Document ID: **OC-EU1-IV3** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

See Attachment OC-EU1-AR for Ash Management Plan, Fuel Management Plan, and Good Combustion Plan.

COGENERATION PLANT
MATERIALS HANDLING AND STORAGE

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [4]
Cogen Plant- Materials Handling and Storage

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

   Material Handling and Storage at Cogeneration Plant

3. Emissions Unit Identification Number: **004**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit: Paint Booth
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    This emission unit includes unloading operations, stockpiles, transfer operations, conveyors, screens, crushers, hoppers and silos.

EMISSIONS UNIT INFORMATION
Section [4]
Cogen Plant- Materials Handling and Storage

Emissions Unit Control Equipment/Method: Control **1** of **2**

1. Control Equipment/Method Description: **Fabric Filter – Low Temperature (T< 180F)**
2. Control Device or Method Code: **018**

Emissions Unit Control Equipment/Method: Control **2** of **2**

1. Control Equipment/Method Description: **Process Enclosed**
2. Control Device or Method Code: **054**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **3,761,731 TPY**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **1,063,162 TPY woodwaste; 1,444,659 TPY bagasse; plus 50 percent additional for yearly variability. See Attachment OC-EU4-F1.10.**	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Material Handling System**		2. Emission Point Type Code: **4**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Fly Ash Silo** **Conveyor Transfer Points** **Hogger** **Biomass Storage Piles** **Rental or Permanent Activated Carbon Injection System (if required)**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: **77**°F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: **10** feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment: **Fugitive emissions.**		

EMISSIONS UNIT INFORMATION
Section [4]
Cogen Plant- Materials Handling and Storage

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Bulk materials open stockpiles: Biomass**		
2. Source Classification Code (SCC): **3-02-103-99**	3. SCC Units: **Tons used**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: **3,761,731**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Segment represents biomass handling and storage operations.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION
Section [4]
Cogen Plant- Materials Handling and Storage

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			**WP**
PM_{10}			**WP**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions:		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _ of _

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-297.620(4), Florida Administrative Code (F.A.C.).**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Permit No. PSD-FL-196P. Applies to each baghouse vent.**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU4-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU4-I5** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

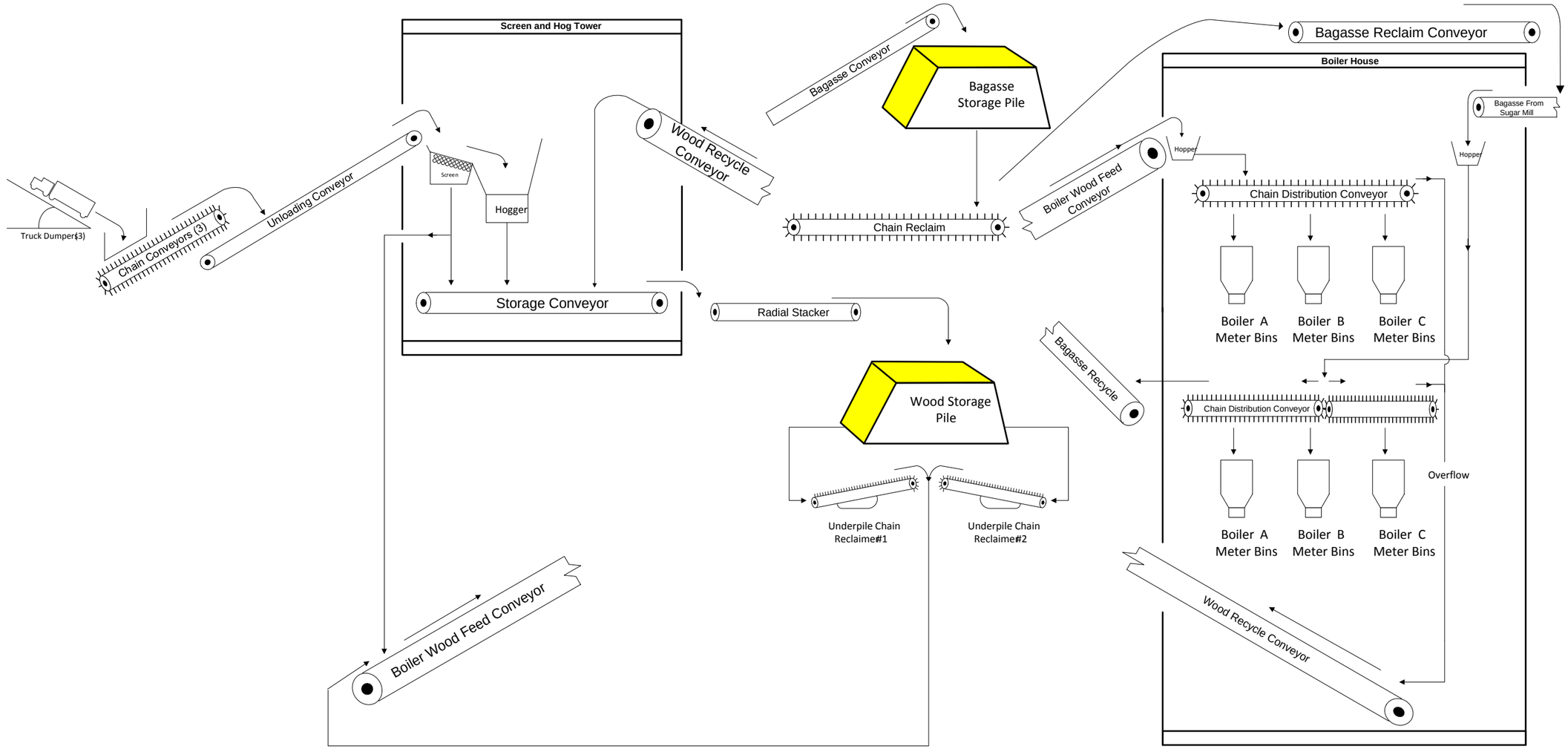
Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU4-IV1**
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU4-I1

PROCESS FLOW DIAGRAM



Attachment OC-EU4-I1a
Materials Handling System
Facility Process Flow Diagram
Okeelanta Corporation
South Bay, FL

Process Flow Legend
Bagasse and/or
Wood Chips →

Golder Associates

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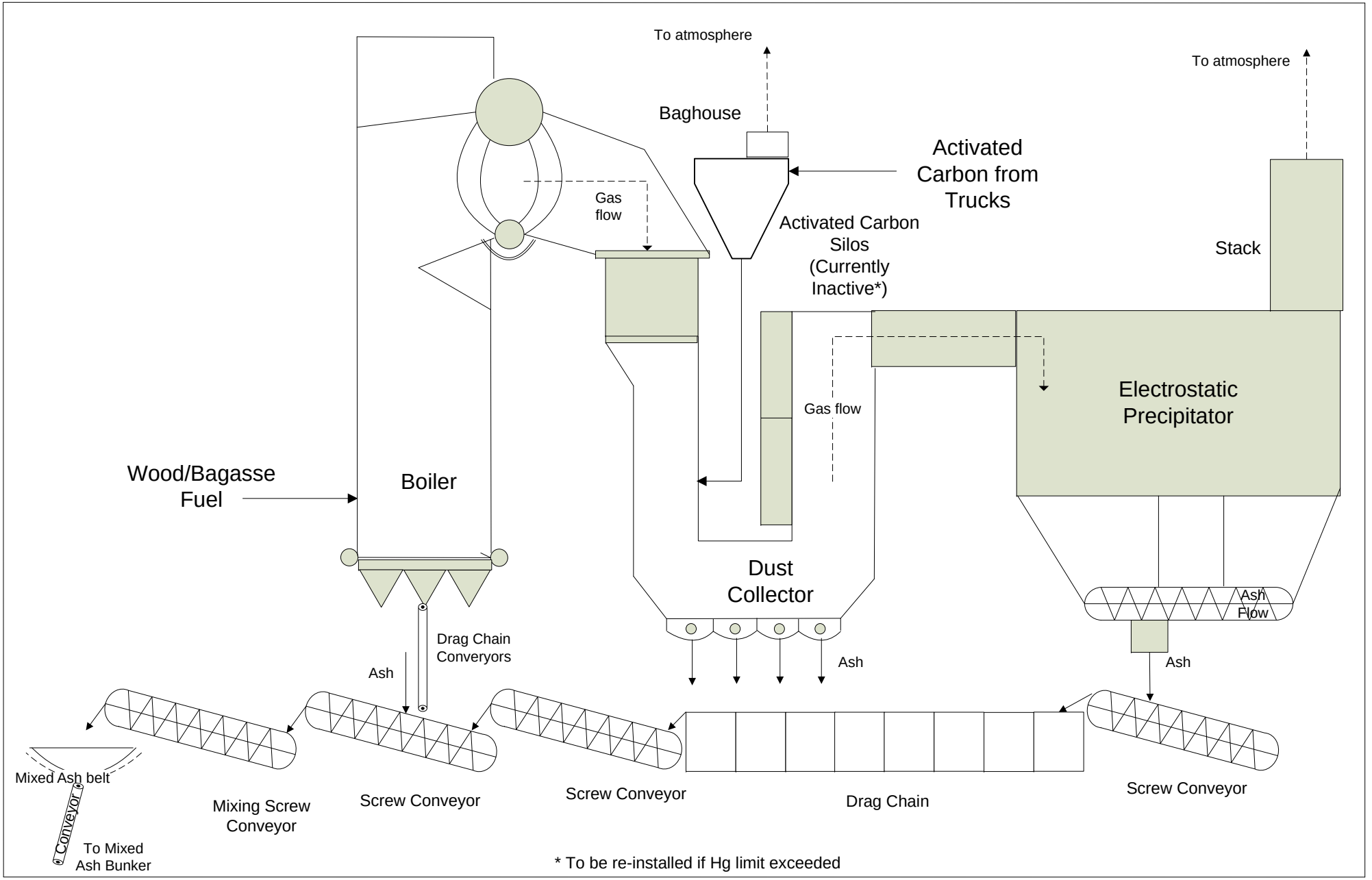

Attachment OC-EU4-I1b
Ash Removal and Carbon Injection System – Boilers A, B, and C
Facility Process Flow Diagram
Okeelanta Corporation
South Bay, Florida

Process Flow Legend
Ash Flow
Gas Flow

Golder Associates

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ATTACHMENT OC-EU4-I5

OPERATION AND MAINTENANCE PLAN

ATTACHMENT OC-EU4-I5

BIOMASS, ASH AND ACTIVATED CARBON HANDLING AND STORAGE OPERATIONS

The New Hope Power Company (NHPC) is a 74.9-MW (net) electric cogeneration plant located in South Bay, Florida. The plant is designed to supply high and low pressure steam to the steam turbine generators and to the Okeelanta Sugar Mill during the grinding season. During the non-grinding season, the cogeneration plant is designed to provide high pressure steam to the steam turbine generators and low-pressure steam to the Okeelanta sugar refinery. Steam generation is accomplished by means of bagasse and wood-fired steam boilers. Electrical power generation is provided by means of two (2) extraction-condensing turbine generator and is used to meet in-house loads and for sale.

The following subsections describe the NHPP wood, bagasse, and ash handling systems from a "process flow" standpoint.

Wood Handling System

Wood fuel is delivered to NHPC by 20-ton trucks (typical) at an approximate design rate of 2,000 tons per day. The trucks are unloaded at NHPC utilizing three (3) hydraulically operated truck dumpers. An unloading area is also provided to accommodate any self-unloading trucks.

When unloading from the trucks, the wood fuel is discharged into receiving hoppers equipped with live bottom chain conveyors that transfer the wood material to the 48-inch Unloading Conveyor. The Unloading Conveyor, which is equipped with a belt scale, conveys the wood fuel to the Hog Tower at a design rate of up to 300 tons per hour (tph).

The Hog Tower is an open facility consisting of a disc screen and a motor-driven, size-reducing hog. The wood fuel is discharged onto the disc screen which acts to separate material sized less than 3 inches from any oversized material. The oversized material is discharged to the Hog, which reduces the wood pieces to less than 3 inches in size, suitable for feeding into the boiler.

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

Sized wood fuel is reclaimed from the wood storage area at a design rate of up to 175 tph through the use of two under-pile chain reclaimers. The reclaimers transfer the sized wood material to the Boiler Feed Conveyor that deposits the fuel onto one of two chain distribution conveyors for delivery into the boilers.

Bagasse Handling System

The bagasse is transferred from the adjacent sugar mill to the Bagasse Transfer Conveyor from two pickup points located at the existing sugar mill tandems. The 72-inch wide Bagasse Transfer Conveyor conveys

the fuel to the boiler building at a rate 270 tph. The conveyor is equipped with a belt scale to record the rate of bagasse delivered to NHPC.

At the boiler building, the bagasse is diverted to the Recycle Conveyor which can transfer the bagasse to the Chain Distribution Conveyors and ultimately to the Rotary Drum Feeders for delivery to the boiler, or send the material to the bagasse storage area. If being sent to the bagasse storage area, the bagasse is transferred from the Recycle Conveyor to the Bagasse Conveyor, which discharges to the Bagasse Storage Pile.

Bagasse is reclaimed from the Bagasse Storage Pile by transferring to the Bagasse Reclaim Conveyor and then the Bagasse Conveyor, ultimately making its way to the Rotary Drum Feeders for delivery to the boiler

Ash Handling System

The ash handling systems at NHPC comprises equipment from two distinct systems: 1) the handling of bottom ash from the boilers; and 2) the handling of fly ash collected in the electrostatic precipitators (ESP) and the dust collector hoppers. Currently, both types of ash are combined and transferred to a Mixed Ash Conveyor, which conveys the ash to the Mixed Ash Bunker. From there, the wet ash is loaded into trucks and transported off-site.

Bottom Ash Handling

Bottom ash continuously discharged from the boilers into three water-submerged Drag Chain Conveyors. Each conveyor consists of a wet compartment and a dry compartment. The upper compartment is a water-tight steel trough designed to contain the water required for quenching and cooling the bottom ash.

The dewatered ash from the dewatering inclined ramp of the chain conveyor is discharged onto the Mixed Ash Conveyor belt through the diverter gate. The Mixed Ash Conveyor belt deposits the ash into the mixed ash bunker.

Fly Ash Handling

Fly ash at NHPC includes ash collected from the dust collectors and the ESP hoppers. The fly ash handling system encompasses the removal and transport of fly ash from the hoppers to the Mixed Ash Bunker, using screw and belt conveyors. All of the screw conveyors and the belt conveyor are enclosed.

The fly ash leaves the ESP through a double dump valve and is deposited onto the #1 Transfer Screw Conveyor which empties onto the #2 Transfer Screw Conveyor. The #2 Transfer Screw Conveyor discharges into the Fly Ash Conveyor which also accepts the ash from the dust collector hoppers. The fly ash and dust collector ash is then emptied onto the #1 Incline Screw Conveyor which discharges to the #2 Incline Screw Conveyor, and finally to the Mixing Screw Conveyor that deposits the ash onto the Mixed Ash Belt Conveyor that discharges into the Mixed Ash Bunker for transport and disposal.

The Fly Ash Handling System also includes a Fly Ash Storage Silo (1,500 ton capacity), pug-mill conditioners, and truck loadout. However, these systems have not been operated for several years. The silo is controlled by a baghouse designed to limit PM emissions to 0.01 grains per actual cubic foot of exhaust.

Mercury Control System – Activated Carbon Injection System

In the event that an activated carbon injection system (or equivalent) must be used to control mercury emissions from the boilers, an activated carbon injection system will be brought on-site. A volumetric feeder with an integral supply hopper will be used to meter activated carbon for injection at a point in the ductwork between the ESP and the ID fan. This will promote turbulent mixing and provide adequate residence time. A blower system will then transport the carbon to the injection point. Any storage silos associated with the carbon injection system will be controlled by baghouses. The baghouses will be designed for a PM outlet loading of 0.01 gr/acf or less.

COGENERATION PLANT
UNREGULATED EMISSIONS UNITS

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [5]
Cogen Plant - Unregulated Emissions Units

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☒ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   This emission unit addresses Cogen Plant-wide unregulated emissions sources not addressed in other emission units. See Attachment OC-EU5-A2.

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**20**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    This emission unit contains the unregulated emission sources at New Hope Power Company that contribute to the facility-wide fugitive emissions not addressed in any other emission unit.

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code: **018**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate:	million Btu/hr
4. Maximum Incineration Rate:	pounds/hr tons/day
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **4**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			**NS**
PM10			**NS**
VOC			**NS**
SO2			**NS**
NOx			**NS**
PM2.5			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions:		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20**% Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rules 62-296.320(4)(b)1. & 4., F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU5-A2

LIST OF UNREGULATED EMISSION UNITS AND/OR ACTIVITIES

ATTACHMENT OC-EU5-A2
LIST OF UNREGULATED EMISSION UNITS AND/OR ACTIVITIES

The below listed emissions units and/or activities have been identified by Okeelanta as "unregulated emissions units". Emissions units and activities meeting the requirements in Rule 62-213.430(6)(b), F.A.C. are also considered insignificant for purposes of Title V permitting.

New Hope Power Cogeneration Plant (ARMS ID No. 09900332)

ID No.	EU Description	Activities/Equipment
005	Cogeneration Plant - Miscellaneous support equipment	• 50,000 gallon distillate oil tank • Nominal 75 MW Steam Turbine Electrical Generator • Nominal 65 MW Steam Turbine Electrical Generator • Condensers • Two Cooling Towers • Switchyard, etc. • Boiler Drum Blowdown Tank • Hydrogen Sulfide Degasifier • Oil/water Separators • Sodium Hydroxide Tank • Wastewater Neutralization Tank • Cold Cleaning Devices (Parts Washers) • Sulfuric Acid Storage and Distribution Systems • Painting Operations • Portable Diesel Air Compressors • Portable Electric Generators • Portable Welders • Portable Pumps • Forklift, loader and crane operations • Urea Tank (30,000 gal) • Water Treatment Plant (for Boiler Water) • Natural Gas Station (valves, flanges, filters, etc) • Small Diesel Tanks

COGENERATION PLANT
RICE

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [6]
Cogen Plant - Reciprocating Internal Combustion Engines (RICE)

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

   Cogeneration Plant Reciprocating Internal Combustion Engines (RICE) – Six Engines

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Six on-site stationary Reciprocating Internal Combustion Engines (RICE). See Attachment OC-EU6-A11 for a detailed description of the engines.

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate:	million Btu/hr
4. Maximum Incineration Rate:	pounds/hr tons/day
5. Requested Maximum Operating Schedule:	**24** hours/day **7** days/week **52** weeks/year **8,760** hours/year
6. Operating Capacity/Schedule Comment: **The engines only operate during emergency situations.** **Limited to 100 hours per calendar year for maintenance and testing and emergency demand response; 50 hours per calendar year for operation in non-emergency situations (counted in the 100-hour limit per calendar year).**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NHPC Fire Water Makeup** **Diesel Fire Pump #1** **Diesel Fire Pump #2** **Air Compressor #1** **Air Compressor #2** **Back up Generator**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **P**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines: Electric Generation; Distillate Oil (Diesel); Reciprocating**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.0015**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **136**
10. Segment Comment:		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			**NS**
PM10			**NS**
VOC			**NS**
SO2			**NS**
NOx			**NS**
PM2.5			**NS**
CO			**EL**
VOC			**NS**
GHGs			**NS**
CO2e			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: **See Attachment OC-EU6-A11** Reference: **40 CFR 63, Subpart ZZZZ and 40 CFR 60, Subpart IIII**		7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions: **See Attachment OC-EU6-A11**		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **230 ppmvd @ 15% O_2**	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: **ASTM D6522-00 (Reapproved 2005) or Method 10 of 40 CFR part 60, appendix A-4**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **49 ppmvd @ 15% O2**	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(4)(b).**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION
Section [6]
Cogen Plant - Reciprocating Internal Combustion Engines (RICE)

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **1**

1. Parameter Code: **Hours**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Non-resettable hour meter required for each emergency engine as required by NESHAP Subpart ZZZZ and NSPS Subpart IIII.**	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU6-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU6-A11

LIST OF RICE ENGINES

Attachment OC-EU6-A11
Information for Existing RICE Engines - New Hope Power

Engines	Engine Make	Model	Man. Date	Duty	Horse Power Rating (HP)	Displacement (in^3)	Fuel	Subject to ZZZZ Existing/New	CO Limit (ppmvd @ 15% O_2)
NHPC Fire Water Makeup (9-10 AN-S MILL LOT)	Detroit	DD471	1981	Emergency	140	NA	Diesel	Existing	Work Practice Standard
Diesel Fire Pump #1 (Fire Pump Bldg by Warehouse)	Detroit	DDFP-L6VT-2362	Prior to 2005	Emergency	310	NA	Diesel	Existing	Work Practice Standard
Diesel Fire Pump #2 (Fire Water Tank S. of Ash Bunker)	Caterpillar	3208	Prior to 2005	Emergency	375	NA	Diesel	Existing	Work Practice Standard
Air Compressor #2	Caterpillar	C15	2011	Emergency	540	NA	Diesel	New	Meets Subpart IIII, Tier 4
Back up Generator	John Deere	4045HFS80	2013	Non-Emergency	90	NA	Diesel	New	Meets Subpart IIII, Tier III Certified

Note: CO testing is a one time, initial test. After the initial test demonstrates compliance, O&M and/or parameter monitoring may be required, depending on size of the engine

ATTACHMENT OC-EU6-I2

FUEL ANALYSIS

ATTACHMENT OC-EU6-I2

FUEL ANALYSIS
RICE ENGINES

Parameter	No. 2 Fuel Oil
Specific Gravity	0.865
Heating Value (Btu/lb)	19,175
Heating Value (Btu/gal)	138,000
Heating Value (Btu/scf)	
Ultimate Analysis (dry basis percentage)	
Carbon	87.01
Hydrogen	12.47
Nitrogen	0.02
Oxygen	0.00
Sulfur	0.05
Ash/Inorganic	0.00
Moisture	–

TRANS-SHIPMENT FACILITY

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [7]
Trans-Shipment Facility

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Trans-Shipment Facility

3. Emissions Unit Identification Number: **018, 019, 020, 030, 031, 032, 045, 046, 047, 049**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**20**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    This emission unit consists of Multiple Emission Points: The Central Vacuum System No. 1 Baghouse (EU 018), the Sugar Packaging Lines Baghouse (EU 019), the Grinder Baghouse (EU 020), the three Sugar Silo Baghouses (EU 030), the Railcar Unloading Receivers Nos. 1 & 2 Baghouses (EU 031 & 032), the Powdered Sugar Dryer/Cooler Baghouse (EU 045), the Powdered Sugar Hopper Baghouse (EU 046), the Sugar Packaging Lines 12-14 Baghouse (EU 047) and a Baghouse (Currently Inactive) (EU 049) 049).

EMISSIONS UNIT INFORMATION
Section [7]
Trans-Shipment Facility

Emissions Unit Control Equipment/Method: Control **1** of **2**

1. Control Equipment/Method Description: **Fabric Filter – Low Temperature (T < 180 F)** **12 baghouses (refer to Attachment OC-EU7-C15)**
2. Control Device or Method Code: **018**

Emissions Unit Control Equipment/Method: Control **2** of **2**

1. Control Equipment/Method Description: **Wet Cyclonic Separator** **(Inlet side of vacuum pump of Vacuum System)**
2. Control Device or Method Code: **085**

Emissions Unit Control Equipment/Method: Control _ of _

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **1,300 tons/day of sugar**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

Maximum throughput relates to the maximum refined sugar production rate.

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Trans-Shipment Facility**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **EU 018 - Central Vacuum System No. 1 Baghouse** **EU 019 - Sugar Packaging Lines Baghouse** **EU 020 - Sugar Grinder** **EU 030 - Sugar Silo Nos. 1-3** **EU031 - Railcar Unloading Receivers No. 1** **EU032 - Railcar Unloading Receivers No. 2** **EU045 - Powdered Sugar Dryer/Cooler, Packaging Line 8B** **EU046 - Powdered Sugar Hopper** **EU047 - Sugar Packaging Lines 12-14** **EU049 - Baghouse (Currently Inactive)**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **27** feet	7. Exit Diameter: **1.50** feet
8. Exit Temperature: **75**°F	9. Actual Volumetric Flow Rate: **10,000** acfm	10. Water Vapor: **0.025** %
11. Maximum Dry Standard Flow Rate: **9,868** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Parameters shown are for the existing Packaging Lines Baghouse (EU 019).** **See Attachment OC-EU7-C15 for stack/vent information on each separate emission point contained in this emission unit.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Food and Agriculture – Sugar Cane Processing, General**		
2. Source Classification Code (SCC): **3-02-015-01**	3. SCC Units: **Tons sugar produced**	
4. Maximum Hourly Rate: **81.5**	5. Maximum Annual Rate: **474,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum annual rate based on 1,300 tons/day of refined sugar.**		

Segment Description and Rate: Segment **_** of **_**

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**018**	**085**	**WP**
PM10	**018**	**085**	**NS**
PM2.5	**018**	**085**	**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **3.11** lb/hour **13.63** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: **Refer to Attachment OC-EU7-F1.10**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Refer to Attachment OC-EU7-F1.10.**	
11. Potential, Fugitive, and Actual Emissions Comment: **Potential emissions based on the baghouse design specification, the maximum exhaust flow rates, and 8,760 hours of operation per year. These rates are not enforceable emissions standards.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-297.620(4), Florida Administrative Code (F.A.C.) and Permit No. 0990005-038-AV. This limit applies to each point source exhaust stack.**	

V Visible Emissions Limitation: Visible Emissions Limitation _ of _

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [7]
Trans-Shipment Facility

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU7-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU7-I3** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: **See Attachment OC-EU7-I6**
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU7-IV1**
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU7-C15

STACK PARAMETER SUMMARY TABLE

Attachment OC-EU7-C15
Stack Parameter Summary Table for the Trans-Shipment Facility

Emission Source	Control Device	Point ID	Discharge Type	Stack Height (ft)	Exit Diameter (ft)	Exit Temperature (° F)	Actual Volumetric Flow Rate (acfm)	Percent Water Vapor (%) [a]	Maximum Standard Flow Rate (scfm)
Central Vacuum System No. 1	Baghouse	018	Horizontal	8	0.33	75	284	0.025	280
Sugar Packaging Lines 0-9	Baghouse	019	Vertical	27	1.5	75	10,000	0.025	9,869
Sugar Grinder	Baghouse	020	Horizontal	39	1.0 [b]	75	3,000	0.025	2,961
Sugar Silo No. 1	Baghouse	030	Horizontal	65	0.5	90	521	0.025	500
Sugar Silo No. 2	Baghouse	030	Horizontal	65	0.5	90	521	0.025	500
Sugar Silo No. 3	Baghouse	030	Horizontal	65	0.5	90	521	0.025	500
Railcar Unloading Receiver #1	Baghouse	031	Horizontal	5.0	0.50	90	641	0.025	615
Railcar Unloading Receiver #2	Baghouse	032	Horizontal	5.0	0.50	90	641	0.025	615
Powdered Sugar Dryer/Cooler, Packaging Line 8B	Baghouse	045	Vertical	48	2.0	90	9,000	0.025	8,640
Powdered Sugar Hopper	Baghouse	046	Horizontal	48	0.75	90	1,800	0.025	1,728
Sugar Packaging Lines 12, 13 and 14	Baghouse	047	Vertical	48	1.75	90	3,780	0.025	3,629
Baghouse (Currently Inactive)	Baghouse	049	Horizontal	9	0.94[c]	70	2,220	0.025	2,212

Footnotes:

[a] Percent water vapor content represents typical content of "Kathbar" treated air.

[b] Equivalent exit diameter based on a rectangular exhaust duct (10 inches by 11 inches) cross sectional area of 0.7638 sq. ft.
Equivalent diameter = 0.9862 ft.

[c] Equivalent exit diameter based on a rectangular exhaust duct (10 inches by 10 inches) cross sectional area of 0.6944 sq. ft.
Equivalent diameter = 0.9403 ft.

ATTACHMENT OC-EU7-F1.10

EMISSIONS CALCULATIONS

Attachment OC-EU7-F1.10
Summary of Particulate Emissions for the Trans-Shipment Facility

Emission Source	Point ID	Baghouse Guaranteed Manufacturer's Emission Rate	Baghouse Gas Flow Rate	Hourly Emissions (lb/hr)	Annual Emissions [a] (TPY)
Central Vacuum System No. 1	018	0.01 gr/scf	280 scfm	0.024	0.11
Sugar Packaging Lines 0-9	019	0.01 gr/scf	9,869 scfm	0.846	3.71
Sugar Grinder	020	0.0005 gr/scf	2,961 scfm	0.013	0.056
Sugar Silo No. 1	030	0.02 gr/scf	500 scfm	0.086	0.38
Sugar Silo No. 2	030	0.02 gr/scf	500 scfm	0.086	0.38
Sugar Silo No. 3	030	0.02 gr/scf	500 scfm	0.086	0.38
Railcar Unloading Receiver #1	031	0.02 gr/scf	615 scfm [b]	0.11	0.46
Railcar Unloading Receiver #2	032	0.02 gr/scf	615 scfm [b]	0.11	0.46
Powdered Sugar Dryer/Cooler, Packaging Line 8B	045	0.01 gr/scf	8,640 scfm	0.74	3.24
Powdered Sugar Hopper	046	0.01 gr/scf	1,728 scfm	0.15	0.65
Sugar Packaging Lines 12, 13 and 14	047	0.01 gr/scf	5,760 scfm	0.49	2.16
Baghouse (Currently Inactive)	049	0.02 gr/scf	2,212 scfm	0.38	1.66
		Total Particulate Emissions All Sources		3.11 lb/hr	13.63 TPY

[a] Based on 8,760 hr/yr operation.
[b] Vendor provided 1,150 scfm at 16" Hg Data shown is corrected to 1 atmosphere pressure (29.9" Hg).

ATTACHMENT OC-EU7-I1

PROCESS FLOW DIAGRAM

Baghouse (EU 049)
Inactive

Sugar From Railcar
Vacuum Sugar Receiver No. 2
Baghouse (EU 032)
Atmosphere
Baghouse (EU 031)
Vacuum Sugar Receiver No. 1
Sugar From Railcar
Conveyor and Bucket Elevator
Inactive

Off-Spec Sugar from Warehouse
Off-Spec Sugar Reclaim
Off-Spec Sugar to Truck

From Trucks
Atmosphere
Atmosphere
Atmosphere

Sugar Silo with Baghouse (EU 030)
Sugar Silo with Baghouse (EU 030)
Sugar Silo with Baghouse (EU 030)

Vacuum Hookups throughout Plant
Top of Silo
Bottom of Silo
Baghouse (EU 018)
Cyclone
Collection Bin
Atmosphere
Vacuum Pump
Inactive

Baghouse (EU 047)
Atmosphere

Distribution Conveyor
Distribution Conveyor

Pneumatic Distribution Conveyor

Surge Bins
Surge Bins
Surge Bins
Surge Bins

Vents inside building

Atmosphere
Baghouse (EU 046)
Grinder
Grinder
Baghouse (EU 020)
Atmosphere

Vent Inside Building
Packaging Lines 5B, 6, 7, 8A

Packaging Lines 12 and 13
Packaging Line 14
Packaging Line 0
Packaging Lines 1-5A
Baghouse (EU 019)

Distribution Conveyor

Packaging Line 9
Packaging Line 8B
Atmosphere
Baghouse (EU 045)

Shipment to Customer
Warehouse

Attachment OC-EU7-I1
Trans-shipment Facility Process Flow Diagram
Okeelanta Corporation Refinery
South Bay, Florida

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Process Flow Legend
Solid/Liquid
Gas

Golder Associates

ATTACHMENT OC-EU7-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT OC-EU7-I3a

CONTROL EQUIPMENT PARAMETERS FOR THE
CENTRAL VACUUM SYSTEM NO. 1 BAGHOUSE (EU 018) AT THE TRANS-SHIPMENT FACILITY

Central Vacuum System No. 1 Baghouse		
Manufacturer and Model No.	Ross Cook Model RC30HBFBX-PJ	
Outlet Gas Temp (^{o}F)		75
Outlet Gas Flow Rate (acfm)		284
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		280
Cleaning Method		Pulse Jet cleaning (Timer Actuated)
Bag Material		Polyfelt
Total Area of Filter Media (sq. ft)		72
Air to Cloth Ratio		3.9
Manufacturer's Guaranteed Outlet Loading (grains/scf)		0.01
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.024

Note: Parameters based on manufacturers design specifications.
Exit temperature from construction permit application.
Percent water vapor content represents typical content of "Kathbar" treated air.
Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X
outlet loading rate (grains/dscf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3b

CONTROL EQUIPMENT PARAMETERS FOR THE
SUGAR PACKAGING LINES 0-9 BAGHOUSE (EU 019) AT THE TRANS-SHIPMENT FACILITY

Sugar Packaging Lines 0-9		
Manufacturer and Model No.	MAC Environmental Model 55AVSC64 Style III	
Outlet Gas Temp (^{o}F)		75
Outlet Gas Flow Rate (acfm)		10,000
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		9,869
Cleaning Method		Pulse Jet cleaning (Timer Actuated)
Bag Material		Polyester Pleated
Total Area of Filter Media (sq. ft)		3,520
Air to Cloth Ratio		2.84
Manufacturer's Guaranteed Outlet Loading (grains/acf)		0.01
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.846

Note: Parameters based on manufacturers design specifications.
Exit temperature from construction permit application.
Percent water vapor content represents typical content of "Kathbar" treated air.
Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X
outlet loading rate (grains/acfm) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3c

CONTROL EQUIPMENT PARAMETERS FOR THE SUGAR GRINDER BAGHOUSE (EU 020) AT THE TRANS-SHIPMENT FACILITY

Sugar Grinder System Baghouse		
Manufacturer and Model No.	Reimelt Corp. Model	
Outlet Gas Temp (^{o}F)		75
Outlet Gas Flow Rate (acfm)		3,000
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		2,961
Cleaning Method		Pulse Jet cleaning (Timer Actuated)
Bag Material		Gor-Tex Polyester
Total Area of Filter Media (sq. ft)		800
Air to Cloth Ratio		3.75
Manufacturer's Guaranteed Outlet Loading (grains/scf)		0.0005
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.013

Note: Parameters based on manufacturers design specifications.
Exit temperature from construction permit application.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:

Outlet loading rate (lb/hr) = outlet gas flow rate (dscfm) X
outlet loading rate (grains/dscf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3d

CONTROL EQUIPMENT PARAMETERS FOR THE
SUGAR STORAGE SILOS BAGHOUSES (EU 030)
AT THE TRANS-SHIPMENT FACILITY

Each Storage Silo Baghouse		
Manufacturer and Model No.	Reimelt Corp. Model JF795-14P-7.5-5	
Outlet Gas Temp (^{o}F)		90
Outlet Gas Flow Rate (acfm)		521
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		500
Cleaning Method		Pulse Jet cleaning (Timer Actuated)
Bag Material		Polyester
Total Area of Filter Media (sq. ft)		81
Air to Cloth Ratio		6.17
Manufacturer's Guaranteed Outlet Loading (grains/scf)		0.02

Pollutants	Outlet Loading
Particulate Matter (lb/hr)	0.0857

Note: Parameters based on manufacturers design specifications.
Exit temperature from construction permit application.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (dscfm) X
outlet loading rate (grains/dscf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3e

CONTROL EQUIPMENT PARAMETERS FOR THE RAILCAR UNLOADING NOS. 1 AND 2 BAGHOUSES (EU 031 AND EU 032) AT THE TRANS-SHIPMENT FACILITY

Each Railcar Unloading Receiver Nos. 1 and 2 Baghouse		
Manufacturer and Model No.	United States Systems 84AVR36:60S	
Outlet Gas Temp (^{o}F)		90
Outlet Gas Flow Rate (acfm)		641
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		615
Cleaning Method		--
Bag Material		Polyester (Scrim supported felt type)
Total Area of Filter Media (sq. ft)		408
Air to Cloth Ratio		1.57
Manufacturer's Guaranteed Outlet Loading (grains/scf)		0.02
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.105

Note: Parameters based on manufacturers design specifications.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X
outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3f

CONTROL EQUIPMENT PARAMETERS FOR THE POWDERED SUGAR DRYER/COOLER AND PACKAGING LINE 8B BAGHOUSE (EU 045) AT THE TRANS-SHIPMENT FACILITY

Powdered Sugar Dryer/Cooler and Packaging Line 8B Baghouse		
Manufacturer and Model No.	Reimelt Corp. Model SL3-18	
Outlet Gas Temp (^{o}F)		90
Outlet Gas Flow Rate (acfm)		9,000
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		8,640
Cleaning Method		Pulse Jet cleaning (Timer Actuated)
Bag Material		Duratex II (pleated cartridges)
Total Area of Filter Media (sq. ft)		4,824
Air to Cloth Ratio		1.87
Manufacturer's Guaranteed Outlet Loading (grains/acf)		0.01
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.741

Note: Parameters based on manufacturers design specifications.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X
outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3g

CONTROL EQUIPMENT PARAMETERS FOR THE POWDERED SUGAR HOPPER BAGHOUSE (EU 046) AT THE TRANS-SHIPMENT FACILITY

Powdered Sugar Hopper Baghouse		
Manufacturer and Model No.	Reimelt Corp. Model 24TB-FRIP-32:S6	
Outlet Gas Temp (^{o}F)		90
Outlet Gas Flow Rate (acfm)		1,800
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		1,728
Cleaning Method		Pulse Jet cleaning (Timer Actuated)
Bag Material		Spun Bond Polyester (pleated elements)
Total Area of Filter Media (sq. ft)		325
Air to Cloth Ratio		5.54
Manufacturer's Guaranteed Outlet Loading (grains/acf)		0.01
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.148

Note: Parameters based on manufacturers design specifications.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X
outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3h

CONTROL EQUIPMENT PARAMETERS FOR THE
PACKAGING LINES 12, 13 & 14 BAGHOUSE (EU 047) AT THE TRANS-SHIPMENT FACILITY

Packaging Lines 12, 13 and 14 Baghouse		
Manufacturer and Model No.	MAC Equipment Inc. 55RTC52	
Outlet Gas Temp (^{o}F)		90
Outlet Gas Flow Rate (acfm)		6,000
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		5,760
Cleaning Method		Pulse Jet cleaning (Timer Actuated)
Bag Material		Polyester (pleated tubular cartridge)
Total Area of Filter Media (sq. ft)		2,662
Air to Cloth Ratio		2.25
Manufacturer's Guaranteed Outlet Loading (grains/acf)		0.01
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.494

Note: Parameters based on manufacturers design specifications.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X
outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I3i

CONTROL EQUIPMENT PARAMETERS FOR THE CURRENTLY INACTIVE BAGHOUSE (EU 049) AT THE TRANS-SHIPMENT FACILITY

Baghouse		
Manufacturer and Model No.	SLY Incorporated Model: SBR-66-8 TubeJet Dust Collector	
Outlet Gas Temp (^{o}F)		70
Outlet Gas Flow Rate (acfm)		2,220
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		2,212
Cleaning Method		--
Bag Material		Polyester (Scrim supported felt type)
Total Area of Filter Media (sq. ft)		432
Air to Cloth Ratio		5.14
Manufacturer's Guaranteed Outlet Loading (grains/scf)		0.02
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.379

Note: Parameters based on manufacturers design specifications.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (scfm) X
outlet loading rate (grains/scf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT OC-EU7-I6

COMPLIANCE DEMONSTRATION REPORTS

ATTACHMENT OC-EU7-I6
COMPLIANCE DEMONSTRATION REPORTS

Source ID	Observation Date	Report Date
EU18	DNO	--
EU19	8/29/2014	9/23/2014
EU20	8/29/2014	9/23/2014
EU30 Avg	8/26/2014	9/23/2014
EU31	DNO	--
EU32	DNO	--
EU45	8/29/2014	9/23/2014
EU46	8/29/2014	9/23/2014
EU47	8/29/2014	9/23/2014
EU49	DNO	--

DNO= did not operate during the year

ATTACHMENT OC-EU7-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

NOTICE OF FINAL PERMIT

January 16, 2009

CERTIFIED MAIL 7008 0150 0003 1458 8404
RETURN RECEIPT REQUESTED

In the Matter of an
Application for Permit by:

Ricardo A. Lima, President
Okeelanta Corporation
21250 U.S. Highway 27 South
South Bay, Florida 33493

Palm Beach County - AP
Okeelanta Sugar Mill
DEP File No. 0990005-023-AC

Enclosed is Final Permit Number 0990005-023-AC. This permit authorizes Okeelanta Corporation to construct or modify the following at its Okeelanta Sugar Mill trans-shipment facility: 1) construct a new baghouse to control sugar dust; 2) modify emission units as a result of changes to operational activities and equipment; and 3) redirect emissions from existing emission units to different existing and new emission units. This facility is located 21250 U.S. Highway 27 South, South Bay, Palm Beach County. This permit is issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____

Jon M. Iglehart
Director of
District Management
Post Office Box 2549
Fort Myers, Florida 33902-2549
(239) 332-6975

NOTICE OF FINAL PERMIT
Okeelanta Corporation
Okeelanta Sugar Mill
DEP File No. 0990005-023-AC
January 16, 2009

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Ricardo A. Lima *
Matthew Capone – matthew_capone@floridacrystals.com
David Buff – dbuff@golder.com
James Stormer - james_stormer@doh.state.fl.us
Jeff Koerner, P.E. – Jeff.koerner@dep.state.fl.us

Clerk Stamp

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

_____ _____
CLERK Date

Attachments
JMI/SRM/jw

PERMITTEE:
Okeelanta Corporation
Okeelanta Sugar Mill
21250 U.S. Highway 27 South
South Bay, Florida 33493

Facility I.D. No.: 0990005
Permit Number: 0990005-023-AC
Date of Issue: January 16, 2009
Expiration Date: January 15, 2010
County: Palm Beach
Latitude: 26° 35′ 00" N
Longitude: 80° 45′ 00" W
Project: Trans-Shipment Facility

This permit is issued under the provisions of Chapter 403.087, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-296, and 62-297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

PROJECT DESCRIPTION

This permit authorizes the construction of a new baghouse to control sugar dust from packaging line 14 (new EU049). This permit also authorizes the modification of emission units EU019 (sugar packaging lines 0-9), EU045 (powdered sugar dryer/cooler), and EU047 (sugar packaging lines 11-14). Emissions from packaging lines 14 and 11 will no longer be controlled by EU047. Packaging line 14 (new EU049) emissions will be controlled by new baghouse. Emissions from packaging line 11 will be vented to the main sugar receiver which vents inside the building. Packaging line 8 will be split into two separate packaging lines, 8A and 8B. Emissions from packaging lines 8A and 8B will be vented to the baghouse controlling emissions from EU019 and the baghouse controlling emissions from EU045. The new construction and modifications will increase the trans-shipment facility's total particulate matter (PM) emissions by an additional 1.35 TPY for a total of 13.65 TPY PM.

The facility is located at 21250 U.S. Highway 27 South, South Bay, Palm Beach County. The trans-shipment facility is located approximately one-half mile south of the sugar refinery.

I. FACILITY DESCRIPTION

Okeelanta Corporation operates a sugar mill, a sugar refinery, and a trans-shipment facility. The facility consists of two adjacent plants. New Hope Power Company operates a cogeneration plant that provides process steam for the sugar mill/refinery and generates electricity for sale to the power grid (SIC No. 4911). The cogeneration plant, sugar mill, and sugar refinery are all considered a single facility for purposes of the PSD and Title V regulatory programs.

Extra-fine granulated sugar (EFG) from the sugar refinery is delivered to the trans-shipment facility. The sugar is unloaded at one of three locations and transferred to either surge bins located above the packaging lines or storage silos. Sugar is transferred from each silo by screw conveyors into surge bins.

Sugar is packaged in one of 14 packaging lines. Thirteen packaging lines [lines 0-9 (EU019), line 12 and 13 (EU047), and line 14 (EU049)] are controlled by baghouses. Sugar is metered from the surge bins into the packaging lines for processing into a variety of packages and containers for wholesale and retail distribution.

PERMITTEE:
Okeelanta Corporation
Okeelanta Sugar Mill

Facility I.D. No.: 0990005
Permit Number: 0990005-023-AC
Date of Issue: January 16, 2009
Expiration Date: January 15, 2010

SPECIFIC CONDITIONS:

Summary of Emissions Units

This facility consists of the following emission units:

EU	Emission Unit Description	EU	Emission Unit Description
018	Central vacuum system No. 1	032	Railcar sugar unloading receiver No. 2
019	Sugar packaging lines 0-9, including packaging lines 8A and 8B	045	Powdered sugar dryer/cooler, packaging lines 8A and 8B
020	Sugar grinder	046	Powdered sugar hopper
030	Sugar silos Nos. 1, 2, and 3 (Points #1101-1103)	047	Sugar packaging lines 12 and 13
031	Railcar sugar unloading receiver No. 1	049	Packaging line 14

Regulatory Classification

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

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

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

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

II. FACILITY WIDE CONDITIONS:

1. General Conditions. An integral part of this permit is the **attached 15 General Conditions**. [Rule 62-4.160, F.A.C.]

2. Permitting Authority. All documents related to applications for permits to construct or operate shall be submitted to the Air Resource Section of Department's South District Office, Post Office Box 2549, Fort Myers, Florida, 33902-2549. Copies of all such documents shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-240 and the Air Pollution Control Section of the Palm Beach County Health Department, Post Office Box 29, West Palm Beach, Florida, 33402-0029.

3. Compliance Authority. The permittee shall submit all compliance related notifications and reports required by this permit to the Air Pollution Control Section of the Palm Beach County Health Department, Post Office Box 29, West Palm Beach, Florida, 33402-0029. Copies of all such documents shall be submitted to the Department's South District office at Post Office Box 2549, Fort Myers, Florida, 33902-2549.

4. Applicable Regulations, Forms and Application Procedures. Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit

does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions. For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications. The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

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

8. Objectionable Odor Prohibited. The transshipment facility shall not discharge 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(219), F.A.C.]

9. Fugitive Dust Emissions. This permit requires the use of fans, filters, pneumatic unloading/loading, ductwork, storage silos and other similar equipment to contain, capture, and/or control particulate matter related to the storage and handling of sugar at the transshipment facility. 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.
    a. Enclose or cover conveyor systems.
    b. Confine abrasive blasting where possible.
    c. As necessary, landscape and/or plant vegetation.
    d. As necessary, pave and maintain high-traffic roads, parking areas and yards.
    e. As necessary, remove particulate matter from roads, work areas, buildings, and other paved areas under the control of the permittee to prevent fugitive dust emissions.
    f. As necessary, apply water or other dust suppressants to control emissions from unpaved roads, yards, and other activities as road grading, land clearing, and the demolition of buildings.

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

10. Operating Permit. To obtain a permit to operate, the permittee must submit a timely and complete application for an operating permit {"Application for Air Permit –Title V Source" [DEP Form 62-210.900(1)]}, to the Department. A timely application is one which is submitted at least ninety days before expiration of the

construction permit, but no later than 180 days after commencing operation as a Title V source. An applicant making timely and complete application for a permit shall continue to operate the source under the authority and provisions of this permit. Upon completion of construction, the application shall include the appropriate application fee and required testing results that demonstrate compliance with all permitted emission limits. All applications shall be certified by a professional engineer registered in the State of Florida. [Rules 62-213.420(1)(a) & (b), 62-297.310(7)(a)1., and 62-4.050(3), F.A.C.]

11. Regulation Compliance. Issuance of the permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 62-210, 92-212, 62-252, 62-272, 62-273, 62-275, 62-296 and 62-297, F.A.C., or any other requirements under federal, state or local law. Other new regulations may impact this source at a future date, and the permittee shall comply with any applicable future regulations when and if they become effective. [Rule 62-210.300, F.A.C.]

12. General Visibility Emissions (VE) Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity).
    a. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
    b. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

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

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

14. Changes/Modifications. The permittee shall submit to the Department for review, any changes in, or modifications to: the method of operations; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain, an air construction permit prior to making the desired change. Routine maintenance of equipment will not constitute a modification of this permit. [Rules 62-4.030, 62-210.300 and (1)(a), and 62-4.210, F.A.C.]

15. Special Compliance Tests. When the Compliance Authority, 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 Compliance Authority. [Rule 62-297.310(7)(b), F.A.C.]

III. EMISSIONS UNITS AND DESCRIPTION

This section of the permit addresses the following emissions units:

EU	Emission Unit Description
019	Sugar packaging lines 0-9, including packaging lines 8A and 8B
045	Powdered sugar dryer/cooler, packaging lines 8A and 8B
047	Sugar packaging lines 12 and 13
049	Packaging line 14

Equipment

16. New Operations. The permittee is authorized to the modify the operations of the trans-shipment process as follows:
    a. Packaging line 8 will be separated into packaging lines 8A and 8B. Packaging lines 8A and 8B will vent emissions to the baghouse controlling emissions from EU019 and the baghouse controlling emissions from EU045.
    b. Packaging line 11 and packaging line 14 will no longer vent emissions to EU047. Packaging line 11 will vent emissions to the main sugar receiver. The main sugar receiver vents inside the building and is not controlled by a baghouse. Packaging line 14 (new EU049) will vent to the new baghouse authorized by this permit.

17. New Baghouse. The permittee is authorized to the install a new baghouse to control emissions from packaging line 14 (new EU049). Packaging line 14 will no longer vent emissions to EU047.

18. Baghouse Design Specifications. Each of the following emissions units shall be controlled by a baghouse that is designed, operated, and maintained to achieve the particulate matter baghouse design specification (grains/scf) identified in the following table:

EU	Emission Unit Description	Baghouse Specification [a] (grains/scf)	Exhaust Rate scfm	Stack Height	Maximum Emissions [b]	
				(feet)	lb/hour	tons/year
019	Sugar packaging lines (0-9)	0.01	9869	27	0.85	3.71
045	Powdered sugar dryer/cooler, Packaging Lines 8A & 8B	0.01	8640	48	0.74	3.24
047	Sugar packaging lines (12,13)	0.01	3629	48	0.49	2.16
049	Packaging Line 14	0.02	2212	9	0.38	1.66

    a. New and replacement bags shall meet these specifications based on vendor information. No particulate matter emissions tests are required.
    b. These rates represent the maximum expected emissions based on the baghouse design specification, the maximum exhaust flow rates, and 8760 hours of operation per year. These rates are not enforceable emissions standards.

SPECIFIC CONDITIONS:

Essential Potential to Emit Parameters

19. Permitted Capacity. The maximum sugar packaging rate is 1300 tons per day. [Rule 62-210.200(PTE), F.A.C.]

20. Restricted Operation. The hours of operation are not limited. [Rules 62-4.070(3), and 62-210.200(PTE), F.A.C.]

21. Plant Operation – Problems. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

Emissions Limits and Standards

22. Opacity Standard. As determined by EPA Method 9 observations, visible emissions from each baghouse exhaust point shall not exceed 5% opacity. [Rule 62-4.070(3), F.A.C.; Permit No. 0990005-019-AC]

Excess Emissions

23. Excess Emissions – Allowed. Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

24. Excess Emissions – Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

25. Excess Emissions – Notification. In case of excess emissions resulting from malfunctions, the permittee shall notify the Department Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Compliance Authority. [Rule 62-210.700(6), F.A.C.]

Test Methods and Procedures

26. Initial Compliance Tests. The new baghouse exhaust point for EU049 shall be tested to demonstrate initial compliance with the specified opacity standard. The initial test shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [Rule 62-297.310(7)(a)1, F.A.C.]

SPECIFIC CONDITIONS:

27. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), each baghouse exhaust point shall be tested to demonstrate compliance with the specified opacity standard. [Rule 62-297.310(7)(a)4, F.A.C.]

28. Tests Prior to Renewal. Within the 12-month period prior to renewing the operation permit, each baghouse exhaust point shall be tested to demonstrate compliance with the specified opacity standard. [Rule 62-297.310(7)(a)3, F.A.C.]

29. Test Method. All tests shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Tests shall also comply with the applicable requirements of Rule 62-297.310, F.A.C. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

30. Test Procedures. Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. The permittee shall record the actual sugar processing rate for the emissions unit being controlled and tested. [Rules 62-297.310(4) and (5), F.A.C.]

31. Test Notification. At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify the Compliance Authority of: the date, time, and place of the test; and the contact person who will be responsible for coordinating and having the test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

Recordkeeping and Reporting Requirements

32. Test Reports. The permittee shall submit a report to the Compliance Authority on the results of each opacity test. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Compliance Authority to determine if the test was properly conducted and the test results properly computed. The test report shall include the information specified in Rule 62-297.310(8), F.A.C. The required test report shall be filed as soon as practical but no later than 45 days after completing the test. [Rule 62-297.310(8), F.A.C.]

33. Records Retention. All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Compliance Authority upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

34. Annual Operating Reports (AOR). The permittee shall submit to Air Pollution Control Section of the Palm Beach County Health Department (with copies submitted to the Department's South District office) by April 1 of the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office. [Rule 62-210.370(3), F.A.C.]

35. Operational Data. The permittee shall maintain daily and monthly records of the sugar packaging rate to demonstrate compliance with the permit limitations specified in Condition 19. of this permit. [Rule 62-4.070(3), F.A.C.]

PERMITTEE:
Okeelanta Corporation
Okeelanta Sugar Mill

Facility I.D. No.: 0990005
Permit Number: 0990005-023-AC
Date of Issue: January 16, 2009
Expiration Date: January 15, 2010

SPECIFIC CONDITIONS:

NOTE: In the event of an emergency the permittee shall contact the Department by calling (850) 413-9911. During normal business hours, the permittee shall call **(239) 332-6975.**

Issued this 16th day of January 2009.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____

Jon M. Iglehart
Director of
District Management
Post Office Box 2549
Fort Myers, Florida 33902-2549
(239) 332-6975

JMI/SRM/jw

PERMITTEE:
Okeelanta Corporation
Okeelanta Sugar Mill

Facility I.D. No.: 0990005
Permit Number: 0990005-023-AC
Date of Issue: January 16, 2009
Expiration Date: January 15, 2010

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey 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 or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   (a) Have access to and copy any records that must be kept under the conditions of the permit;
   (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

GENERAL CONDITIONS:

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

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

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.l20 and 62-730.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit incorporates the following previously issued determinations:
   (a) Determination of Best Available Control Technology (not applicable);
   (b) Determination of Prevention of Significant Deterioration (not applicable); and
   (c) Compliance with New Source Performance Standards (not applicable).

14. The permittee shall comply with the following:

   (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
   (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

GENERAL CONDITIONS:

(c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The person responsible for performing the sampling or measurements;
3. The date's analyses were performed;
4. The person responsible for performing the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Memorandum

Florida Department of Environmental Protection

TO: Michael G. Cooke, DARM Director

THRU: Trina Vielhauer, BAR Chief

FROM: Jeff Koerner, Air Permitting North Program

DATE: April 4, 2006

SUBJECT: Air Permit No. 0990005-019-AC
Okeelanta Corporation
Sugar Transshipment Facility - Expansion Project

The Final Permit for this project is attached for your approval and signature. The permit authorizes the construction of: two new sugar receivers (with baghouses) to pneumatically unload sugar from railcars; and a new sugar packaging line (Line "0"), which will share an existing baghouse system. The sugar packaging capacity of the transshipment facility will increase from 865 tons per day to 1300 tons per day. The new equipment will be installed at the existing sugar transshipment facility (SIC No. 2062), which is located approximately one-half mile south of the Okeelanta sugar refinery. The existing facility is located in Palm Beach County at 21250 U.S. Highway 27 South in South Bay, Florida. The project results in a minor source air construction permit and is not subject to PSD preconstruction review.

The Department distributed an "Intent to Issue Permit" package on February 27, 2006. The applicant published the "Public Notice of Intent to Issue" in the Palm Beach Post on March 17, 2006. The Department received the proof of publication on March 29, 2006. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

Day #90 is June 11, 2006. I recommend your approval of the attached Final Permit for this project.

Attachments

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Okeelanta Corporation
21250 U.S. Highway 27 South
South Bay, Florida 33493

Authorized Representative:
Mr. Ricardo Lima, V.P. and General Manager

Air Permit No. 0990005-019-AC
Okeelanta Corporation
Sugar Transshipment Facility

Enclosed is Final Air Permit No. 0990005-019-AC, which authorizes the construction of two new sugar receivers (with baghouses) to pneumatically unload sugar from railcars; and a new sugar packaging line (Line "0"), which will share an existing baghouse system. The sugar packaging capacity of the transshipment facility will increase from 865 tons per day to 1300 tons per day. The new equipment will be installed at the existing sugar transshipment facility (SIC No. 2062), which is located approximately one-half mile south of the Okeelanta sugar refinery. The existing facility is located in Palm Beach County at 21250 U.S. Highway 27 South in South Bay, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina L Vielhauer

Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4/11/06 to the persons listed:

Ricardo Lima, Okeelanta Corporation*
Matthew Capone, Okeelanta Corporation
David Buff, Golder Associates Inc.
Ron Blackburn, SD Office
James Stormer, PBCHD

Clerk Stamp

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

Barbara J. Smedley (Clerk) 4/11/06 (Date)

FINAL DETERMINATION

PERMITTEE

Okeelanta Corporation
21250 U.S. Highway 27 South
South Bay, Florida 33493

PERMITTING AUTHORITY

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

PROJECT

Air Permit No. 0990005-019-AC
Okeelanta Corporation
Sugar Transshipment Facility

This permit authorizes the construction of: two new sugar receivers with separate baghouses to pneumatically unload sugar from railcars; and a new sugar packaging line (Line "0"), which will share an existing baghouse system. The sugar packaging capacity of the transshipment facility will increase from 865 tons per day to 1300 tons per day. The new equipment will be installed at the existing sugar transshipment facility (SIC No. 2062), which is located approximately one-half mile south of the Okeelanta sugar refinery. The existing facility is located in Palm Beach County at 21250 U.S. Highway 27 South in South Bay, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on February 27, 2006. The applicant published the "Public Notice of Intent to Issue" in the Palm Beach Post on March 17, 2006. The Department received the proof of publication on March 29, 2006. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

COMMENTS

Only minor comments were received from the applicant. The comments and the Department's response are summarized below.

1. New Railcar Sugar Unloading Receivers: In the descriptions throughout the permit for this equipment, replace "separate baghouses" with "integral baghouses" or "built-in baghouses". Also, identify each railcar sugar unloading receiver as a separate Emissions Unit. *Response*: The intent was merely to recognize that there will be two baghouses. The permit was clarified to read, "Each railcar sugar unloading receiver (EU-031, EU-032) shall be controlled by a baghouse."
2. Sugar Silo EU Numbers: To clarify the record keeping and reporting requirements, revise the three Emissions Unit numbers for these silos (EU-026, EU-027, and EU-028) to a common Emissions Unit number. *Response*: The permit was revised to identify the three silos as a single Emissions Unit (030) with three separate Emissions Points (S1101, S1102, and S1103).

CONCLUSION

The final action of the Department is to issue the permit with the changes described above.

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

PERMITTEE:

Okeelanta Corporation
21250 U.S. Highway 27 South
South Bay, Florida 33493

Authorized Representative:
Mr. Ricardo Lima, V.P. and General Manager

Air Permit No. 0990005-019-AC
Okeelanta Corporation
Sugar Transshipment Facility
Expansion Project
Permit Expires: April 4, 2008

PROJECT AND LOCATION

This permit authorizes the construction of: two new sugar receivers (with baghouses) to pneumatically unload sugar from railcars; and a new sugar packaging line (Line "0"), which will share an existing baghouse system. The sugar packaging capacity of the transshipment facility will increase from 865 tons per day to 1300 tons per day. The new equipment will be installed at the existing sugar transshipment facility (SIC No. 2062), which is located approximately one-half mile south of the Okeelanta sugar refinery. The existing facility is located in Palm Beach County at 21250 U.S. Highway 27 South in South Bay, Florida. The UTM coordinates are Zone 17, 524.90 km East, and 2940.10 km North. The map coordinates are latitude 26° 35' 00" N and longitude 80° 45' 00" W.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

Michael G. Cooke, Director
Division of Air Resource Management

4/11/06
(Effective Date)

FACILITY AND PROJECT DESCRIPTION

The facility consists of two adjacent plants. New Hope Power Partnership (ARMS ID No. 0990332) operates a nominal 140 MW cogeneration plant that provides process steam for the sugar mill/refinery and generates electricity for sale to the power grid (SIC No. 4911). Okeelanta Corporation (ARMS ID No. 0990005) operates a sugar mill (SIC No. 2061), sugar refinery (SIC No. 2062) and transshipment facility. The cogeneration plant, sugar mill, and sugar refinery are all considered a single facility for purposes of the PSD and Title V regulatory programs. The transshipment facility is located approximately one-half mile south of the sugar refinery and consists of the following emissions units.

ID	Emission Unit Description	ID	Emission Unit Description
018	Central vacuum system No. 1	032	Railcar sugar unloading receiver No. 2 (New)
019	Sugar packaging line Nos. 0-9 (New Line "0")	045	Powdered sugar dryer/cooler
020	Sugar grinder	046	Powdered sugar hopper
030	Sugar silos Nos. 1, 2, and 3 (Points #1101-1103)	047	Sugar packaging lines (11-14)
031	Railcar sugar unloading receiver No. 1 (New)	---	---

Extra-fine granulated sugar (EFG) from the refinery is delivered to the transshipment facility at one of three locations. At the east truck receiving dock, trucks are pneumatically unloaded into a main sugar receiver, which pneumatically transfers sugar into surge bins above packaging lines (11-14). At the north side of the facility, trucks are unloaded at a bulk receiving station by locking a boot mechanism against the truck's hopper and sugar is transferred from trucks by screw conveyors to a bucket elevator feeding one of three storage silos. At the north railcar receiving station just west of the sugar silos, railcars will be pneumatically unloaded into two new sugar receivers for transfer by screw conveyor to a bucket elevator feeding one of three storage silos. The west receiver will also transfer sugar directly to a surge bin for new packaging line "0", which will be used to fill totes north of packaging line "1" in the existing packaging room. At the three storage silos, sugar is transferred by screw conveyor into surge bins located above packaging lines (1-9).

Sugar is metered from the surge bins into the packaging lines for processing into a variety of packages and containers for wholesale and retail distribution. A small portion of sugar can be conveyed to the grinder and mixed with starch to produce powdered sugar. In addition, brown sugar may be produced by mixing light or dark molasses with the extra fine granulated sugar.

The transshipment facility emits particulate matter due to the handling and storage of sugar. The transshipment facility was constructed in 1996 with nine sugar packaging lines (1-9) and consisted of four primary areas: truck unloading; packaging; warehouse; and office/administration areas. An expansion project in 2000 added: four new packaging lines (11-14); a pneumatic main sugar receiver storage bin; and additional packaging/storage areas. This project will add packaging line "0" and two railcar unloading receivers. The transshipment facility has been permitted such that total potential emissions of all included emissions units are below the PSD significant emission rate of 15 tons per year of PM_{10}. After this expansion project, the total potential emissions from the transshipment facility will remain below the PSD significant emission rate of 15 tons per year of PM_{10}.

REGULATORY CLASSIFICATION

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

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

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

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

RELEVANT DOCUMENTS

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

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct or operate shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall be submitted to the Air Resource Section of the Department's South District Office (Post Office Box 2549, Fort Myers, Florida, 33902-2549) and the Air Pollution Control Section of the Palm Beach County Health Department (Post Office Box 29, West Palm Beach, Florida, 33402-0029).

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's South District Office (Post Office Box 2549, Fort Myers, Florida, 33902-2549) and the Air Pollution Control Section of the Palm Beach County Health Department (Post Office Box 29, West Palm Beach, Florida, 33402-0029).

3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Format); and Appendix B (General Conditions).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

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

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Transshipment Facility

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description	ID	Emission Unit Description
018	Central vacuum system No. 1	032	Railcar sugar unloading receiver No. 2 (New)
019	Sugar packaging line Nos. 0-9 (New Line "0")	045	Powdered sugar dryer/cooler
020	Sugar grinder	046	Powdered sugar hopper
030	Sugar silos Nos. 1, 2, and 3 (Points #1101-1103)	047	Sugar packaging lines (11-14)
031	Railcar sugar unloading receiver No. 1 (New)	---	---

EQUIPMENT

1. Existing Equipment: The transshipment facility consists of the following existing equipment: central vacuum system No. 1 (EU-018); sugar packaging line Nos. 1-9 (EU-019); sugar grinder (EU-020); sugar silos Nos. 1 - 3 (EU-030); powdered sugar dryer/cooler (EU-045); powdered sugar hopper (EU-046); and sugar packaging lines 11-14 (EU-047). Each existing units shall be controlled by a baghouse system. This air construction permit supersedes all previous air construction permits for the transshipment facility. [Rule 62-4.070(3), F.A.C.]

2. New Sugar Packaging Line: The permittee is authorized to the install a new packaging line "0". The new packaging line will be added to the group of existing packaging lines 1-9 (EU-019) and shall be controlled by the existing common baghouse. [Design; Application No. 0990005-019-AC]

3. New Railcar Sugar Unloading Receivers: The permittee is authorized to the install two new railcar sugar unloading receivers (Nos. 1 and 2). Each railcar sugar unloading receiver (EU-031, EU-032) shall be controlled by a baghouse. [Design; Application No. 0990005-019-AC]

4. Baghouse Design Specifications: Each of the following emissions units shall be controlled by a baghouse that is designed, operated, and maintained to achieve the particulate matter baghouse design specification (grains/scf) identified in the following table.

ID	Emission Unit Description	Baghouse Specification [a] (grains/scf)	Exhaust Rate scfm	Maximum Emissions [b]	
				lb/hour	tons/year
018	Central vacuum system No. 1	0.01	280	0.024	0.11
019	Sugar packaging lines (0-9)	0.01	9869	0.86	3.75
020	Sugar grinder	0.0005	2961	0.013	0.06
030	Sugar silo No. 1 (Point #S1101)	0.02	500	0.086	0.38
	Sugar silo No. 2 (Point #S1102)	0.02	500	0.086	0.38
	Sugar silo No. 3 (Point #S1103)	0.02	500	0.086	0.38
031	Railcar unloading receiver No. 1	0.02	615	0.11	0.46
032	Railcar unloading receiver No. 2	0.02	615	0.11	0.46
045	Powdered sugar dryer/cooler	0.01	8640	0.77	3.38
046	Powdered sugar hopper	0.01	1728	0.15	0.68
047	Sugar packaging lines (11-14)	0.01	5760	0.51	2.25
				Total	12.29

a. New and replacement bags shall meet these specifications based on vendor information. No particulate matter emissions tests are required.

b. These rates represent the maximum expected emissions based on the baghouse design specification, the maximum

exhaust flow rates, and 8760 hours of operation per year. These rates are not enforceable emissions standards.

[Design; Application No. 0990005-019-AC]

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.]

PERFORMANCE RESTRICTIONS

6. Permitted Capacity: The maximum sugar packaging rate is 1300 tons per day. [Rule 62-210.200(PTE), F.A.C.; [Design; Application No. 0990005-019-AC]

7. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rule 62-4.070(3), F.A.C; 62-210.200(PTE), F.A.C.]

8. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

9. Fugitive Dust Emissions: This permit requires the use of fans, filters, pneumatic unloading/loading, ductwork, storage silos and other similar equipment to contain, capture, and/or control particulate matter related to the storage and handling of sugar at the transshipment facility. 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.

   a. Enclose or cover conveyor systems.

   b. Confine abrasive blasting where possible.

   c. As necessary, landscape and/or plant vegetation.

   d. As necessary, pave and maintain high-traffic roads, parking areas and yards.

   e. As necessary, remove particulate matter from roads, work areas, buildings, and other paved areas under the control of the permittee to prevent fugitive dust emissions.

   f. As necessary, apply water or other dust suppressants to control emissions from unpaved roads, yards, and other activities as road grading, land clearing, and the demolition of buildings.

   [Rule 62-296.320(4)(c), F.A.C.; Rule 62-4.070(3), F.A.C.]

10. Objectionable Odor Prohibited: The transshipment facility shall not discharge 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) and62-210.200(187), F.A.C.]

EMISSIONS STANDARDS

11. Opacity Standard: As determined by EPA Method 9 observations, visible emissions from each baghouse exhaust point shall not exceed 5% opacity. [Rule 62-4.070(3), F.A.C.; Application No. 0990005-019-AC]

12. Excess Emissions - Allowed: Excess emissions resulting from malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

13. Excess Emissions - Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

14. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Compliance Authority. [Rule 62-210.700(6), F.A.C.]

PERFORMANCE TESTING

15. Initial Compliance Tests: For this expansion project, each baghouse exhaust points for EU-019, EU-031, and EU-032 shall be tested to demonstrate initial compliance with the specified opacity standard. 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. [Rule 62-297.310(7)(a)1, F.A.C.]

16. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each baghouse exhaust point shall be tested to demonstrate compliance with the specified opacity standard. [Rule 62-297.310(7)(a)4, F.A.C.]

17. Tests Prior to Renewal: Within the 12-month period prior to renewing the operation permit, each baghouse exhaust point shall be tested to demonstrate compliance with the specified opacity standard. [Rule 62-297.310(7)(a)3, F.A.C.]

18. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required test. [Rule 62-297.310(7)(a)9, F.A.C.]

19. Test Method: All tests shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Tests shall also comply with the applicable requirements of Rule 62-297.310, F.A.C. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

20. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. The permittee shall record the actual sugar processing rate for the emissions unit being controlled and tested. [Rule 62-297.310(4) and (5), F.A.C.]

21. Test Notification: At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify the Compliance Authority of: the date, time, and place of the test; and the contact person who will be responsible for coordinating and having the test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

22. Special Compliance Tests: When the Compliance Authority, 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 Compliance Authority. [Rule 62-297.310(7)(b), F.A.C.]

RECORDS AND REPORTS

23. Test Reports: The permittee shall submit a report to the Compliance Authority on the results of each opacity test. The required test report shall be filed as soon as practical but no later than 45 days after completing the test. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Compliance Authority to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report 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 materials processed, and the types and amounts of material processed during each test.

5. The means, raw data and computations used to determine the amount of materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. The date, starting time and duration of the test.
8. The test procedure used.
9. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.
10. The applicable standard for the emissions unit and the test result in the same form and unit of measure.
11. A certification that, to the knowledge of the owner or his authorized agent, all data submitted is true and correct. 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.]

24. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Compliance Authority upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

25. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

26. Operational Data: The permittee shall maintain adequate records of the sugar packaging rate to demonstrate compliance with the conditions of this permit. [Rule 62-4.070(3), F.A.C.]

CONTENTS

SECTION 4. APPENDIX A
CITATION FORMATS

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

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

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

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

New Permit Numbers

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

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

PSD Permit Numbers

Example: Permit No. PSD-FL-317

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

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

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

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

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GENERAL CONDITIONS

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

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

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

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (Not Applicable);
    b. Determination of Prevention of Significant Deterioration (Not Applicable); and
    c. Compliance with New Source Performance Standards (Not Applicable).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SUGAR REFINERY

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [8]
Sugar Refinery

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Sugar Refinery

3. Emissions Unit Identification Number: **021–025, 034, 035, 043, 054, 055, 056**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**20**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    The sugar refinery produces standard white sugar or specialty sugars from the raw sugar sent from the mill. Some of the refined sugar is sold in bulk and shipped by truck or rail car. The majority of the refined sugar produced is transferred by truck to an onsite packaging and distribution warehouse (Trans-shipment facility).

EMISSIONS UNIT INFORMATION
Section [8]
Sugar Refinery

Emissions Unit Control Equipment/Method: Control **1** of **3**

1. Control Equipment/Method Description: **Fabric Filter – Low Temperature (T < 180 F)**
2. Control Device or Method Code: **018**

Emissions Unit Control Equipment/Method: Control **2** of **3**

1. Control Equipment/Method Description: **Process Enclosed**
2. Control Device or Method Code: **054**

Emissions Unit Control Equipment/Method: Control **3** of **3**

1. Control Equipment/Method Description: **Wet Cyclonic Separators (6)**
2. Control Device or Method Code: **085**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **490,000 TPY Refined Sugar**	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year

6. Operating Capacity/Schedule Comment:

The maximum production rate of 490,000 TPY is the combined total for EU 021, EU 023, EU 024, and EU 025, and is based on any consecutive 52-week period.

Operation of the sugar refinery is limited by equipment processing capacities. The hours of operation are not limited (8,760 hours per year).

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **See comment**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **See Attachment OC-EU8-C15.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **93** feet	7. Exit Diameter: **7** feet
8. Exit Temperature: **115**°F	9. Actual Volumetric Flow Rate: **70,620** acfm	10. Water Vapor: **0.7** %
11. Maximum Dry Standard Flow Rate: **64,390** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Parameters are shown for the stack with the greatest volumetric flow rate (Fluidized Bed Dryer Baghouse – EU 025). See Attachment OC-EU8-C15 for all stack parameters.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **4**

1. Segment Description (Process/Fuel Type): **Food and Agriculture – Sugar Cane Processing, General**		
2. Source Classification Code (SCC): **3-02-015-01**	3. SCC Units: **Tons sugar produced**	
4. Maximum Hourly Rate: **75 (24-hr average)**	5. Maximum Annual Rate: **490,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum hourly and annual rates refer to the amount of refined sugar production by the refinery from the fluidized bed and rotary drying systems [1,350 tons per day (TPD) from the fluidized bed and the rotary drying systems; 1,800 TPD for simultaneous operation]. Annual rate limited per Permit Nos. 0990005-038-AV and 027-AC.**		

Segment Description and Rate: Segment **2** of **4**

1. Segment Description (Process/Fuel Type): **Food and Agricultural – Sugar Cane Processing, Other Not Classified**		
2. Source Classification Code (SCC): **3-02-015-99**	3. SCC Units: **Tons processed**	
4. Maximum Hourly Rate: **44**	5. Maximum Annual Rate: **139,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum hourly and maximum annual rates refer to the maximum amount of refined sugar loaded at the Bulk Load-Out Station. Permit Nos. 0990005-038-AV and 035-AC.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment **3** of **4**

1. Segment Description (Process/Fuel Type): **Food and Agriculture – Sugar Cane Processing, Other Not Classified**		
2. Source Classification Code (SCC): **3-02-015-99**	3. SCC Units: **Tons processed**	
4. Maximum Hourly Rate: **72**	5. Maximum Annual Rate: **351,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum hourly and maximum annual rates refer to the maximum amount of refined sugar loaded at the Transfer Bulk Load-Out Station (EU 034). Permit Nos. 0990005-038-AV and 027-AC.**		

Segment Description and Rate: Segment **4** of **4**

1. Segment Description (Process/Fuel Type): **Food and Agriculture – Sugar Cane Processing, Other Not Classified**		
2. Source Classification Code (SCC): **3-02-015-99**	3. SCC Units: **Tons processed**	
4. Maximum Hourly Rate: **56.25**	5. Maximum Annual Rate: **130,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum hourly and annual rates refer to the maximum amount of refined sugar processed through Rotary Dryer System. Permit No. 0990005-038-AV and 0990005-027-AC.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**018, 085**	**054**	**EL**
PM10	**018, 085**	**054**	**EL**
PM2.5	**018, 085**	**054**	**NS**
VOC			**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:	
3. Potential Emissions: **6.13** lb/hour **19.77** tons/year		4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: **Permit Nos. 0990005-035-AC and 099005-038-AV** Reference: **Refer to Attachment OC-EU8-F1.10**		7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions: **Refer to Attachment OC-EU8-F1.10f.**		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **19.77 TPY**	4. Equivalent Allowable Emissions: lb/hour **19.77** tons/year
5. Method of Compliance: **EPA Method 9.**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0990005-035-AC and 0990005-038-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM10**	2. Total Percent Efficiency of Control:	
3. Potential Emissions: **1.67** lb/hour **2.90** tons/year		4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: **Permit Nos. 0990005-035-AC and -038-AV** Reference: **Refer to Attachment OC-EU8-F1.10**		7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions: **Total potential hourly emissions represent sugar drying and handling using the rotary drying system only and load-out operations. Total potential annual emissions represent sugar drying and handling using the fluidized bed and rotary systems combined, and load out operations. Refer to Attachment OC-EU8-F1.10f.**		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2.90 TPY**	4. Equivalent Allowable Emissions: lb/hour **2.90** tons/year
5. Method of Compliance: **EPA Method 9.**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0990005-035-AC and 0990005-038-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:	
3. Potential Emissions: **10.36** lb/hour **39.0** tons/year		4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: **Permit No. 0990005-021-AC and 0990005-038-AV.** Reference: **Refer to Attachment OC-EU8-F1.10h**		7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions: **Volatile organic compound (VOC) emissions based on 78,040 pounds per year (lb/yr) alcohol usage rate.**		
11. Potential, Fugitive, and Actual Emissions Comment: **Refer to Attachment OC-EU8-F1.10f for complete calculations.**		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **39.00 TPY**	4. Equivalent Allowable Emissions: lb/hour **39.00** tons/year
5. Method of Compliance: **Recordkeeping**	
6. Allowable Emissions Comment (Description of Operating Method): **Permit No. 0990005-021-AC and 0990005-038-AV**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-297.620(4), Florida Administrative Code (F.A.C.) and Permit Nos. 0990005-021-AC, 027-AC, 035-AC, and -038-AV. This limit applies to each point source exhaust stack.**	

V Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-296.310(2), F.A.C. and Permit No. 0990005-021-AC, and -038-AV. This limit applies to all fugitive emissions points, including the Transfer Bulk Station (EU035).**	

EMISSIONS UNIT INFORMATION

Section [8]
Sugar Refinery

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU8-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU8-I3** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **See Attachment OC-EU8-I6**
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU8-IV1**
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: **CAM PLAN** ☒ Not Applicable
3. Alternative Methods of Operation: ☒ Attached, Document ID: **OC-EU8-IV3** ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU8-C15

EMISSION POINT INFORMATION

ATTACHMENT OC-EU8-C15
EMISSION POINT INFORMATION

Descriptions of Emissions Points Comprising this Emissions Unit

ID
021 Rotary Dryer/Central Dust Collection System No. 1 with Wet Rotoclone No. 1
022 Central Dust Collection System No. 2 ("B" System) with Wet Rotoclone No. 2
023 Cooler No. 1/Rotoclone No. 3
024 Cooler No. 2/Rotoclone No. 4
025 Fluidized Bed Dryer/Cooler with Baghouse
034 Bulk Load-out Operation with Baghouse
035 Transfer Bulk Load-out Operation
043 Alcohol Usage in Refinery
054 "A" System/Wet Rotoclone No. 6
055 "C" System/Wet Rotoclone No. 7

Emission Point Comment:

1. Identification of Point on Plot Plan or Flow Diagram:
   - R1 – Rotary Dryer/Wet Rotoclone No. 1 (EU 021)
   - R2 – B System/Wet Rotoclone No. 2 (EU 022)
   - R3 – Cooler No. 1/Wet Rotoclone No. 3 (EU 023)
   - R4 – Cooler No. 2/Wet Rotoclone No. 4 (EU 024)
   - FB – Fluidized Bed Dryer/Cooler (EU 025)
   - BL - Bulk Load-out Operation (EU 034)
   - TBL - Transfer Bulk Load-out Station (EU 035)
   - R6 – Wet Rotoclone No. 6 ("A" System) (EU 054)
   - R7 – Wet Rotoclone No. 7 ("B" System) (EU 055)

See the following table for stack/vent information for each emission point.

Stack Parameters for the Okeelanta Sugar Refinery

EU ID	Stack Description	Stack Height [a] (ft)	Exit Diameter (ft)	Stack Temp (°F)	Actual Volumetric Flow Rate (acfm)	Percent Water Vapor (%)	Maximum Dry Standard Flow Rate (dscfm)
021	Wet Rotoclone No. 1	89	2.5	100	15,000	NA	NA
022	Wet Rotoclone No. 2	86	2.5	90	14,770	NA	NA
023	Wet Rotoclone No. 3	80	2.5	100	15,000	NA	NA
024	Wet Rotoclone No. 4	80	2.5	100	15,000	NA	NA
025	Baghouse	93	7.0	115	70,620	0.7	64,390
034	Baghouse	15	1.78	100	3,400	0.025	NA
054	Wet Rotoclone No. 6	86	2.5	90	15,078	NA	NA
055	Wet Rotoclone No. 7	86	2.5	90	12,895	NA	NA

[a] Stack height verified in 2006.

ATTACHMENT OC-EU8-F1.10

EMISSIONS CALCULATIONS

Attachment OC-EU8-F1.10a. Potential Particulate Matter Emissions Using the Fluidized Bed Drying System
Okeelanta Corporation

Source Emission Point Description	Emission Unit ID	Maximum Refined Sugar Throughput (TPD)	(lb/hr)	(TPY)	Drop Points Controlled	PM Uncontrolled Emission Factor	Loading to Control Equipment (lb/hr)	Control Efficiency (%)	Maximum Emission Rate (lb/hr)	Maximum Annual Emissions (TPY)
Particulate Matter (PM)										
Fluidized Bed Dryer/Cooler Baghouse	025	1,350	112,500	490,000	N/A	1.5 % [a]	1,687.5	99.80 [b]	3.38	14.70
B System - AAF/Wet Rotoclone No.2	022	1,350	112,500	490,000	20	2.090 lb/ton [c]	117.58	99.90 [d]	0.118	0.512
A System - AAF/Wet Rotoclone No.6	054	1,350	112,500	490,000	14	1.463 lb/ton [c]	82.31	99.90 [d]	0.082	0.358
C System - AAF/Wet Rotoclone No.7	055	1,350	112,500	490,000	12	1.254 lb/ton [c]	70.55	99.90 [d]	0.071	0.307
								Total	**3.65**	**15.88**
Particulate Matter (PM_{10})										
Fluidized Bed Dryer/Cooler Baghouse	025	1,350	112,500	490,000	N/A	0.060 % [e]	67.5	99.80 [b]	0.14	0.59
B System - AAF/Wet Rotoclone No.2	022	1,350	112,500	490,000	20	0.084 lb/ton [e]	4.70	99.00 [d]	0.047	0.205
A System - AAF/Wet Rotoclone No.6	054	1,350	112,500	490,000	14	0.059 lb/ton [e]	3.29	99.00 [d]	0.033	0.143
C System - AAF/Wet Rotoclone No.7	055	1,350	112,500	490,000	12	0.050 lb/ton [e]	2.82	99.00 [d]	0.028	0.123
								Total	**0.24**	**1.06**
Particulate Matter ($PM_{2.5}$)										
Fluidized Bed Dryer/Cooler Baghouse	025	1,350	112,500	490,000	N/A	0.060 % [f]	67.5	N/A	0.14	0.59
B System - AAF/Wet Rotoclone No.2	022	1,350	112,500	490,000	20	0.084 lb/ton [f]	4.70	N/A	0.047	0.205
A System - AAF/Wet Rotoclone No.6	054	1,350	112,500	490,000	14	0.059 lb/ton [f]	3.29	N/A	0.033	0.143
C System - AAF/Wet Rotoclone No.7	055	1,350	112,500	490,000	12	0.050 lb/ton [f]	2.82	N/A	0.028	0.123
								Total	**0.24**	**1.06**

Note: TPD = tons per day, lb/hr = pounds per hour, TPY = tons per year.

Footnotes:

[a] Based on manufacturer's maximum estimated PM inlet loading rate of 1.5 % of throughput rate for fluidized bed dryer/cooler. Factor assumes that all of the fluidized bed dryer/cooler sugar dust is vented to this control device.

[b] Baghouse manufacturers efficiency.

[c] Based on continuous drop emission factors computed from AP-42 (USEPA, 1995) Section 13.2.4.
Formula used with multiple for drop points.
E (lb/ton) = k x 0.0032 x (U/5)^1.3 / (M/2)^1.4 ; where U is assumed to be a max of 1 mph due to the building enclosure.
M = Moisture Content = 0.03% for refined sugar.
k = 0.74 for PM.
E =0.1045 lb/ton per transfer point/operation multiplied by the number of transfer points (for PM).

[d] Manufacturers control equipment efficiency rating for total PM = 99.9% and PM_{10} = 99.0%.

[e] Based on sugar dust analysis, uncontrolled PM_{10} is less than 4% of total sugar dust loading to the control equipment.

[f] $PM_{2.5}$ is assumed to equal PM_{10}.

Attachment OC-EU8-F1.10b. Potential Particulate Matter Emissions Using the Rotary Drying System
Okeelanta Corporation

Source Emission Point Description	Emission Unit ID	Maximum Refined Sugar Throughput (TPD)	(lb/hr)	(TPY)	Drop Points Controlled	PM Uncontrolled Emission Factor	Loading to Control Equipment (lb/hr)	Control Efficiency[d] (%)	Maximum Emission Rate (lb/hr)	Maximum Annual Emissions (TPY)
SCENARIO 1 - ROTARY DRYER AND COOLER NOS. 1 AND 2										
Particulate Matter (PM)										
Cooler No. 1 /Wet Rotoclone No. 3	023	1,350	112,500	130,000	N/A	0.175 % [a]	197	99.9	0.20	0.23
Cooler No. 2 /Wet Rotoclone No. 4	024	1,350	112,500	130,000	N/A	0.175 % [a]	197	99.9	0.20	0.23
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	1,350	112,500	130,000	N/A	3.150 % [a]	3,544	99.9	3.54	4.09
B System - AAF/Wet Rotoclone No.2	022	1,350	112,500	130,000	4	0.418 lb/ton[c]	23.52	98.9	0.259	0.299
A System - AAF/Wet Rotoclone No.6	054	1,350	112,500	130,000	14	1.463 lb/ton[c]	82.31	99.9	0.082	0.095
C System - AAF/Wet Rotoclone No.7	055	1,350	112,500	130,000	1	0.105 lb/ton[c]	5.88	99.9	0.006	0.007
								Total	**4.28**	**4.95**
Particulate Matter (PM_{10})										
Cooler No. 1 /Wet Rotoclone No. 3	023	1,350	112,500	130,000	N/A	0.007 % [e]	7.9	99.0	0.079	0.091
Cooler No. 2 /Wet Rotoclone No. 4	024	1,350	112,500	130,000	N/A	0.007 % [e]	7.9	99.0	0.079	0.091
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	1,350	112,500	130,000	N/A	0.126 % [e]	141.8	99.0	1.418	1.638
B System - AAF/Wet Rotoclone No.2	022	1,350	112,500	130,000	4	0.0167 lb/ton[e]	0.941	98.0	0.019	0.022
A System - AAF/Wet Rotoclone No.6	054	1,350	112,500	130,000	14	0.0585 lb/ton[e]	3.292	99.0	0.033	0.038
C System - AAF/Wet Rotoclone No.7	055	1,350	112,500	130,000	1	0.0042 lb/ton[e]	0.235	99.0	0.002	0.003
								Total	**1.63**	**1.88**
Particulate Matter ($PM_{2.5}$)										
Cooler No. 1 /Wet Rotoclone No. 3	023	1,350	112,500	130,000	N/A	0.007 % [f]	7.9	NA	0.079	0.091
Cooler No. 2 /Wet Rotoclone No. 4	024	1,350	112,500	130,000	N/A	0.007 % [f]	7.9	NA	0.079	0.091
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	1,350	112,500	130,000	N/A	0.126 % [f]	141.8	NA	1.418	1.638
B System - AAF/Wet Rotoclone No.2	022	1,350	112,500	130,000	4	0.0167 lb/ton[f]	0.941	NA	0.019	0.022
A System - AAF/Wet Rotoclone No.6	054	1,350	112,500	130,000	14	0.0585 lb/ton[f]	3.292	NA	0.033	0.038
C System - AAF/Wet Rotoclone No.7	055	1,350	112,500	130,000	1	0.0042 lb/ton[f]	0.235	NA	0.002	0.003
								Total	**1.63**	**1.88**
SCENARIO 2 - COOLER NOS. 1 AND 2										
Particulate Matter (PM)										
Cooler No. 1 /Wet Rotoclone No. 3	023	600	50,000	130,000	N/A	3.150 % [b]	1575	99.9	1.57	4.09
Cooler No. 2 /Wet Rotoclone No. 4	024	600	50,000	130,000	N/A	0.350 % [b]	175	99.9	0.17	0.45
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	0	0	0	N/A	0.000 % [b]	0.00	99.9	0.00	0.00
B System - AAF/Wet Rotoclone No.2	022	0	0	0	4	0.418 lb/ton[c]	0.00	98.9	0.00	0.00
A System - AAF/Wet Rotoclone No.6	054	0	0	0	14	1.463 lb/ton[c]	0.00	99.9	0.00	0.00
C System - AAF/Wet Rotoclone No.7	055	0	0	0	1	0.105 lb/ton[c]	0.00	99.9	0.00	0.00
								Total	**1.75**	**4.55**
Particulate Matter (PM_{10})										
Cooler No. 1 /Wet Rotoclone No. 3	023	600	50,000	130,000	N/A	0.126 % [e]	63.0	99.0	0.630	1.638
Cooler No. 2 /Wet Rotoclone No. 4	024	600	50,000	130,000	N/A	0.014 % [e]	7.0	99.0	0.070	0.182
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	0	0	0	N/A	0.000 % [e]	0.00	99.0	0.00	0.00
B System - AAF/Wet Rotoclone No.2	022	0	0	0	4	0.0167 lb/ton[e]	0.00	98.0	0.00	0.00
A System - AAF/Wet Rotoclone No.6	054	0	0	0	14	0.0585 lb/ton[e]	0.00	99.0	0.00	0.00
C System - AAF/Wet Rotoclone No.7	055	0	0	0	1	0.0042 lb/ton[e]	0.00	99.0	0.00	0.00
								Total	**0.70**	**1.82**
Particulate Matter ($PM_{2.5}$)										
Cooler No. 1 /Wet Rotoclone No. 3	023	600	50,000	130,000	N/A	0.126 % [f]	63.0	NA	0.630	1.638
Cooler No. 2 /Wet Rotoclone No. 4	024	600	50,000	130,000	N/A	0.014 % [f]	7.0	NA	0.070	0.182
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	0	0	0	N/A	0.000 % [f]	0.0	NA	0.00	0.00
B System - AAF/Wet Rotoclone No.2	022	0	0	0	4	0.0167 lb/ton[f]	0.00	NA	0.00	0.00
A System - AAF/Wet Rotoclone No.6	054	0	0	0	14	0.0585 lb/ton[f]	0.00	NA	0.00	0.00
C System - AAF/Wet Rotoclone No.7	055	0	0	0	1	0.0042 lb/ton[f]	0.00	NA	0.00	0.00
								Total	**0.70**	**1.82**

Note: TPD = tons per day, lb/hr = pounds per hour, TPY = tons per year.

Footnotes:

[a] Based on sugar industry data, uncontrolled sugar dust loading (PM and PM_{10}) is a max of 3.5% of the total refined sugar throughput when rotary dryers/coolers are used. Factor assumes that 5% of the uncontrolled sugar dust is vented to each Cooler No. 1 and No. 2 Wet Cyclone and 90% is vented to Wet Rotoclone No. 1.

[b] Based on sugar industry data, uncontrolled sugar dust loading (PM and PM_{10}) is a max of 3.5% of the total refined sugar throughput when rotary dryers/coolers are used. Factor assumes that 90% of the uncontrolled sugar dust is vented to Wet Rotoclone No. 3 and 10% is vented to Wet Rotoclone No. 4.

[c] Based on continuous drop emission factors computed from AP-42 (USEPA, 1995) Section 13.2.4.
Formula used with multiple for drop points.
E (lb/ton) = k x 0.0032 x (U/5)^1.3 / (M/2)^1.4 ; where U is assumed to be a max of 1 mph due to the building enclosure.
M = Moisture Content = 0.03% for refined sugar.
k = 0.74 for PM.
E =0.1045 lb/ton per transfer point/operation multiplied by the number of transfer points (for PM).

[d] Manufacturers control equipment efficiency rating for total PM = 99.9% and PM_{10} = 99.0%.

[e] Based on sugar dust analysis, uncontrolled PM_{10} is less than 4% of total sugar dust loading to the control equipment.

[f] $PM_{2.5}$ is assumed to equal PM_{10}.

Attachment OC-EU8-F1.10c. Potential Particulate Matter Emissions Using the Fluidized Bed and Rotary Drying/Cooling Systems Simultaneously
Okeelanta Corporation

Source Emission Point Description	Emission Unit ID	Refined Sugar Throughput [a] (TPD)	(lb/hr)	(TPY)	Drop Points Controlled	PM Uncontrolled Emission Factor		Loading to Control Equipment (lb/hr)	Control Efficiency (%)	Maximum Emission Rate (lb/hr)	(TPY)
Particulate Matter (PM)											
Fluidized Bed Drying System											
Fluidized Bed Dryer/Cooler Baghouse	025	1,350	112,500	360,000	N/A	1.5	%	1687.5	99.8	3.38	10.80
Rotary Drying System											
Cooler No. 1 /Wet Rotoclone No. 3	023	450	37,500	130,000	N/A	0.175	%	65.63	99.9	0.07	0.23
Cooler No. 2 /Wet Rotoclone No. 4	024	450	37,500	130,000	N/A	0.175	%	65.63	99.9	0.07	0.23
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	450	37,500	130,000	N/A	3.150	%	1,181.3	99.9	1.18	4.09
Material Handling											
B System - AAF/Wet Rotoclone No.2	022	1,800	150,000	490,000	21	2.195	lb/ton	164.62	99.9	0.1646	0.5377
A System - AAF/Wet Rotoclone No.6	054	1,800	150,000	490,000	18	1.881	lb/ton	141.10	99.9	0.1411	0.4609
C System - AAF/Wet Rotoclone No.7	055	1,800	150,000	490,000	12	1.254	lb/ton	94.07	99.9	0.0941	0.3073
									Total	**5.09**	**16.66**
Particulate Matter (PM_{10})											
Fluidized Bed Drying System											
Fluidized Bed Dryer/Cooler Baghouse	025	1,350	112,500	360,000	N/A	0.060	%	67.50	99.8	0.135	0.43
Rotary Drying System											
Cooler No. 1 /Wet Rotoclone No. 3	023	450	37,500	130,000	N/A	0.007	%	2.63	99.0	0.03	0.09
Cooler No. 2 /Wet Rotoclone No. 4	024	450	37,500	130,000	N/A	0.007	%	2.63	99.0	0.03	0.09
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	450	37,500	130,000	N/A	0.126	%	47.25	99.0	0.47	1.64
Material Handling											
B System - AAF/Wet Rotoclone No.2	022	1,800	150,000	490,000	21	0.0878	lb/ton	6.585	99.0	0.066	0.215
A System - AAF/Wet Rotoclone No.6	054	1,800	150,000	490,000	18	0.0753	lb/ton	5.644	99.0	0.056	0.184
C System - AAF/Wet Rotoclone No.7	055	1,800	150,000	490,000	12	0.0502	lb/ton	3.763	99.0	0.038	0.123
									Total	**0.82**	**2.77**
Particulate Matter ($PM_{2.5}$)[b]											
Fluidized Bed Drying System											
Fluidized Bed Dryer/Cooler Baghouse	025	1,350	112,500	360,000	N/A	0.060	%	67.50	N/A	0.135	0.43
Rotary Drying System											
Cooler No. 1 /Wet Rotoclone No. 3	023	450	37,500	130,000	N/A	0.007	%	2.63	N/A	0.03	0.09
Cooler No. 2 /Wet Rotoclone No. 4	024	450	37,500	130,000	N/A	0.007	%	2.63	N/A	0.03	0.09
Rotary Dryer / AAF Skimmer/Wet Rotoclone No. 1	021	450	37,500	130,000	N/A	0.126	%	47.25	N/A	0.47	1.64
Material Handling											
B System - AAF/Wet Rotoclone No.2	022	1,800	150,000	490,000	21	0.0878	lb/ton	6.585	N/A	0.066	0.215
A System - AAF/Wet Rotoclone No.6	054	1,800	150,000	490,000	18	0.0753	lb/ton	5.644	N/A	0.056	0.184
C System - AAF/Wet Rotoclone No.7	055	1,800	150,000	490,000	12	0.0502	lb/ton	3.763	N/A	0.038	0.123
									Total	**0.82**	**2.77**

Note: TPD = tons per day, lb/hr = pounds per hour, TPY = tons per year.

Footnote:
[a] Based on 1,800 TPD throughput as a combined operation potential maximum for the refinery.
[b] $PM_{2.5}$ is assumed to equal PM_{10}.

Attachment OC-EU8-F1.10d. Potential Particulate Matter Emissions from the Bulk Load-Out Operation
Okeelanta Corporation

Source Emission Point Description	Emission Unit ID	Maximum Refined Sugar Throughput [a] (TPD)	(lb/hr)	(TPY)	PM Emission Rate	Baghouse Gas Flow Rate (acfm)	Maximum Emission Rate (lb/hr)	Annual Emissions (TPY)
Particulate Matter (PM)								
Bulk Load-out Operation [b]	034	600	88,000	139,000	0.010 gr/acf	3,400	0.29	1.28
Particulate Matter (PM_{10})								
Bulk Load-out Operation [b]	034	600	88,000	139,000	0.00040 gr/acf [c]	3,400	0.012	0.051
Particulate Matter ($PM_{2.5}$)								
Bulk Load-out Operation [b]	034	600	88,000	139,000	0.00040 gr/acf [d]	3,400	0.012	0.051

Note: TPD = tons per day, lb/hr = pounds per hour, TPY = tons per year.

Footnotes:

[a] Throughput based on 1,800 tons/day (TPD) and 490,000 tons/yr (TPY), with 30/70% split between the Bulk and Transfer Bulk load-out operations.

[b] Based on baghouse parameters (See Attachment OC-EU1-I3).

[c] PM_{10}, based on sugar dust analysis, is less than 4% of total sugar dust loading.

[d] $PM_{2.5}$ is assumed to equal PM_{10}.

Attachment OC-EU8-F1.10e. Potential Particulate Matter Emissions from the Transfer Load-Out Station
Okeelanta Corporation

Source Emission Point Description	Emission Unit ID	Maximum Refined Sugar Throughput [a] (TPD)	(lb/hr)	(TPY)	PM Uncontrolled Emission Factor	Uncontrolled PM Emissions (lb/hr)	Control Efficiency (%)	Maximum Emission Rate (lb/hr)	Annual Emissions (TPY)
Particulate Matter (PM)									
Transfer Bulk Load-out Station	035	1,200	144,000	351,000	0.105 lb/ton[b]	7.53	90 [d]	0.75	1.83
Particulate Matter (PM_{10})									
Transfer Bulk Load-out Station	035	1,200	144,000	351,000	0.00418 lb/ton[c]	0.301	90 [d]	0.030	0.073
Particulate Matter ($PM_{2.5}$)									
Transfer Bulk Load-out Station	035	1,200	144,000	351,000	0.00418 lb/ton[e]	0.301	N/A [e]	0.030	0.073

Note: TPD = tons per day, lb/hr = pounds per hour, TPY = tons per year.

Footnotes:

[a] Throughput based on 1,800 tons/day (TPD) and 490,000 tons/yr (TPY), with 30/70% split between the Bulk and Transfer Bulk load-out operations.

[b] Bulk load-out operations continuous drop emission factors are computed from AP-42 (USEPA, 1995) Section 13.2.4.
E (lb/ton) = k x 0.0032 x (U/5)^1.3 / (M/2)^1.4 ; where U is assumed to be a max of 1 mph due to the building enclosure.
M = Moisture Content = 0.03% for refined sugar.
k = 0.74 for PM.

[c] PM_{10}, based on sugar dust analysis, is less than 4% of total sugar dust loading.

[d] Represents assumed control efficiency achieved from the building load-out enclosure. Transfer bulk load-out control efficiency is higher than bulk load-out building due to improved design and operating procedures.

[e] $PM_{2.5}$ is assumed to equal PM_{10}.

Attachment OC-EU8-F1.10f. Summary of Potential PM Emissions from the Sugar Refinery Okeelanta Corporation

Method of Operation	Maximum Potential for Each Method of Operation	
	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate Matter (PM)		
Fluidized Bed Drying System	3.65	15.88
Rotary Drying System	4.28	4.95
Fluidized Bed and Rotary Drying Systems	5.09	16.66
Maximum for Any Method	5.09	16.66
Bulk Load-Out Operation	0.29	1.28
Transfer Bulk Load-Out Station	0.75	1.83
Sugar Refinery Total	**6.13**	**19.77**
Particulate Matter (PM_{10})		
Fluidized Bed Drying System	0.24	1.06
Rotary Drying System	1.63	1.88
Fluidized Bed and Rotary Drying Systems	0.82	2.77
Maximum for Any Method	1.63	2.77
Bulk Load-Out Operation	0.012	0.051
Transfer Bulk Load-Out Station	0.030	0.073
Sugar Refinery Total	**1.67**	**2.90**
Particulate Matter ($PM_{2.5}$)[a]		
Fluidized Bed Drying System	0.24	1.06
Rotary Drying System	1.63	1.88
Fluidized Bed and Rotary Drying Systems	0.82	2.77
Maximum for Any Method	1.63	2.77
Bulk Load-Out Operation	0.012	0.051
Transfer Bulk Load-Out Station	0.030	0.073
Sugar Refinery Total	**1.67**	**2.90**

Note: lb/hr = pounds per hour; TPY = tons per year.

Footnotes:

[a] $PM_{2.5}$ is assumed to equal PM_{10}.

Attachment OC-EU8-F1.10g. Potential PM Emisssions from Each Emissions Unit Within the Sugar Refinery
Okeelanta Corporation

Source Emission Point Description	Emission Unit ID	Maximum Potential for Each Emissions Unit	
		Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate Matter (PM)			
Fluidized Bed Drying System			
Fluidized Bed Dryer/Cooler Baghouse	025	3.38	14.70
Rotary Drying System			
Cooler No. 1 / Rotoclone No. 3	023	1.57	4.09
Cooler No. 2 / Rotoclone No. 4	024	0.20	0.45
Rotary Dryer / AAF Skimmer/Wet Rotoclone No.1	021	3.54	4.09
Material Handling			
B System - AAF/Wet Rotoclone No.2	022	0.16	0.54
A System - AAF/Wet Rotoclone No.6	054	0.14	0.46
C System - AAF/Wet Rotoclone No.7	055	0.09	0.31
Bulk and Transfer Load-Out Operations			
Bulk load-out Operation	034	0.29	1.28
Transfer Bulk Load-out Station	035	0.75	1.83
Particulate Matter ($PM_{10}/PM_{2.5}$)			
Fluidized Bed Drying System			
Fluidized Bed Dryer/Cooler Baghouse	025	0.14	0.59
Rotary Drying System			
Cooler No. 1 / Rotoclone No. 3	023	0.63	1.64
Cooler No. 2 / Rotoclone No. 4	024	0.079	0.18
Rotary Dryer / AAF Skimmer/Wet Rotoclone No.1	021	1.42	1.64
Material Handling			
B System - AAF/Wet Rotoclone No.2	022	0.066	0.215
A System - AAF/Wet Rotoclone No.6	054	0.056	0.184
C System - AAF/Wet Rotoclone No.7	055	0.038	0.123
Bulk and Transfer Load-Out Operations			
Bulk load-out Operation	034	0.012	0.051
Transfer Bulk Load-out Station	035	0.030	0.073

Note: lb/hr = pounds per hour; TPY = tons per year.

Attachment OC-EU8-F1.10h. Potential Emisssions of VOCs from Sugar Refinery Chemical Usage
Okeelanta Corporation

Material	Chemical	VOC Content	Potential	
			Chemical Usage[a] (lb/yr)	VOC Emissions (TPY)
Alcohol	Isopropyl Alcohol or Ethanol	100 %	78,040	39.02
		Total VOCs	**10.36 lb/hr[b]**	**39.0 TPY**

Note: lb/hr = pounds per hour; TPY = tons per year.

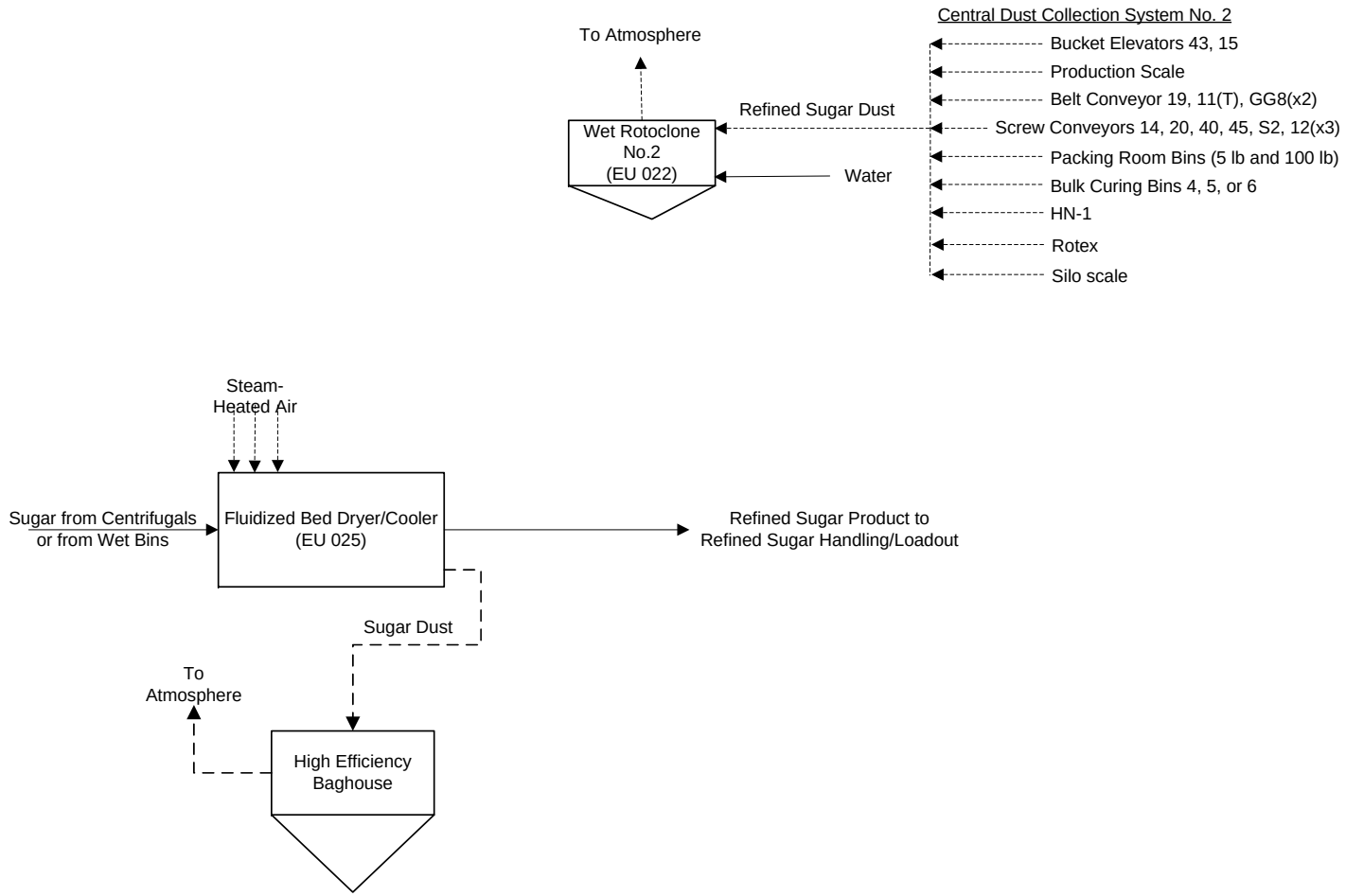
Footnotes:

[a] Based on estimates for maximum usage rates.

[b] Based on 7,531 hours per year (hr/yr) for the Fluidized Bed dryers reported in the facility's 2007 Annual Operating Report (a minimum for the most recent 3 years, 2007-2013), assuming that 100% of compound is emitted to the atmosphere.

ATTACHMENT OC-EU8-I1

PROCESS FLOW DIAGRAM



Attachment OC-EU8-I1a
Process Flow Diagram
Operations with Fluidized Bed Dryer/Cooler
Okeelanta Refinery
South Bay, Florida

Process Flow Legend
Solid/Liquid ——→
Gas - - - - →

Golder Associates

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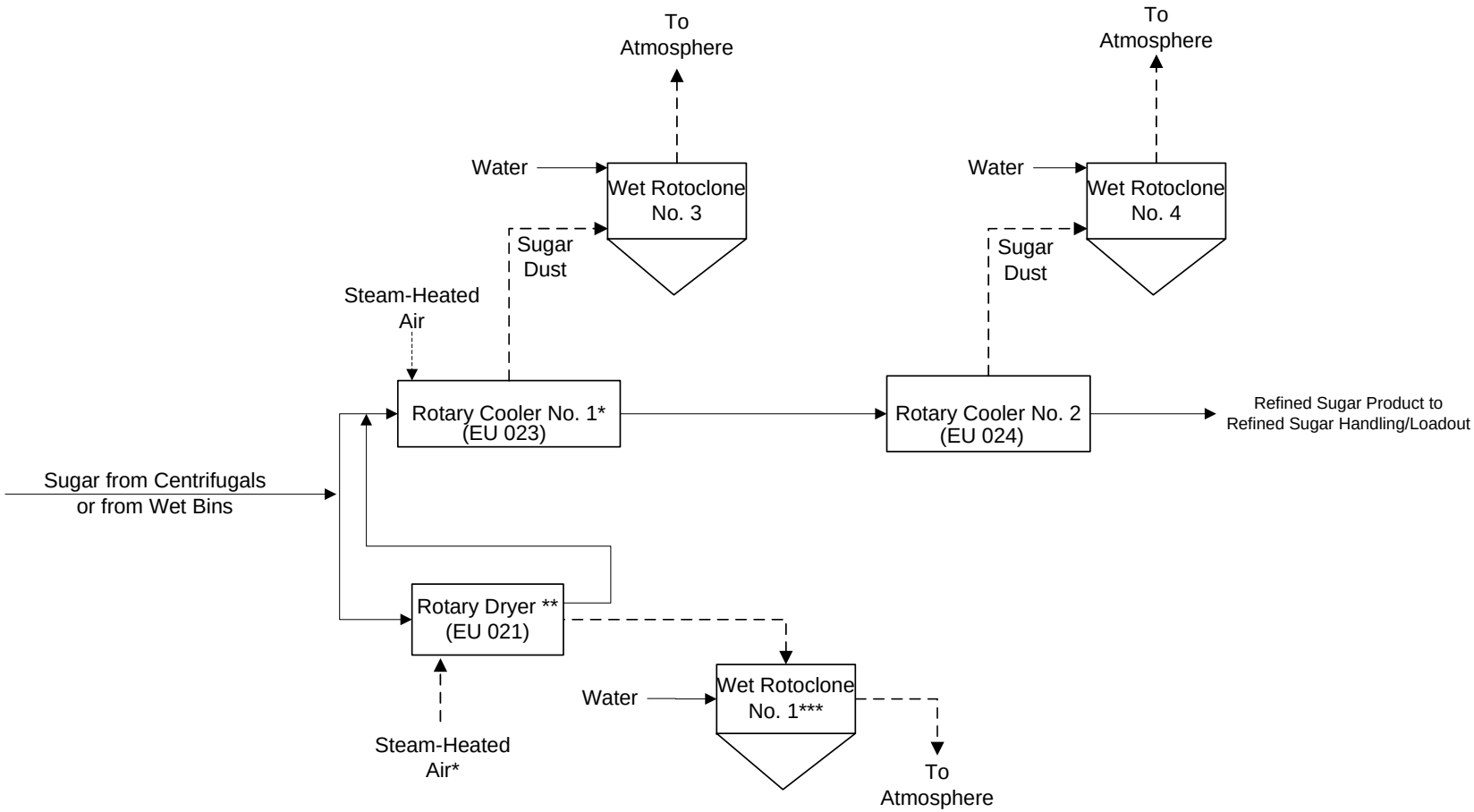
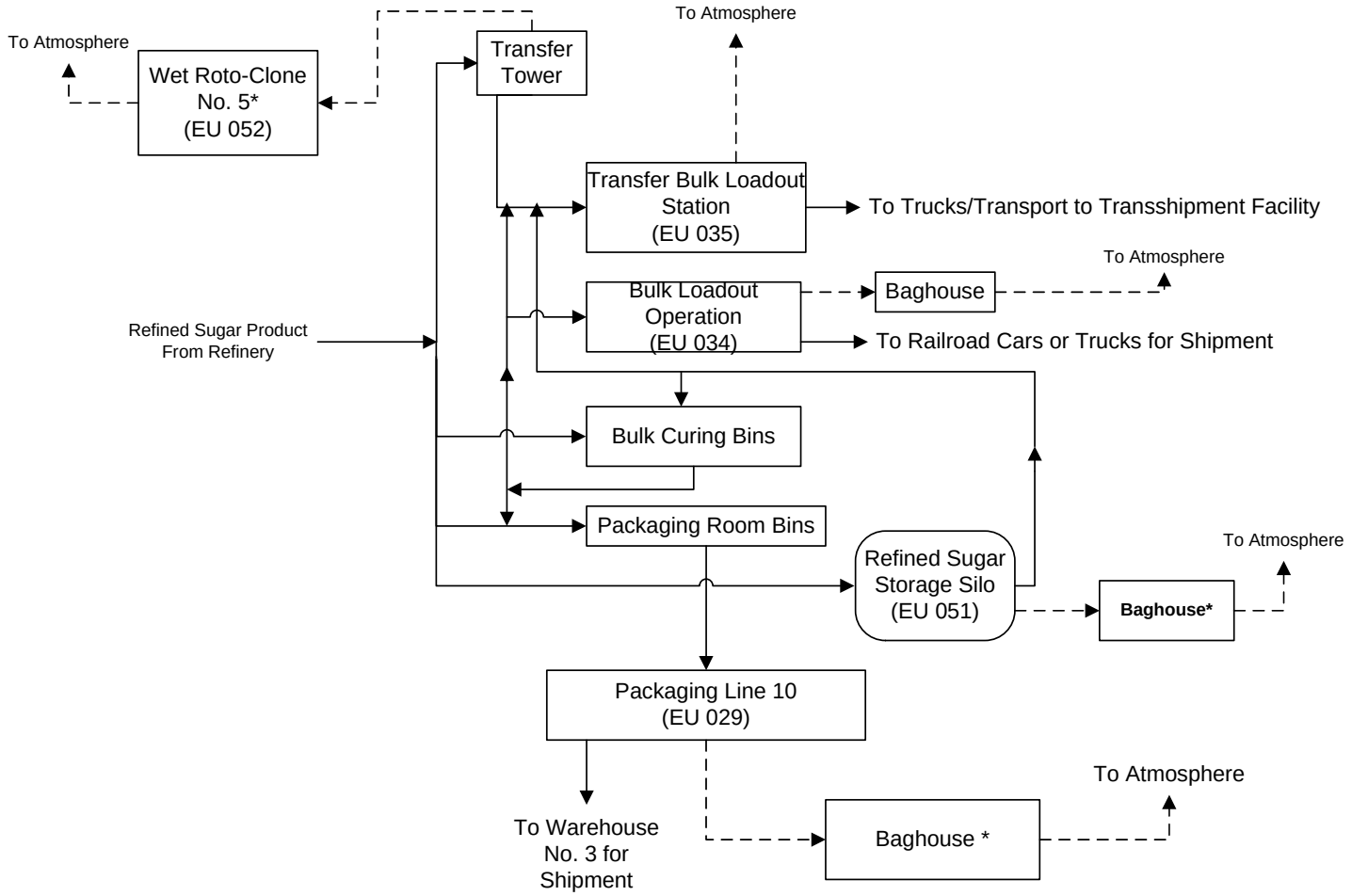


* For specialty sugar with low-production loads (<450 TPD), Rotary Cooler No. 1 functions as Dryer (Rotary Dryer not Operated).
** Rotary dryer typically run only for high-production loads.
*** Operated only when Rotary Dryer is needed.

Attachment OC-EU8-I1b
Process Flow Diagram
Operations with Rotary Dryer/Coolers
Okeelanta Refinery
South Bay, Florida

Process Flow Legend
Solid/Liquid ——→
Gas - - - →

Golder Associates



* These sources were determined to be exempt from permitting.

Attachment OC-EU8-I1c
Process Flow Diagram
Refined Sugar Handling/Loadout
Okeelanta Refinery
South Bay, Florida

Process Flow Legend
Solid/Liquid ——→
Gas - - - - →

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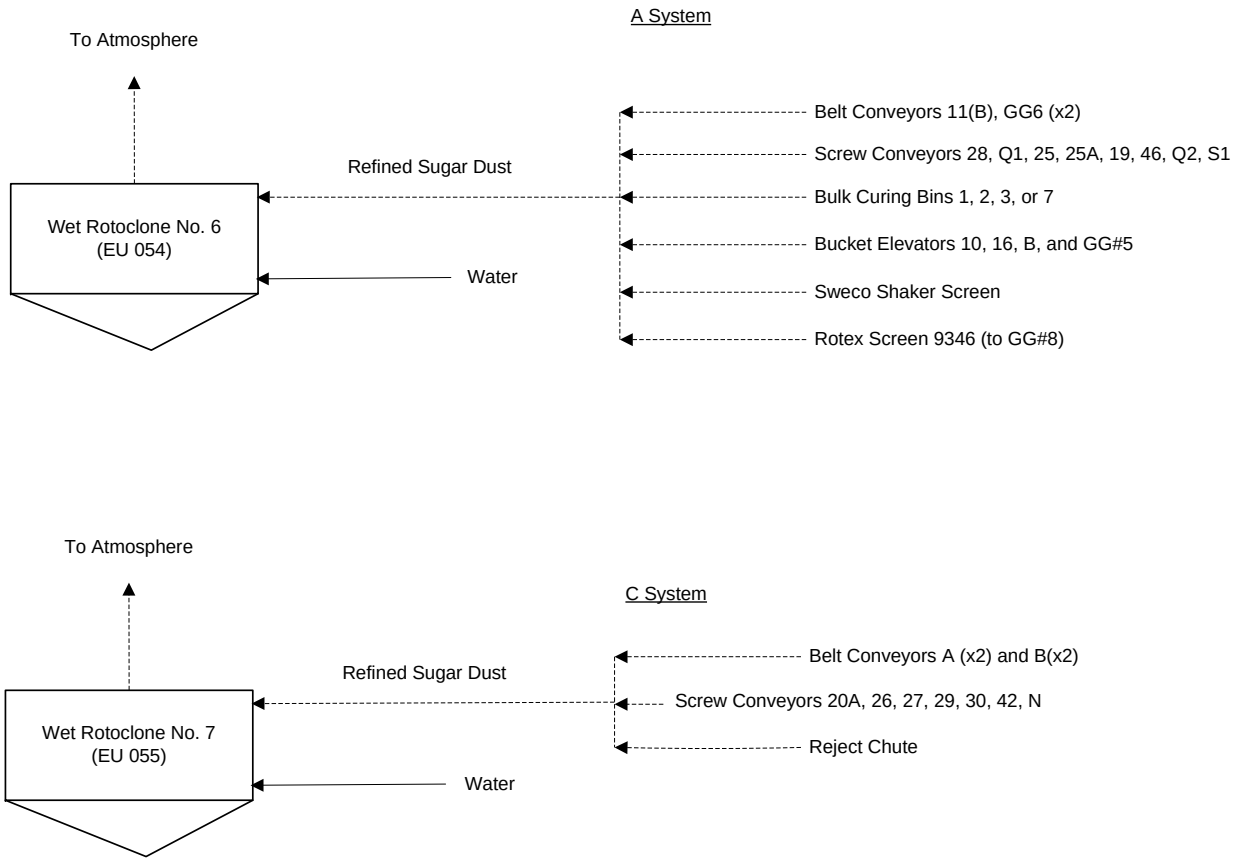

Attachment OC-EU8-I1d
Process Flow Diagram
New Dust Collection Systems for Rotary Dryer/Coolers and Fluidized Bed Dryer/Cooler
Okeelanta Refinery
South Bay, Florida

Process Flow Legend
Solid/Liquid ——→
Gas – – – –→

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ATTACHMENT OC-EU8-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Attachment OC-EU8-I3a: Control Parameters and Particulate Removal Efficiencies for Sugar Dust Wet Collection Systems at the Sugar Refinery
Okeelanta Corporation

Name	Rotary Dryer/ CDCS No. 1 Wet Rotoclone No. 1	CDCS No. 2/ B System Wet Rotoclone No. 2	Cooler No. 1 Wet Rotoclone No. 3	Cooler No. 2 Wet Rotoclone No. 4	"A" System Wet Rotoclone No. 6	"C' System Wet Rotoclone No. 7
Emission Unit ID No.	021	022	023	024	054	055
Manufacturer	American Air Filter	American Air Filter	American Air Filter	American Air Filter	American Air Filter	American Air Filter
Type/Design	Wet Rotoclone Type W, Size 27	Wet Rotoclone Type W, Size 27	Wet Rotoclone Type W, Size 27	Wet Rotoclone Type W, Size 27	Wet Rotoclone Type W, Size 27	Wet Rotoclone Type W, Size 27
Outlet Gas Temp (^{o}F)	100	100	100	100	100	100
Outlet Gas Flow Rate (acfm)	15,000	14,770	15,000	15,000	15,078	12,895
Water Injection Rate (gal/min) (minimum)[a]	2	2	2	2	2	2
Total PM Control Efficiency (%)[b]	99.9	99.9	99.9	99.9	99.9	99.9
Total PM_{10} Control Efficiency (%)[b]	99.0	99.0	99.0	99.0	99.0	99.0
Total $PM_{2.5}$ Control Efficiency (%)[b]	88	88	88	88	88	88

Sample calculations:
Control efficiency (%) = [(inlet loading rate - outlet loading rate) / inlet loading rate] × 100.

Footnotes:
[a] Based on 2002 stack testing for Rotoclones Nos. 1 and 2, and manufacturer's data for Rotoclones Nos. 3, 4, 6, and 7.
[b] Control efficiency is manufacturer's efficiency rating.

Attachment OC-EU8-I3b: Control Equipment Parameters and Particulate Removal Efficiency Derivation for Fluidized Bed Dryer/Cooler Pulse Jet Baghouse (EU 025) at Sugar Refinery Okeelanta Corporation

Manufacturer	BETH GmbH, 23556 Lobeck
Type	BETHPULS 6.60 x 7.5.10
Outlet Gas Temp (^{o}F)	115
Outlet Gas Flow Rate (acfm)	70,620
Exhaust Gas Moisture Content (%)	0.7
Cleaning Method	Pulse Jet Compressed Air
Compressed Air Consumption (cfm)	51.8
Number of Bags	420
Total Filter Media Surface Area (sq. ft)	9,041
Air to Cloth Ratio (cfm per sq ft.)	7.81
Outlet Loading (grains/dscf)	0.00348 [a]

Pollutants	Inlet [b] Loading lb/hr	Control [c] Efficiency (%)	Outlet Loading lb/hr
Particulate Matter	960	99.80	1.92

Note: All parameters are based on manufacturers design information.

Footnotes:

[a] Calculated based on expected outlet loading rate (lb/hr) and outlet gas flow rate (scfm) at operational conditions.

[b] Inlet loading to the filter specified by the fluidized bed dryer manufacturer while operating at Okeelanta's estimated maximum refined sugar production (includes a 20% design safety factor).

[c] Control efficiency based on baghouse manufacturers design information for dust content in raw gas (10g/m^3 at standard conditions) and for dust content in clean gas (20 mg/m^3 at standard conditions).

Sample calculations:

Outlet loading rate = inlet loading rate x [1-(control efficiency/100)].

Attachment OC-EU8-I3c: Control Equipment Parameters for the Bulk Load-Out Operation Baghouse (EU 034) at Sugar Refinery
Okeelanta Corporation

Bulk Load-Out Operation's Baghouse - Located in the Refinery Facility		
Manufacturer and Model No.	MAC Equipment MODEL 55AVSC49/30, Style III	
Outlet Gas Temp (°F)		100
Outlet Gas Flow Rate (acfm)		3,400
Exhaust Gas Moisture Content (%)		0.025
Outlet Gas Flow Rate (scfm)		3,206
Cleaning Method		Not Specified
Bag Material		Polypropylene
Total Area of Filter Media (sq. ft)		786
Air to Cloth Ratio		2.2:1
Manufacturer's Guaranteed Outlet Loading (grains/acf)		0.01
Pollutants		Outlet Loading
Particulate Matter (lb/hr)		0.291

Note: Parameters based on manufacturers design specifications.
Percent water vapor content represents typical content of "Kathbar" treated air.

Sample calculations:
Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X outlet loading rate (grains/acf) ÷ 7,000 grains/lb X 60 min/hr

ATTACHMENT OC-EU8-I6

COMPLIANCE DEMONSTRATION REPORTS

ATTACHMENT OC-EU8-I6
COMPLIANCE DEMONSTRATION REPORTS

Source ID	Observation Date	Report Date
EU021	DNO	--
EU022	7/3/2014	7/9/2014
EU023	3/27/2014	4/7/2014
EU024	3/27/2014	4/7/2014
EU025	7/3/2014	7/9/2014
EU034	12/5/2013	12/9/2014
EU054	7/3/2014	7/9/2014
EU055	7/3/2014	7/9/2014
EU059	7/22/2014	7/29/2014

DNO= did not operate during the year

ATTACHMENT OC-EU8-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

PERMITTEE:
Okeelanta Corporation
Okeelanta Sugar Refinery
21250 U.S. Highway 27 South
South Bay, FL 33493

Facility I.D. No.: 0990005
Permit Number: 0990005-021-AC
Date of Issue: January 15, 2008
Revised Date: February 25, 2008
Expiration Date: July 14, 2008
County: Palm Beach County
Latitude: 26° 35' 00" N
Longitude: 80°45' 00" W
Project: Sugar Refinery Modification

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, 62-210, 62-296, and 62-297. **This permit administratively corrects Permit No.: 0990005-020-AC. This permit (Permit No.: 0990005-021-AC) replaces and supercedes Permit No.: 0990005-020-AC.** The above named permittee is hereby authorized to construct the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

This permit authorizes an expansion and modification of the sugar refinery operations. The expansion consists of enlarging the mill boiling house associated with the sugary refinery. The mill boiling house expansion includes installation of new process equipment. The new process equipment will be dedicated to the production of specialty sugar products. Existing equipment will be available for the production of standard refined sugars. The sugar refinery's expansion and modification will realize an increase in refined sugar production yield and efficiency and a decrease in the particulate matter (PM) (both PM and PM10) emissions. Specifically, this permit authorizes the following: 1) an increase in the sugar refinery's permitted capacity for total refined sugar production, 2) an increase in the permitted capacity for refined sugar production from the fluidized bed dryer/baghouse system, the bulk load-out station and the transfer bulk load-out station, 3) a modification of the dust collection systems #1 and #2 process operations, 4) a reduction in Total PM and PM10 emissions and 5) alternative methods of operation for the fluidized bed dryer and the rotary dryer/cooler system. *(Permitting Note: In a letter dated November 16, 2004, the Department approved control equipment (Rotoclones No. 3 and No. 4) replacement. The replacement of Rotoclones No. 3 and No. 4 contributes mainly to the decrease in PM emissions. The reduction in PM emissions has not been previously requested through a construction permit application.)*

The facility is located at 21250 U.S. Highway 27 South, South Bay, Palm Beach County.

SPECIFIC CONDITIONS:

This subsection addresses the following emissions units:

EU No.	Emissions Unit Description
021	Rotary Dryer with Rotoclone No. 1
022	Dust Collection System No. 2 with Rotoclone No. 2
023	Cooler No. 1 with Rotoclone No. 3
024	Cooler No. 2 with Rotoclone No.4
025	Fluidized Bed Dryer/Cooler with Baghouse
034	Bulk Load-Out Operation
035	Transfer Bulk Load-out Station
043	Alcohol Usage

Process Descriptions

The sugar refinery produces refined sugar (standard white sugar and specialty sugars) from the raw sugar sent from the mill. Some of the refined sugar is sold in bulk and shipped by truck or rail car. The majority of the refined sugar produced is transferred by truck to an onsite packaging and distribution warehouse (Transshipment facility).

The primary sugar drying system is a Fluidized Bed Dryer (EU025). The fluidized bed dryer is currently used for standard refined sugar. The exhaust is controlled by a high efficiency pulse jet baghouse manufactured by BETH GmbH, 23556 Lobeck (Type BETHPULS 6.60 x 7.5.10). The baghouse exhausts through a stack 93 feet above grade. Steam is used for the necessary heat and no fuels are fired in the fluidized bed dryer.

The Rotary Drying System consists of one (1) rotary dryer (EU021) and two (2) rotary coolers in series (EU023 and EU024). The rotary dryer system is used for specialty sugars and when the fluidized bed dryer is off line for repairs. Steam is used for the necessary heat and no fuels are fired in the rotary drying system. Emissions from the rotary drying system are controlled with the use of a skimmer followed by a Wet Rotoclone No. 1 (American Air Filter, Type W, Size 27), which exhausts 89 feet above grade. The ductwork associated with the Wet Rotoclone No. 1 will be modified so that it will be able to control sugar dust from the rotary dryer (EU021) and two (2) specialty sugar conveyors. (The two (2) specialty sugar conveyors will convey sugar products during production with rotary dryer and cooling system only). Sugar from the rotary dryer is directed to two (2) coolers (EU023 and EU024). The exhaust from Cooler No. 1 is controlled by Rotoclone No. 3 (American Air Filter, Type W, Size 27) which is vented 80 feet above grade. The exhaust from Cooler No. 2 is controlled by Rotoclone No. 4 (American Air Filter, Type W, Size 27) which is vented 80 feet above grade.

Dust Collection System No. 2 (EU022) controls emissions from miscellaneous refined sugar drop points. As depicted on attachments OC-EU1-I1b and OC-EU1-I1c which were submitted with the application (DEP File No. 0990005-020-AC), the Dust Collection System No. 2 (EU022) is authorized to be modified to control emissions from bucket elevator 10, the silo scale, belt conveyors 11, 16, 18, 19, A and B, Screw Conveyors 20, 26, 28, 40 and 45, Q1, Q2, S1 and S2, the packing room bins, the bulk curing

SPECIFIC CONDITIONS:

bins #1 through #8, bucket elevator 16 and 43, and the Sweco shaker screen. The system is controlled by Rotoclone No. 2 (American Air Filter, Type W, Size 27), which exhausts 86 feet above grade. Rotoclone No. 2 operates when either the fluidized bed dryer or rotary drying system is operating.
The Bulk Load-Out Operation (EU034) is used to load sugar into either trucks or railcars. The operation includes a silo and a three-sided building. Emissions of fugitive particulate matter are controlled by use of the enclosure.

The Transfer Bulk Load-Out Station (EU035) is used to supply sugar to the Transshipment Facility. The operation includes four (4) enclosed conveyors in series feeding refined sugar from the storage silo or bulk curing bins to an enclosed load-out building. Emissions of fugitive particulate matter are controlled by use of the enclosure and high-pressure air curtains.

The proposed expansion of the existing mill boiling house will consist of extending the building approximately 40 feet on the south end. The following equipment will be housed in the expansion: two (2) melters, two (2) syrup tanks, two (2) grain receiver tanks, two (2) vacuum pans, two (2) magma/cut tanks, two (2) batch centrifuges, two (2) molasses tanks, two (2) screw conveyors, one (1) magma mingler, one (1) run-off tank, a motor control center room, and various pumps and piping systems. The existing sugar refinery expansion building (Permit No. 0990005-005-AC) houses the following associated process equipment: a 1700 cubic feet vacuum pan, a vacuum pan condenser, two (2) centrifugals, syrup and molasses feed tanks, final liquor syrup storage tanks, one (1) 5000 gallon condensate collection tank, one (1) 1000 gallon centrifugal wash water tank, two (2) 1200 cubic feet seeder cutover tanks, a motor control center room, MCC and centrifugal controller room, a refined sugar conveying system, one (1) 2000 cubic feet receiver, various pumps.

For the sugar refinery, activities that are completely enclosed and vented within the building are not classified as air pollution sources.

Two types of alcohol, isopropyl alcohol and organic ethanol, are used in the sugar refinery to aid in the crystallization process in the vacuum pans. Isopropyl alcohol is the primary contributant to the refinery's Volatile Organic Compounds (VOCs) emissions. Isopropyl is used in the production of standard refined sugar. Organic ethanol is used in the production of organic sugar.

Equipment Specifications

1. Baghouse Specifications: To control emissions from the fluidized bed dryer (EU025) the permittee shall operate and maintain a baghouse control system with the following specifications:

Parameter	Specification
Design exhaust flow rate	70,620 acfm
Filtering area	9041 ft^2
Air-to-cloth ratio	7.81 cfm/ft^2
Control efficiency (as described in the application)	99.8% (Total PM and PM10)

[Rule 62-210.242, F.A.C.]

SPECIFIC CONDITIONS:

2. Cyclonic Control Devices: The permittee shall operate and maintain the following emission units and corresponding control equipment in accordance with the specifications identified in the table below:

EU No.	Description	Control Type	Design Flow Rates, acfm	Water Injection Rate gpm, minimum	Control Efficiency (%)	
					PM (Total)	PM10
021	Rotary Dryer	Rotoclone No. 1	15,000	2	99.9	99.0
022	Dust Collection System No. 2	Rotoclone No. 2	15,000	2		
023	Cooler No. 1	Rotoclone No. 3	15,000	2		
024	Cooler No. 2	Rotoclone No. 4	15,000	2		

[Rule 62-210.242, F.A.C.]

Capacity and Performance Restrictions

3. Permitted Capacities:
   a. The sugar refinery [combined EU021, EU023, EU024 and EU025] shall not process more than 490,000 tons of refined sugar during any consecutive 52 week period, and
   b. The sugar refinery's emission units shall not process more than nor exceed the following:

EU No.	Description	Maximum refined sugar processed (tons per consecutive 52 weeks period)	Maximum Usage (lbs per consecutive 52 week period)
021 and 023 and 024	Rotary Dryer System	130,000	
034	Bulk Load-Out Operation	139,000	
035	Transfer Bulk Load-Out Station	351,000	
043	Alcohol	--------	78,040

[Permit No.: 0990005-005-AC; Permit No.: 0990005-020-AC; Rule 62-4-070(3), F.A.C.; Rule 62-4.210(2), F.A.C.]

4. Hours of Operation: Operation of the sugar refinery is limited by the limitations on processing capacities. The hours of operation of are not limited (8760 hours per year). [Permit No. 0990005-005-AC]

SPECIFIC CONDITIONS:

Methods of Operation

5. Method of Operation: The owner or operator is authorized to operate the dryers in any of the following methods:
    a. The Fluidized Bed Dryer only;
    b. Rotary Drying System only: The owner or operator is authorized to operate the rotary dryer system in either of the following two (2) methods:
        i. High Production Rates: The rotary dryer system is operated as a three stage system (rotary dryer followed by two coolers operating in series). High production rates are approximately 1000 TPD for standard white sugar and above 600 TPD for specialty sugar production.
        ii. Low Production Rates: The rotary dryer system is operated as a two stage process. In this configuration, cooler #1 is operated as a rotary dryer and the rotary dryer and wet Rotoclone No. 1 remain shut down. Low production rates are below 500 TPD for specialty sugars.
    c. The Fluidized Bed Dryer and Rotary Dryer System operated simultaneously. The dryers and refinery remain subject to the capacity limitations specified in **Specific Condition No. 3** of this permit. [Permit No. 0990005-020-AC]

Emission Limiting Standards

6. Visible Emissions (VE): The facility and individual emissions units shall not exceed the following visible emissions limits:

Location/ EU	Opacity Limit
Control Device Exhausts: Rotoclone No. 1 (Rotary Dryer - EU021) Rotoclone No. 2 (Dust Collection System No. 2 - EU022) Rotoclone No. 3 (Cooler No. 1 - EU023) Rotoclone No. 4 (Cooler No. 2 - EU024) Baghouse (Fluidized Bed Dryer/Cooler - EU025)	5%
Fugitive Emissions: All fugitive emission points Bulk Load-Out Operation (EU034) Transfer Bulk Load-Out Station (EU035)	20%

[Permit No. 0990005-002-AC; Rules 62-296.320(4), F.A.C.; 62-297.310(7)(c), F.A.C.; and 62-297.620(4), F.A.C.]

7. Particulate Matter (PM/PM10):
    a. The sum of all emission units (EU021, EU022, EU023, EU024, EU025, EU034, and EU035) shall not exceed the following:

Total PM	21.70 tons per year
PM10	2.70 tons per year

SPECIFIC CONDITIONS:

b. As submitted in the application and identified here for information purposes only, the facility's emissions units have the potential to emit the following amounts Total PM and PM10 emissions identified in the table below. The emission amounts shown in the table below reflect the worst case scenario for that emission unit during one of three authorized alternate modes of operation (See **Specific Condition 5**.). The applicant has requested through the application (DEP File No. 0990005-020-AC) to be limited to the PM emissions in **Specific Condition 7.a**.

EU No.	Description	Total PM (tons per year)	PM10 (tons per year)
021	Rotary Dryer with Rotoclone No. 1	4.104	1.645
022	Dust Collection System No. 2 with Rotoclone No. 2	0.563	0.225
023	Cooler No. 1 with Rotoclone No. 3	4.09	1.64
024	Cooler No. 2 with Rotoclone No.4	0.45	0.18
025	Fluidized Bed Dryer/Cooler with Baghouse	14.70	0.588
034	Bulk Load-Out Operation	3.63	0.15
035	Transfer Bulk Load-out Station	1.83	0.07

[Permit No. 0990005-020-AC]

8. PM/PM10 Emission Factors**.** As submitted in the application, the following emission factors and control efficiencies shall be used to calculate Total PM/PM10 emissions:

		Total PM		PM10	
EU No.	Description	PM Uncontrolled Emission Factor	Control Efficiency	PM Uncontrolled Emission Factor	Control Efficiency
021	Rotary Dryer with Rotoclone No. 1	3.150% (from dryer) **plus** 0.2090 lb/ton (from transfer points)	99.9 %	0.126 % (from dryer) **plus** 0.00836 lb/ton (from transfer points)	99.0 %
022	Dust Collection System No. 2 with Rotoclone No. 2	2.2994 lb/ton	99.9 %	0.09198 lb/ton	99.0%
023	Cooler No. 1 with Rotoclone No. 3	0.175%	99.9 %	0.007 %	99.0 %
024	Cooler No. 2 with Rotoclone No.4	0.175%	99.9 %	0.007 %	99.0 %
025	Fluidized Bed Dryer/Cooler with Baghouse	1.5%	99.8 %	0.060 %	99.8 %
034	Bulk Load-Out Operation	0.105 lb/ton	50 %	0.00418 lb/ton	50 %
035	Transfer Bulk Load-out Station	0.105 lb/ton	90 %	0.00418 lb/ton	90 %

[Permit No. 0990005-020-AC]

SPECIFIC CONDITIONS:

9. Volatile Organic Compounds (VOCs): VOCs shall not exceed 39.00 tons during any consecutive 52 weeks period. *(Permitting Note: VOC emissions are contributed mainly from isopropyl alcohol.)* [Permit No. 0990005-020-AC]

Testing

10. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each baghouse and each Rotoclone exhaust point of emission units EU021, EU022, EU023, EU024, and EU025 shall be tested to demonstrate compliance with the opacity standard specified in **Specific Condition 6**. [Permit No.: 0990005-005-AC; Rule 62-297.310(7)(a)4, F.A.C.]

11. Tests Prior to Renewal: Within the 12-month period prior to renewing the operation permit, each baghouse and each Rotoclone exhaust point shall be tested to demonstrate compliance with the specified opacity standard. [Rule 62-297.310(7)(a)3, F.A.C.]

12. Visible Emissions Test Method: All visible emissions tests shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. [Permit No.: 0990005-002-AC; Rules 62-204.800 and 62-297.310(4), F.A.C.; 40 CFR 60, Appendix A]

13. Particulate Matter (PM) Testing: As requested by the applicant, the compliance test requirements for particulate emissions for emission units EU021, EU022, EU023, EU024, and EU25 are waived, and substituted with an alternative standard of 5% opacity. If the Department has reason to believe that the particulate weight emission standard applicable to the emission unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule. [Rule 62-297.620(4), F.A.C. and 62-4.070(3), F.A.C.]

14. Test Procedures:
    a. Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
    b. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes.
    c. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
    d. The permittee shall record the actual sugar processing rate for the emissions unit(s) being controlled and tested.
    e. Tests shall comply with the applicable requirements of Rule 62-297.310, F.A.C.

    [Permit No.: 0990005-005-AC; Rules 62-297.310(4), F.A.C.; 62-297.310, F.A.C.]

15. Test Notification: At least 15 days prior to the date on which each formal compliance test is to begin, the permittee shall notify both the Palm Beach County Health Department and the Department's South District office of the date, time, and place of the test; and the contact person who will be responsible for coordinating and having the test conducted. [Permit No.: 0990005-002-AC; Rule 62-297.310(7)(a)9, F.A.C.]

SPECIFIC CONDITIONS:

Recordkeeping and Reporting

16. Test Reports: For each visible emissions test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the Palm Beach County Health Department as soon as practical, but no later than 45 days after the last sampling run of each test is completed. Copies of the reports shall be sent to the Department's South District office. [Permit No.: 0990005-005-AC; Rule 62-297.310(8), F.A.C.]

17. Operational Data:
    a. The permittee shall maintain daily and weekly records to demonstrate compliance with the permit limitations specified in **Specific Condition No. 3** of this permit.
    b. The daily and weekly records shall include, at a minimum, the following records:
        i. Date;
        ii. Hours of operation;
        iii. Total refined sugar produced;
        iv. Refined sugar produced from the fluidized bed sugar drying system;
        v. Refined sugar production from the rotary sugar dryer system (including coolers);
        vi. Quantity of refined sugar handled through the bulk load out area;
        vii. Quantity of refined sugar handle through the transshipment load out area;
        viii. Weekly use of alcohol (isopropyl and organic ethanol); and
        ix. Weekly rolling consecutive 52 weeks period total for all permitted refined sugar production limits.

    [Permit No. 0990005-020-AC; Rule 62-4.070(3), F.A.C.]

18. Annual Operating Reports (AOR). The permittee shall submit an annual operating report [(DEP Form 62-210.900(5)] that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Palm Beach County Health Department (and copies submitted to the Department's South District office) by March 1st of each year. Beginning with 2007, annual emissions shall be computed in accordance with the provisions of subsection. The permittee shall include each emission unit's total PM and PM10 on the AOR. Total PM and PM10 emissions shall be calculated using the emission factors and control efficiencies in **Specific Condition No. 8.** [Permit No. 0990005-020-AC; Rule 62-210.370(3), F.A.C.]

19. Records Retention. All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14), F.A.C. and 62-213.440(1)(b)2, F.A.C.]

Facility-Wide Conditions

20. General Conditions. An integral part of this permit is the **attached 15 General Conditions**. [Rule 62-4.160, F.A.C.]

SPECIFIC CONDITIONS:

21. Operating Permit. To obtain a permit to operate, the permittee must submit a complete application for an operating permit {"Application for Air Permit –Title V Source" [DEP Form 62-210. 900(1)]}, to the Department prior to the expiration date of the construction permit or, no later than 180 days after the unit(s) are placed into operation or modifications completed, whichever occurs first. The application shall include the application fee and required compliance tests results (See Specific Condition No. 22). The applicant shall retain a licensed Professional Engineer registered in the State of Florida for the inspection of the construction of this project. Upon completion, the engineer shall inspect for conformity to the construction permit, applications, and associated documents. [Rules 62-210.300(2), F.A.C., 62-4.210(3), F.A.C. and 62-4.220, F.A.C.]

22. Required Testing. 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. [Rules 62-297.310(7)(a)1., F.A.C. and 62-4.050(3), F.A.C.]

23. Regulation Compliance. Issuance of the permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 62-210, 92-212, 62-252, 62-272, 62-273, 62-275, 62-296 and 62-297, F.A.C., or any other requirements under federal, state or local law. Other new regulations may impact this source at a future date, and the permittee shall comply with any applicable future regulations when and if they become effective. [Rule 62-210.300, F.A.C.]

24. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor as defined in Rule 62-210.200(217), F.A.C. [Rule 62-296.320(2), F.A.C.]

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

26. Unconfined Emissions of Particulate Matter. The permittee shall 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. Enclose or cover conveyor systems where practicable.
    b. Minimize drop distances of dry materials when handling.
    c. As necessary, provide wind breaks around material handling equipment.
    d. Confine abrasive blasting where possible.
    e. As necessary, provide landscape and/or vegetation.

SPECIFIC CONDITIONS:

f. As necessary, remove dust from roads, work areas, parking area, and other paved areas under the control of the permittee to prevent fugitive dust emissions.
g. 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.
h. Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.; Rule 62-4.070(3); F.A.C.]

27. Liquid Effluent Discharge: Any activity performed by the permittee at the plant site shall not result in the discharge of liquid effluent or contaminated runoff to surface or ground water without prior approval from the Department. [Rule 62-4.070(3), F.A.C.]

28. Excess Emissions. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

29. Excess Emissions notification. In case of excess emissions resulting from malfunctions, the permittee or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

30. 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 may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

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

32. Changes/Modifications. The permittee shall submit to the Department for review, any changes in, or modifications to: the method of operations; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain, an air construction permit prior to making the desired change. Routine maintenance of equipment will not constitute a modification of this permit. [Rules 62-4.030, F.A.C.; 62-210.300 an (1)(a), F.A.C.; 62-4.210, F.A.C., and 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

33. The permittee shall submit all compliance related notifications and reports required by this permit to the Palm Beach County Health Department at:

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

Copies of compliance related notifications and reports shall be sent to:

Department of Environmental Protection
South District Office
P.O. Box 2549
Fort Myers, FL 33902
Phone: 239-332-6975
FAX: 239-332-6969

NOTE: In the event of an emergency the permittee shall contact the Department by calling (850) 413-9911. During normal business hours, the permittee shall call (239) 332-6975.

Issued this 25th day of February 2008.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Jon M. Iglehart
Director of
District Management
Post Office Box 2549
Fort Myers, Florida 33902-2549
(239) 332-6975

JMI/SRM/jw

PERMITTEE:
Okeelanta Corporation
Okeelanta Sugar Mill

Facility I.D. No.: 0990005
Permit Number: 0990005-020-AC
Date of Issue: January 15, 2008
Revised Date: February 25, 2008
Expiration Date: July 14, 2008

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey 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 or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

    (a) Have access to and copy any records that must be kept under the conditions of the permit;
    (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,

GENERAL CONDITIONS:

(c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   (a) A description of and cause of non-compliance; and

   (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.l20 and 62-730.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit incorporates the following previously issued determinations:

   (a) Determination of Best Available Control Technology (not applicable);

   (b) Determination of Prevention of Significant Deterioration (not applicable); and

   (c) Compliance with New Source Performance Standards (not applicable).

GENERAL CONDITIONS:

14. The permittee shall comply with the following:

    (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    (c) Records of monitoring information shall include:

        1. The date, exact place, and time of sampling or measurements;
        2. The person responsible for performing the sampling or measurements;
        3. The date's analyses were performed;
        4. The person responsible for performing the analyses;
        5. The analytical techniques or methods used; and
        6. The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Florida Department of Environmental Protection
South District Office
Post Office Box 2549
Fort Myers, Florida 33902-2549

May 26, 2011

CERTIFIED MAIL 7010 1870 0001 8477 7280
RETURN RECEIPT REQUESTED

PERMITTEE

Okeelanta Corporation
21250 U.S. Highway 27
South Bay, Florida 33493

Authorized Representative:
Matthew Capone

Air Permit No. 0990005-027-AC
Permit Expires: May 25, 2012

Okeelanta Sugar Refinery
Minor Source Air Construction Permit
System A, B, C, Rotoclones
EU 022, EU 054 and EU 055

This is the final air construction permit, which authorizes Okeelanta Sugar Refinery to modify the existing AAF/Wet Rotoclone No. 2 (EU-022) and add two (2) new Rotoclones (EU 054 & 055) to improve dust collection and housekeeping for existing Title V Operating Permit No. 0990005-017-AV. The proposed work will be conducted at the Okeelanta Sugar Refinery, (Standard Industrial Classification No. 2061 & 2062). The facility is located in Palm Beach County at 21250 U.S. Highway 27 South in South Bay, Florida. The UTM coordinates are Zone 17, 524.9 km East, and 2940.1 km North. As noted in the Final Determination provided with this final permit, no changes and clarifications were made to the draft permit.

This final permit is organized by the following sections:
Section 1. General Information
Section 2. Administrative Requirements
Section 3. Emissions Unit Specific Conditions
Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Fort Myers, Florida

_____ _____
Jon M. Iglehart (Date)
Director of
District Management

JMI/CBE/jw

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by certified mail (*) or electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on _____ to the persons listed below.

Matthew Capone - (Matthew_Capone@floridacrystals.com)
David Buff – (dbuff@golder.com)
James Stormer – (james_stormer@doh.state.fl.us)
Jeff Koerner, P.E. – (Jeff.koerner@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) (Date)

Florida Department of Environmental Protection
South District Office
Post Office Box 2549
Fort Myers, Florida 33902-2549

NOTICE OF FINAL PERMIT

PERMITTEE

Okeelanta Corporation
21250 U.S. Highway 27, South
South Bay, Florida 33493

Authorized Representative:
Matthew Capone

Air Permit No. 0990005-027-AC
Permit Expires: May 25, 2012

Okeelanta Sugar Refinery
Minor Source Air Construction Permit
System A, B, C, Rotoclones
(EU 022, 054 & 055)

This is the final air construction permit, which authorizes Okeelanta Sugar Refinery to modify the existing AAF/Wet Rotoclone No. 2 (EU-022) and add two (2) new Rotoclones (EU 054 & 055) to improve dust collection and housekeeping for existing Title V Operating Permit No. 0990005-017-AV. Specific Wording and Table changes are also to be made, regarding Operating Permit No. 0990005-017-AV. These wording and table changes pertain to design flow rate revisions, control efficiency, and particulate emissions of the Rotoclones, Central Dust Collection System (EU-021), Rotoclones (EU-022, 023, 024), Fluidized Bed Dryer/Cooler Baghouse (EU-025) and Bulk Load-Out Station (EU-035).

The proposed work will be conducted at the Okeelanta Sugar Refinery, (Standard Industrial Classification No. 2061 & 2062). The facility is located in Palm Beach County at 21250 U.S. Highway 27 South in South Bay, Florida. The UTM coordinates are Zone 17, 524.9 km East, and 2940.1 km North. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections.
Section 1. General Information
Section 2. Administrative Requirements
Section 3. Emissions Unit Specific Conditions
Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

FACILITY AND PROJECT DESCRIPTION

Existing Facility

Okeelanta Corporation operates a sugar mill, a sugar refinery, and a trans-shipment facility. The facility consists of two adjacent plants. New Hope Power Company operates a cogeneration plant that provides process steam for the sugar mill/refinery and generates electricity for sale to the power grid (SIC No. 4911). The cogeneration plant, sugar mill, and sugar refinery are all considered a single facility for purposes of the PSD and Title V regulatory programs.

Extra-fine granulated sugar (EFG) from the sugar refinery is delivered to the trans-shipment facility. The sugar is unloaded at one of three locations and transferred to either surge bins located above the packaging lines or storage silos. Sugar is transferred from each silo by screw conveyors into surge bins.

Sugar is packaged in one of 14 packaging lines. Thirteen packaging lines [lines 0-9 (EU019), line 12 and 13 (EU047), and line 14 (EU049)] are controlled by baghouses. Sugar is metered from the surge bins into the packaging lines for processing into a variety of packages and containers for wholesale and retail distribution.

The total facility consists of the following emission units:

EU	NOMENCLATURE	LOCATION
014	Boiler 16 – 150,000 lb/hr	Mill & Refinery
015	Fuel Tank	Sugar Mill & Refinery
016	Fuel Tank	Sugar Mill & Refiner
017	Fuel Tank	Sugar Mill & Refinery
018	Central vacuum system No. 1	Central System
019	Packaging Lines 0-9	Transhipment Facility
020	Sugar Grinder	Transhipment Facility
021	Rotary Dryer	CDC System, Rotoclone No. 1
022	CDC System, Rotoclone No. 2	Sugar Refinery
023	Cooler w/ Rotoclone No. 3	Sugar Refinery
024	Cooler w/ Rotoclone No. 4	Sugar Refinery
025	Fluidized Bed Dryer/Cooler w/Baghouse	Sugar Refinery
030	Sugar Silos No.1,2, and 3	Transhipment Facility
031	Railcar Sugar Unloading Receiver #1,	Transhipment Facility
032	Railcar Sugar Unloading Receiver # 2,	Transhipment Facility
033	Sugar Refinery Misc. Support Equip.	Sugar Refinery
034	Bulk Loadout	Sugar Refinery
035	Transfer Bulk Loadout	Sugar Refinery
036	Shop Activities	Sugar Mill
037	Boiler House	Sugar Mill

038	Sugar Cane Dump Area	Sugar Mill
039	Sugar Cane Processing Facility	Sugar Mill
040	Fuel Farm	Sugar Mill
041	Potable Water System	Sugar Mill
042	Sewer Plant	Sugar Mill
043	Alcohol Usage	Sugar Refinery
044	Misc. Unregulated Activities	----------
045	Powdered Sugar Dryer/Cooler,	8A & 8B
046	Powdered Sugar Hopper	Transhipment Facility
047	Sugar Packaging Lines 12 - 14	Transhipment Facility
048	Paint Booth	Shop
049	Off-Spec. Sugar Reclaim	Transhipment Facility
050	Misc. Support Equipment	Transhipment Facility
051	EXEMPT – Refinery Silo Baghouse	Refinery Silo
052	EXEMPT – Rotoclone No. 5	Bulk Trans. Station
053	EXEMPT – Label Printing Operation	----------
056	EXEMPT – Hi-Vac Industrial Vacuum	----------
057	EXEMPT – 300 hp Gas-Fired Package Boiler	Boiler
058	EXEMPT – Sugar Bin with Dust Collector	Warehouse No. 3

Regulatory Classification

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

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

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

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

Proposed Project

The project includes some wording changes of permit No. 0990005-017-AV, the modification of the existing AAF/Wet Rotoclone No. 2 (EU-022) and the addition of two (2) new Rotoclones (EU-054 and EU-055), to control sugar dust from multiple drop points in the sugar refinery. Three (3) separate systems are used to improve control of sugar dust in the sugar refinery. Systems A, B, and C control dust from 20, 17 and 15 drop points within the sugar refinery, respectively. System B utilizes the current Dust Collection System No. 2 which currently controls 22 drop points with AAF/Wet Rotoclone No. 2 (EU-022).

Another minor change pertains to AAF/Wet Rotoclone No. 1 (EU-021). Permit No. 0990005-021-AC specifies that this unit will control dust from the two (2) proposed specialty conveyors (SP1 and SP2). Note: The two (2) Proposed specialty conveyors were NOT constructed, and therefore EU-021 controls only the dust from the rotary dryer.

This project will add or modify the following emissions units.

Facility ID No.0990005	
ID No.	**Emission Unit Description**
021	Rotoclone No. 1- Rotary Dryer Dust Collection – change to no dust control from 2speciality Conveyors
022	Rotoclone No. 2 - "B" System – (Existing) (Modify) – change of dust collection assignments
054	Rotoclone No. 6 – "A" System – (New)
055	Rotoclone No. 7 – "C" System - (New)

FACILITY REGULATORY CLASSIFICATION

- The combined Title V facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

1. Permitting Authority: The permitting authority for this project is Air Resource Management, South District, Florida Department of Environmental Protection (Department). The Air Resource Management, South District's mailing address is P.O. Box 2549, Fort Myers, Florida 33902-2549. All documents related to applications for permits to operate an emissions unit shall be submitted to the South District Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the South District Office. The mailing address and phone number of the South District Office is: P.O. Box 2549, Fort Myers, Florida 33902-2549 and 239/344-5600.

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions; and

   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

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

8. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

   a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; 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 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

   b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of

the report. The report shall contain the following:

1) The name, address and telephone number of the owner or operator of the major stationary source;
2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
4) Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the Department requires the annual reporting of actual particulate matter (PM) emissions for the following units: EU-021, EU-022, EU-054 and EU-055.

[Application 0990005-027-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

A. EU Group Description

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
EU-021	Rotoclone No. 1- Rotary Dryer Dust Collection System (Existing)

This is a minor change that pertains to the existing AAF/Wet Rotoclone No. 1 (EU-021). Permit No. 0990005-021-AC specifies that this unit will control dust from two (2) proposed specialty conveyors (SP1 and SP2). Note: The two (2) proposed specialty conveyors were NOT constructed, and therefore EU-021 controls only the dust from the rotary dryer.

EQUIPMENT

1. Rotoclone: American Air Filter (AAF), Type W, Size 27 (uses 2 gpm water injection).

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: Design flow rate: 15,000 (acfm). [Rule 62-210.200(PTE), F.A.C.]

3. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

4. Emissions Standards: (Based upon refined sugar thruput of rotary dryer at 112,500 lb/hr. and loading to control unit (EU-021) at 3,544.0 lb/hr).

Potential Particulate Matter (PM) Emission Rate….. 3.54 lb/hr….4.09 TPY
(PM10) Emission Rate….1.42 lb/hr….1.64 TPY
(PM2.5) Emission Rate…...1.42 lb/hr….1.64 TPY
[Application No. 0990005-027-AC and Rule 62-296, F.A.C.]

Opacity Standards: As determined by EPA Method 9 observations, visible emissions from exhaust point shall not exceed 5% opacity. [Rule 62-4.070 (3), F.A.C.]

TESTING REQUIREMENTS

5. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for visual emissions (VE) opacity. 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.]

6. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standards for visible emissions (VE) opacity. [Rule 62-297.310(7)(a)4, F.A.C.]

7. 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 D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are 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 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]
[Rule 624.070(3), F.A.C.]

RECORDS AND REPORTS

9. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.

A. EU Group Description

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
022	Rotoclone No. 2 - "B" System – (Existing), (Modify) – change of dust collection assignments

Summary of drop points: System B – EU-022 (Existing Rotoclone No. 2)

- Belt Conveyor 19
- Screw Conveyors 4, 12, 14, 19, 20, 20A, 40 and 45
- Packing Room Bins (5 lb. and 100 lb.)
- Bulk Curing Bins 4, 5 or 6
- Bucket Elevators 43A and 43B
- Production Scale
- Production Screens 2 and 3
- Total drop points controlled – Fluidized Bed System = 17
- Total drop points controlled – Rotary Dryer System = 0

EQUIPMENT:

10. Rotoclone: American Air Filter (AAF), Type W, Size 27 (uses 2 gpm water injection).

PERFORMANCE RESTRICTIONS

11. Permitted Capacity: Design flow rate: 14,770 (acfm) [Rule 62-210.200(PTE), F.A.C.]

12. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARD

13. Emissions Standards: (Based upon refined sugar thruput of System "B" at 150,000 lb/hr. and loading to control unit (EU-022) at 133.26 lb/hr).

Potential Particulate Matter (PM) Emission Rate…. 0.1333 lb/hr….0.435 TPY
(PM10) Emission Rate….0.053 lb/hr…...0.174 TPY
(PM2.5) Emission Rate…..0.053 lb/hr…...0.174 TPY
[Application No. 0990005-027-AC and Rule 62-296, F.A.C.]

14. Opacity Standards: As determined by EPA Method 9 observations, visible emissions from exhaust point shall not exceed 5% opacity. [Rule 62-4.070 (3), F.A.C.]

TESTING REQUIREMENTS

15. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for visual emissions (VE) opacity. 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.]

16. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standards for visual emissions (VE) opacity. [Rule 62-297.310(7)(a)4, F.A.C.]

17. 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 D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are 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 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

19. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
054	Rotoclone No. 6 – "A" System – (New)

Summary of drop points: System A – EU-054 (New) Rotoclone No. 6)

- Belt Conveyors 11 and GG #6
- Screw Conveyors F, G, 27, 28, P, Q1, S2, 8, 25 and 25A
- Silo Scale
- Bulk Curing Bins 1,2,3 or 7
- Bucket Elevators 10, 16, B, GG #5
- Sweco Shaker Screen
- Rotex Screen 9346 (to GG #8)
- Total drop points controlled – Fluidezed Bed System = 10
- Total drop points controlled – Rotary Dryer System = 10

EQUIPMENT

20. Rotoclone: American Air Filter (AAF), Type W, Size 27 (uses 2 gpm water injection).

PERFORMANCE RESTRICTIONS

21. Permitted Capacity: Design flow rate: 15,078 (acfm) [Rule 62-210.200(PTE), F.A.C.]

22. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

23. Emissions Standards: (Based upon refined sugar thruput of System "A" at 150,000 lb/hr. and loading to control unit (EU-054) at 156.78 lb/hr).

Potential Particulate Matter (PM) Emission Rate….. 0.156 lb/hr….0.512 TPY
(PM10) Emission Rate….0.063 lb/hr….0.205 TPY
(PM2.5) Emission Rate…..0.063 lb/hr…0.205 TPY
[Application No. 0990005-027-AC and Rule 62-296, F.A.C.]

Opacity Standards: As determined by EPA Method 9 observations, visible emissions from exhaust point shall not exceed 5% opacity. [Rule 62-4.070 (3), F.A.C.]

TESTING REQUIREMENTS

24. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for visual emissions (VE) opacity. 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.]

25. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standards for particulate visible emissions (VE) opacity. [Rule 62-297.310(7)(a)4, F.A.C.]

26. 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 D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are 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 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

28. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
055	Rotoclone No. 7 – "C" System - (New)

Summary of drop points: System C – EU-055 (New) Rotoclone No. 7)

- Belt Conveyors A (x2) and B
- Screw Conveyors 20A. 26, 27, 29, 30, 31, 41, 42, 46, N
- Bucket Elevator 15
- Reject Chute
- Total drop points controlled – Fluidized Bed System = 14
- Total drop points controlled – Rotary Dryer System = 1

EQUIPMENT

29. Rotoclone: American Air Filter (AAF), Type W, Size 27 (uses 2 gpm water injection).

PERFORMANCE RESTRICTIONS

30. Permitted Capacity: Design flow rate: 12,895 (acfm) [Rule 62-210.200(PTE), F.A.C.]

31. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

32. Emissions Standards: (Based upon refined sugar thruput of System "C" at 150,000 lb/hr. and loading to control unit (EU-055) at 117.58 lb/hr).

Potential Particulate Matter (PM) Emission Rate…. 0.117 lb/hr…0.384 TPY
(PM10) Emission Rate….0.047 lb/hr….0.154 TPY
(PM2.5) Emission Rate….0.047 lb/hr…0.154 TPY
[Application No. 0990005-027-AC and Rule 62-296, F.A.C.

33. Opacity Standards: As determined by EPA Method 9 observations, visible emissions from exhaust point shall not exceed 5% opacity. [Rule 62-4.070 (3), F.A.C.]

TESTING REQUIREMENTS

34. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the ***emissions standards for visual emissions (VE) opacity. 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.]***

35. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standards for visible emissions (VE) opacity. [Rule 62-297.310(7)(a)4, F.A.C.]

36. 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 D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are 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 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

38. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62- 297.310(8), F.A.C.]

A. EU Group Description

This section of the permit addresses text (wording) and table changes to operating permit.

WORDING (TEXT) and TABLE CHANGES FOR PERMIT NO. 0990005-017AV, Section 3

Changes of tables and wording are made to Operating Permit No. 099005-017-AV, Section 3. (The changes are shown in ***Script*** *lettering):*

39. Reference Permit No. 0990005-017-AV, Section 3

Cyclonic Control Devices

Table, Cyclonic Control Devices
(The changes are shown in ***Script*** *lettering)*

EU No.	Description	Control Type	Design Flow Rates acfm	Water Injection Rate (gpm, min.)	Control Efficiency PM	Control Efficiency PM10
021	**Rotary Dryer, Central Dust Collection Sys. No. 1**	**Rotoclone No. 1**	**15,000**	**2**	**99.9%**	**99%**
022	*B System*	**Rotoclone No. 2**	*14,770*	**2**	**99.9%**	**99%**
023	**Cooler No. 1**	**Rotoclone No. 3**	**15,000**	**2**	**99.9%**	**99%**
024	**Cooler No. 2**	**Rotoclone No. 4**	**15,000**	**2**	**99.9%**	**99%**
New 054	*A System*	*Rotoclone No. 6*	*15,078*	*2*	*99.9%*	*99%*
New 055	*C System*	*Rotoclone No. 7*	*12,895*	*2*	*99.9%*	99%

40. Changes to wording in Permit No. 0990005-017-AV, Section 3. Emissions Unit Specific Conditions, D. Sugar Refinery, Capacity and Performance Restrictions: (The changes are shown in ***Script*** *lettering):*

    1. **Permitted Capacities: Total refined sugar production (Fluidized Bed Dryer (EU-025), Rotary Dryer (EU-021), Cooler No.1 (EU-023) and Cooler No. 2 (EU-024) shall not exceed 490,000 tons during** *any consecutive 52-week period**, and;***

        a. ***The Rotary System (EU-021, EU-023 and EU-024) shall not process more than 130,000 tons during*** *any consecutive 52-week period.*

        b. **The Bulk Load-out Operation (EU-034) shall not process more than 139,000 tons of refined sugar during** *any consecutive 52-week period.*

        c. **The Transfer Bulk Load-Out Station (EU-035) shall not process more than 351,000 tons of refined sugar during** *any consecutive 52-week period.*

        d. **Isopropyl alcohol usage (EU-043) from the sugar refinery shall not exceed 78,040 pounds during** *any consecutive 52-week period.*

41. Changes to wording in Permit No. 0990005-017-AV, Section 3. Emissions Unit Specific Conditions, D. Sugar Refinery, C, Emissions Limiting Standards: (The changes are shown in ***Script*** *lettering)*

2. **PM/PM10 Emissions): The sum of emissions shall not exceed** *22.15* **tons of PM per year and** *3.00* **tons of PM10 per year from the following emission units: the Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1 (EU-021); the** *B System* **with Rotoclone No. 2 (EU-022); the Cooler No. 1 with Rotoclone No. 3 (EU-023); the Cooler No. 2 with Rotoclone No. 4 (EU-024); the Fluidized Bed Dryer/Cooler with Baghouse (EU-025); the Bulk Load-Out Operation (EU-034);** *the Transfer Bulk Load-Out Station (EU-035), A System with Rotoclone No. 6, and C System with Rotoclone No. 7.* **[Rule 6210.200 (PTE), F.A.C. and Permit No. 0990005-021-AC]**

3. **Potential PM/PM10 Emissions; For informational purposes only, the following table summarizes the potential emissions from the Sugar Refinery emission units:**

(The changes are shown in ***Script*** *lettering):*

EU No.	Description	Tons/Yr PM	Tons/Yr PM10
021	**Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1**	*4.09*	**1.645**
022	*B System* **with Rotoclone No. 2**	*0.44*	*0.174*
023	**Cooler No. 1 with Rotoclone No. 3**	**4.09**	**1.64**
024	**Cooler No. 2 with Rotoclone No. 4**	**0.45**	**0.18**
025	**Fluidized Bed Dryer/Cooler with Baghouse**	**14.70**	**0.588**
034	**Bulk Load-Out Operation**	**3.63**	**0.15**
035	**Transfer Bulk Load-0ut Station**	**1.83**	**0.07**
054	*A System with Rotoclone No. 6- (NEW)*	*0.51*	*0.205*
055	*C System with Rotoclone No. 7- (NEW)*	*0.38*	*0.154*

4. **PM/PM10 Emission Factors: The permittee shall use the following emission factors to calculate PM PM10 emissions (Including calculations for the Annual Operating Report (AOR).**

(The changes are shown in ***Script*** *lettering)*

EU No.	Description	PM Uncontrolled	PM Control Efficiency	PM10 Uncontrolled	PM10 Control Efficiency
021	**Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1**	*3.150 % (from dryer)*	**99.9%**	0.125 % *(from dryer)*	**99.0%**
022	*B System* **with Rotoclone No. 2**	*1.777 lb/ton*	**99.9%**	*0.071 lb/ton*	**99.0%**
023	**Cooler No. 1 with Rotoclone No. 3**	**0.175%**	**99.9%**	**0.007%**	**99.0%**
024	**Cooler No. 2 with Rotoclone No. 4**	**0.175%**	**99.9%**	**0.007%**	**99.0%**
025	**Fluidized Bed Dryer/Cooler with Baghouse**	**1.50%**	**99.8%**	**0.060%**	**99.8%**
034	**Bulk Load-Out Operation**	**0.105 lb/ton**	**50%**	**0.0042 lb/ton**	**50%**
035	**Transfer Bulk Load-0ut Station**	**0.105 lb/ton**	**90%**	**0.0042 lb/ton**	**90%**
054	*A System with Rotoclone No. 6 (New)*	*1.045 lb/ton*	99.9%	*0.042 lb/ton*	*99.0%*
055	*C System with Rotoclone No. 7(New)*	*0.105 lb/ton (Rotary Dryer) 1.463 lb/ton (FluidizerDrying)*	99.9%	*0.0042 lb/ton (Rotary Dryer) 0.059 lb/ton (fluidizer Drying)*	*99.0%*

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or 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 for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of 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 number

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

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

Fl: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B

General Conditions

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

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 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.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.987(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 are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed 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.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

   a. Have access to and copy any records that must be kept under conditions of the permit;

   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of noncompliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

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

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

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

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

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

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

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

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

RECORDS AND REPORTS

10. 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 5 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.]

    a. Emissions Computation and Reporting: *Applicability*. This rule sets forth required methodologies 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 this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

    b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) 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.

(a) 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.

(b) 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.

(c) 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.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) 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

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) 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:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) 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.

(c) 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 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.

(3) Mass Balance Calculations.

(a) 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:

1) 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

2) 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.

(b) 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.

(c) 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.

(4) Emission Factors.

a. 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.

1) 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.

2) 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.

3) 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.

b. 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.

(5) 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.

(6) 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.

(7) 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.

(8) 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(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

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

COMPLIANCE TESTING REQUIREMENTS

1. 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.]

2. Applicable Test Procedures - 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.

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

3. 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.]

4. 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. 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,

3. 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 visible emissions, if there is an applicable standard.

4. 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.

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.

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

RECORDS AND REPORTS

5. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information.

a. The type, location, and designation of the emissions unit tested.

b. The facility at which the emissions unit is located.

c. The owner or operator of the emissions unit.

d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

f. The date, starting time and end time of the observation.

g. The test procedures used.

h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.

i. 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.

j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. 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.]

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

SOUTH DISTRICT
P.O. BOX 2549
FORT MYERS, FL 33902-2549

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Electronic Mail
Received Receipt Requested

PERMITTEE

Okeelanta Corporation
21250 U.S. Highway 27 South
South Bay, Florida 33493

Authorized Representative:
Mr. Jose Gonzalez, Vice President of Industrial Operations

Air Permit No. 0990005-035-AC
Permit Expires: **September 9, 2014**

Okeelanta Sugar Mill Refinery
Air Construction Permit
Add Baghouse at Bulk Load-Out (EU034)

This is the final air construction permit, which authorizes Okeelanta Corporation to construct a baghouse at the sugar refinery's bulk load-out operation. The proposed work will be conducted at the Okeelanta Sugar Mill Refinery, which is a sugar mill and refinery (Standard Industrial Classification Nos. 2061 and 2062). The facility is located in Palm Beach County at 21250 U.S. Highway 27 South, South Bay, Florida. The UTM coordinates are Zone 17, 524.90 km East, and 2940.10 km North. *As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.*

This final permit is organized by the following sections.

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

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Fort Myers, Florida

Jon M. Iglehart
Director of District Management

Date

JMI/srm/jl

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on September 10, 2013 to the persons listed below.

Mr. Jose Gonzalez, Okeelanta Corporation: Jose_Gonzalez@floridacrystals.com
Mr. Matthew Capone, Okeelanta Corporation: matthew_capone@floridacrystals.com
Mr. David Buff, P.E., Golder Associates: dbuff@golder.com
Mr. James Stormer, Palm Beach County Health Department: james_stormer@doh.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) (Date)

PROJECT DESCRIPTION

Proposed Project

The proposed project will add a baghouse to the Bulk Load-Out Operation (EU034) located in the sugar refinery. This project will modify the following emissions units in the sugar refinery.

Facility ID No. 0990005	
ID No.	**Emission Unit Description**
034	Bulk Load-Out Operation

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the South District Engineering and Permitting Section, Florida Department of Environmental Protection (Department). The South District's mailing address is P.O. Box 2549, Fort Myers, Florida 33902-2549. All documents related to applications for permits to operate an emissions unit shall be submitted to the South District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the South District Office and Palm Beach County Health Department. The mailing address and phone number of the South District Office is: P.O. Box 2549, Fort Myers, Florida 33902-2549 and (239) 344-5600. The mailing address and phone number of the Palm Beach County Health Department is: Post Office Box 29 West Palm Beach, Florida 33402-0029 and (561) 837-5900.

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions; and

   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

8. Application for Title V Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing

operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

A. Bulk Load-Out Operation

This section of the permit addresses the following emissions unit.

EU No.	Emissions Unit Description
034	Bulk Load-Out Operation

The Bulk Load-Out Operation (EU034) with a design equipment capacity of 600 tons per day is used to load sugar into either trucks or railcars. Emissions are controlled by a baghouse.

EQUIPMENT SPECIFICATIONS

1. Baghouse Specifications for Bulk Load-Out Operation: The permittee shall operate and maintain the Bulk Load-Out Operation's baghouse with the following minimum specifications:

Parameter	Specification
Design exhaust flow rate	3400 acfm
Filtering area	1536 ft^2
Air-to-cloth ratio	2.2:1 cfm/ft^2
Control efficiency	99.8% (PM and PM_{10})

[Rule 62-4.070(3), F.A.C. and Permit No 0990005-035-AC]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The Bulk Load-Out Operation (EU034) shall not process more than 139,000 tons of refined sugar during any consecutive 52-week period. [Rules 62-4.210, 62-4.070(3) and 62-210.200(PTE), F.A.C. and Permit No. 0990005-035-AC]

3. Restricted Operation: The operation of the sugar refinery is limited by the limitations on processing capacities. The hours of operation are not limited (8,760 hours per year). [Permit No. 0990005-035-AC]

EMISSIONS STANDARDS

4. Visible Emissions (VE): Visible emissions from EU034 shall not exceed 5 percent opacity. [Rules 62-296.320(4) and 62-297.620(4), F.A.C.; and Permit No. 0990005-035-AC]

5. PM/PM_{10} Emissions): The the sum of particulate matter (PM) emissions from the following emission units: EU021, EU022, EU023, EU024, EU025, EU054, EU055, EU034, and EU035, shall not exceed 19.77 TPY of PM and 2.9 TPY of PM_{10}. [Rule 62-210.200(PTE), F.A.C. and Permit No. 0990005-035-AC]

{Permitting Note: The addition of the baghouse to the Bulk Load-Out Operation emission unit will decrease the Bulk Load-Out Operation PM emissions from 3.63 TPY to 1.28 TPY.}

TESTING REQUIREMENTS

6. Initial Compliance Tests: This emissions unit (EU034) shall be tested to demonstrate initial compliance with the emissions standards for **VE**. 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.]

7. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), this emissions unit (EU034) shall be tested to demonstrate compliance with the emission standards for **VE**. [Rule 62-297.310(7)(a)4, F.A.C. and Permit No. 0990005-035-AC]

8. Compliance Tests Prior to Renewal: Compliance tests shall be performed for **VE** once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limit in Specific Condition No. **4.** [Rules 62-210.300(2)(a), 62-297.310(7)(a), F.A.C.]

9. Test Method:

a. *Method*. Compliance tests to determine visible emissions shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C.

b. *Testing Time Length*. The minimum observation period for a visible emissions compliance test shall be 30 minutes.

c. *Required Test Conditions*. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

d. *Recordkeeping During Testing*. The permittee shall record the actual sugar processing rate during testing.

[Rules 62-204.800 and 62-297.310(4), F.A.C.; 40 CFR 60, Appendix A; and Permit No. 0990005-035-AC]

10. 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 D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in Appendix A of 40 CFR 60 and are 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 62-297.100, F.A.C.; Appendix A of 40 CFR 60 and Permit No. 0990005-035-AC]

12. PM Testing: The PM compliance test requirements are waived in lieu of the alternative opacity standard of 5 percent for the Bulk Load-Out Operation. If the Department has reason to believe that the particulate weight emission standard applicable to the emission unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule. [Rule 62-297.620(4), F.A.C. and Permit No. 0990005-035-AC]

RECORDS AND REPORTS

13. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]

14. Test Reports: For each visible emissions test conducted, the permittee shall submit a test report to each Compliance Authority as soon as practical, but no later than 45 days after the last sampling run of each test is completed. Each test report shall include the information specified in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C. and Permit No. 0990005-035-AC]

15. Operational Data: The permittee shall maintain daily and weekly records to demonstrate compliance with the permit limitation specified in Specific Condition No**. 2** of this permit. The daily and weekly records shall include, at a minimum, the following: the date; the hours of operation; quantity of refined sugar handled through the bulk load out area; and weekly rolling consecutive 52-week period total for all permitted refined sugar production limits. [Rule 62-4.070(3), F.A.C. and Permit No. 0990005-035-AC]

A. Bulk Load-Out Operation

OTHER

16. All other specific conditions in air construction permit Nos. 0990005-021-AC and 0990005-027-AC for the sugar refinery emissions units remain effective and unchanged. [Rule 62-4.070(3), F.A.C.**]**

SECTION 4. APPENDICES

Contents

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or 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 for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of 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 number

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

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

Fl: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B

General Conditions

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

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 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.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(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 are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed 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.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
   a. Have access to and copy any records that must be kept under conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   a. A description of and cause of noncompliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 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.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards

addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable);

    b. Determination of Prevention of Significant Deterioration (not applicable); and

    c. Compliance with New Source Performance Standards (not applicable).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        (1) The date, exact place, and time of sampling or measurements;

        (2) The person responsible for performing the sampling or measurements;

        (3) The dates analyses were performed;

        (4) The person responsible for performing the analyses;

        (5) The analytical techniques or methods used;

        (6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware 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.

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

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

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

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

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

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

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

RECORDS AND REPORTS

10. 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 5 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.]

11. Emissions Computation and Reporting:

    a. *Applicability*. This rule sets forth required methodologies 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 this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) 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.

(a) 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.

(b) 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.

(c) 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.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) 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

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) 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:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) 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.

(c) 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 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.

(3) Mass Balance Calculations.

(a) 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:

1) 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

2) 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.

(b) 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.

(c) 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.

(4) Emission Factors.

a. 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.

1) 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.

2) 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.

3) 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.

b. 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.

(5) 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.

(6) 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.

(7) 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.

(8) 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(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

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

COMPLIANCE TESTING REQUIREMENTS

1. 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.]

2. Applicable Test Procedures - 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.

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

3. 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.]

4. 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. 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,

3. 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 visible emissions, if there is an applicable standard.

4. 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.

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.

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

RECORDS AND REPORTS

5. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information.

a. The type, location, and designation of the emissions unit tested.

b. The facility at which the emissions unit is located.

c. The owner or operator of the emissions unit.

d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

f. The date, starting time and end time of the observation.

g. The test procedures used.

h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.

i. 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.

j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. 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.]

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTH DISTRICT
P.O. BOX 2549
FORT MYERS, FL 33902-2549

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

***FINAL PERMIT ***

Electronic Mail
Received Receipt Requested

PERMITTEE

Okeelanta Corporation
21250 U.S. Highway 27 South
South Bay, Florida 33493

Authorized Representative:
Mr. Jose Gonzalez, Vice President of Industrial Operations

Air Permit No. 0990005-037-AC
Permit Expires: **July 16, 2015**

Okeelanta Sugar Mill, Refinery, and Transshipment Facility.

Minor Source Air Construction Permit. Add Packaging Lines No. 16, 17, 18 & 19 and Revise Line 5

This is the final air construction permit, which authorizes Okeelanta Corporation to construct (add) four (4) additional sugar packaging lines (Packaging Lines No. 16, 17, 18 and 19), to be located in Warehouse No. 3. (One (1) of these packaging lines is actually the existing packaging line No. 5 located in the Transshipment Facility which is to be relocated to Warehouse No. 3. It will be replaced in the Transshipment Facility by a brown sugar packaging line of the same capacity and it will be re-designated as Packaging Line No. 5). The potential emissions from the packaging lines consists of particulate matter (PM) in the form of sugar dust, and all four (4) packaging lines are controlled by one (1) baghouse (EU-059). The proposed work will be conducted at the Okeelanta Sugar Mill, Refinery and Transshipment Facility, which is a sugar mill and refinery (Standard Industrial Classification Nos. 2061 and 2062). The facility is located in Palm Beach County at 21250 U.S. Highway 27 South, South Bay, Florida. The UTM coordinates are Zone 17, 524.90 km East, and 2940.10 km North.

This final permit is organized by the following sections.

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

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Fort Myers, Florida

_____ _____

Jon M. Iglehart Date
Director of
District Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on December 6, 2013 to the persons listed below.

Mr. Jose Gonzalez, Okeelanta Corporation: Jose.Gonzalez@floridacrystals.com
Mr. Matthew Capone, Okeelanta Corporation: Matthew.Capone@floridacrystals.com
Mr. David Buff, P.E., Golder Associates: dbuff@golder.com
Mr. James Stormer, Palm Beach County Health Department: james.stormer@doh.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) (Date)

PROPOSED PROJECT

This project will add four (4) additional sugar packaging lines (Packaging Lines No. 16, 17, 18 and 19), to be located in Warehouse No. 3. The additional packaging lines are a separate operation from the existing speciality Sugar production in Warehouse No. 3. Two (2) rooms are to be built into the interior of the warehouse. Two (2) packaging lines to package artificial sweeteners will be installed in one (1) room (Packaging Lines No. 16 and 17) and two (2) packaging lines for speciality sugars are to be housed in the second room (Packaging Lines No. 18 and 19). (One (1) of these packaging lines is actually the existing packaging line No. 5 located in the Transshipment Facility which is to be relocated to Warehouse No. 3. It will be replaced in the Transshipment Facility by a brown sugar packaging line of the same capacity and it will be re-designated as Packaging Line No. 5).

The potential emissions from the packaging lines consists of particulate matter (PM) in the form of sugar dust, and all four (4) packaging lines are controlled by one (1) dust collector (baghouse) (EU-059).

Facility ID No. 0990005

ID No.	Emission Unit Description
059	Dust Collection System (Baghouse) – 3,400 acfm (Emission control for Pkg. Lines 16, 17, 18 and 19)

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the South District Engineering and Permitting Section, Florida Department of Environmental Protection (Department). The South District's mailing address is P.O. Box 2549, Fort Myers, Florida 33902-2549. All documents related to applications for permits to operate an emissions unit shall be submitted to the South District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the South District Office and Palm Beach County Health Department. The mailing address and phone number of the South District Office is: P.O. Box 2549, Fort Myers, Florida 33902-2549 and (239) 344-5600. The mailing address and phone number of the Palm Beach County Health Department is: Post Office Box 29 West Palm Beach, Florida 33402-0029 and (561) 837-5900.

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions; and

   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

8. Application for Air Operation or Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after

commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Sugar Mill

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
59	Dust Collection System (Baghouse) – 3,400 acfm (Emissions control for Pkg. Lines 16, 17, 18 and 19)

EQUIPMENT

1. The permittee is authorized to install one (1) MAC Equipment Dust collector (baghouse), Model 55AVSC49-30 with an outlet gas flow rate of 3,400 acfm. This equipment controls the PM emissions for all four (4) packaging lines. (No. 16, 17, 18 and 19). [Application No. 0990005-037-AC]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: Production Rate for the four (4) combined packaged Sugar/Sweeteners packaging lines (No. 16, 17, 18 and 19) is 181.2 Tons Per Day (TPD) [Rule 62-210.200(PTE), F.A.C.]

3. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

4. Emissions Standards: Visible Emissions (VE): The visible emissions from this emissions unit (EU-59), shall not exceed 5 percent opacity. [Rules 62-296.320(4) and 62-297.620(4), F.A.C.

5. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for **Visual Emissions (VE)**. 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.]

6. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standards for Visual Emissions (VE). [Rule 62-297.310(7)(a)4, F.A.C.]

7. Compliance Tests Prior to Renewal: Compliance tests shall be performed for **VE** once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limit in Specific Condition No. 6. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C

8. Test Method:
   a. Tests to determine visible emissions shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C.
   b. The minimum observation period for a visible emissions compliance test shall be 30 minutes.
   c. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
   d. The permittee shall record the actual sugar processing rate for the emissions units being controlled and tested.

   [Rules 62-204.800 and 62-297.310(4), F.A.C.; 40 CFR 60, Appendix A;

9. 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 D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in Appendix A of 40 CFR 60 and is 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 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

11. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]

12. Test Reports: For each visible emissions test conducted, the permittee shall submit a test report to each Compliance Authority as soon as practical, but no later than 45 days after the last sampling run of each test is completed. Each test report shall include the information specified in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C.

SECTION 4. APPENDICES

Contents

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or 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 for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of 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 number

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

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

Fl: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B

General Conditions

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

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 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.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(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 are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed 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.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
   a. Have access to and copy any records that must be kept under conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   a. A description of and cause of noncompliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 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.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards

addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable);

    b. Determination of Prevention of Significant Deterioration (not applicable); and

    c. Compliance with New Source Performance Standards (not applicable).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        (1) The date, exact place, and time of sampling or measurements;

        (2) The person responsible for performing the sampling or measurements;

        (3) The dates analyses were performed;

        (4) The person responsible for performing the analyses;

        (5) The analytical techniques or methods used;

        (6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware 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.

SECTION 4. APPENDIX C

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

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

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

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

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

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

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

RECORDS AND REPORTS

10. 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 5 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.]

11. Emissions Computation and Reporting:

    a. *Applicability*. This rule sets forth required methodologies 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 this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) 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.

(a) 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.

(b) 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.

(c) 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.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) 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

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) 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:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) 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.

(c) 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 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.

(3) Mass Balance Calculations.

(a) 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:

1) 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

2) 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.

(b) 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.

(c) 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.

(4) Emission Factors.

a. 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.

1) 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.

2) 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.

3) 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.

b. 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.

(5) 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.

(6) 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.

(7) 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.

(8) 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(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

SECTION 4. APPENDIX D

Common Testing Requirements

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

COMPLIANCE TESTING REQUIREMENTS

1. 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.]

2. Applicable Test Procedures - 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.

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

3. 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.]

4. 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. 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,

3. 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 visible emissions, if there is an applicable standard.

4. 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.

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.

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

RECORDS AND REPORTS

5. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information.

a. The type, location, and designation of the emissions unit tested.

b. The facility at which the emissions unit is located.

c. The owner or operator of the emissions unit.

d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

f. The date, starting time and end time of the observation.

g. The test procedures used.

h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.

i. 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.

j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. 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.]

ATTACHMENT OC-EU8-IV3

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT OC-EU8-IV3
ALTERNATIVE METHODS OF OPERATION

The owner or operator is authorized to operate the dryers in any of the following methods.

- The Fluidized Bed Dryer (EU-025) only;
- Rotary System only:
  - 3-Stage High-Production Mode: The Rotary Dryer (EU-021) is operated with Cooler No. 1 (EU-023) and Cooler No. 2 (EU-024) in series. In this mode, high production rates are approximately 1000 tons per day for white refined sugar and above 600 tons per day for specialty sugars.
  - 2-Stage Low-Production Mode: The Rotary Dryer (with Rotoclone No. 1, EU-021) is off and Cooler No. 1 (with Rotoclone No. 3, EU-023) is operated as a dryer followed by Cooler No. 2 (with Rotoclone No. 4, EU-024) in series. In this mode, low production rates are below 500 tons per day for specialty sugars.
- The Fluidized Bed Dryer (EU-025) and Rotary System (EU-021, EU-023 and EU-024) may be operated simultaneously. The dryers and sugar refinery are subject to the production and processing limitations specified in Specific Condition No. 3 of this subsection. [Permit No. 0990005-021-AC and -027-AC.]

PAINT BOOTH

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [9]
Paint Booth

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Paint Booth

3. Emissions Unit Identification Number: **048**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**07**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit: Paint Booth
   Manufacturer: **AFC, Inc.** Model Number: **TSD6036**

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    This emission unit consists of a paint booth which is a drive-through model of the Crossflo truck spray booth used only to apply paint to agricultural equipment, trailers, and other vehicles or facility equipment. Paint is applied using compressed air spray gun, airless paint sprayer or other equipment with equivalent transfer efficiency.

EMISSIONS UNIT INFORMATION
Section [9]
Paint Booth

Emissions Unit Control Equipment/Method: Control **1** of **1**

1. Control Equipment/Method Description: **Glass Fiber Paint Arrestor Pad**
2. Control Device or Method Code: **058**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **4,950 gallons/year**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum throughput rate based on gallons of paint and thinner in any consecutive 12 months.** **Based on Permit No. 0990005-038-AV.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Paint Booth**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **25.7** feet	7. Exit Diameter: **4** feet
8. Exit Temperature: **77**°F	9. Actual Volumetric Flow Rate: **45,500** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **There are two exhaust stacks for the paint spray booth. Both are 25.7 ft tall with a 4-ft diameter and have a flow rate of 45,500 acfm.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Surface Coating Application General - Paint: Solvent Based**		
2. Source Classification Code (SCC): **4-02-001-10**	3. SCC Units: **Gallons of coatings**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: **4,950**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum annual rate based on Permit No.0990005-038-AV and 0990005-015-AC.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
VOC			**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **70.38** lb/hour **9.40** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: **Based on Permit No.0990005-038-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attachment OC-EU9-F1.10 for calculations.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **9.40 TPY VOC**	4. Equivalent Allowable Emissions: lb/hour **9.40** tons/year
5. Method of Compliance: **Recordkeeping**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0990005-038-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-297.620(4), Florida Administrative Code (F.A.C.), and Permit No. 0990005-038-AV.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION
Section [9]
Paint Booth

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU9-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU9-I3** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU9-IV1**
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU9-F1.10

EMISSIONS CALCULATIONS

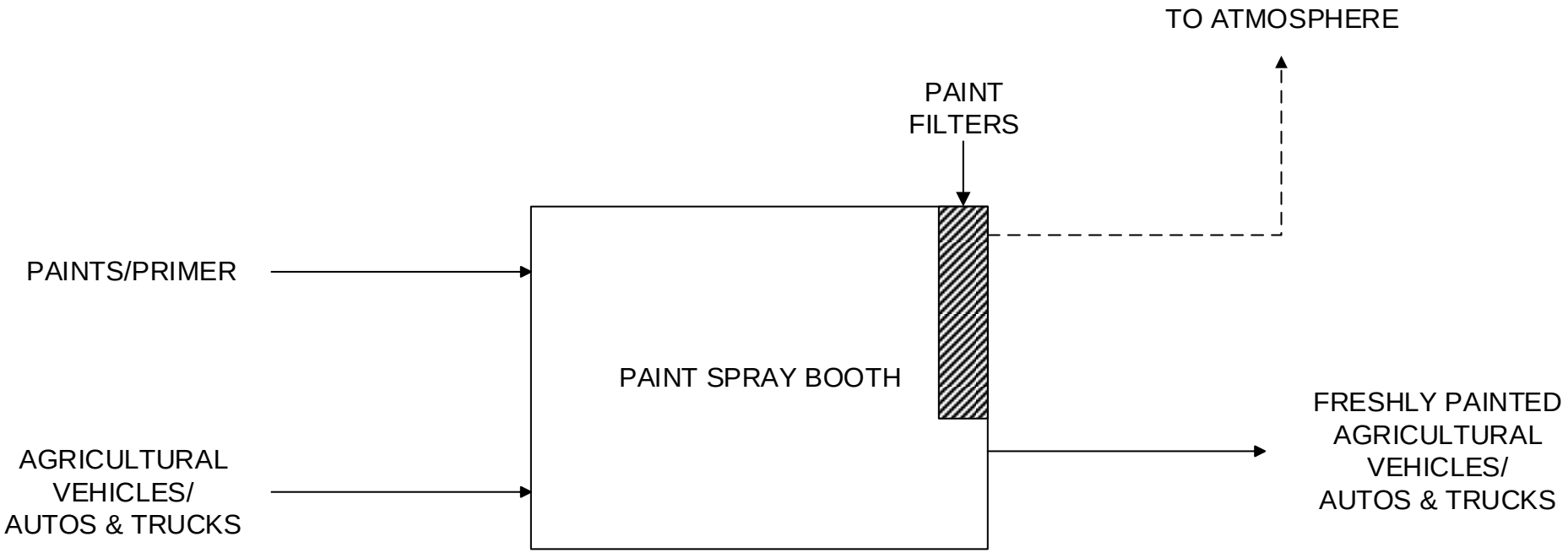
Attachment OC-EU9-F1.10. Calculation of VOC Emissions from Paint Booth
Okeelanta Corporation, South Bay, Fl

Paint Type	Manufacturer	Product Density (lb/gal)	Maximum Usage Rate		VOC Content (lb/gal)	Maximum Emissions		
			gal/hr	gal/yr		lb/hr	lb/yr	TPY
Coatings	Various	7.57	12.5	4,370	3.47	43.38	15,164	7.58
Thinner	Naptha	6.28	4.3	580	6.28	27.00	3,642	1.82
Total			16.8	4,950		70.38	18,806	9.40

Footnotes:
Paint manufacturer or product may change; usages may vary, but maximum emission rates will not be exceed.

ATTACHMENT OC-EU9-I1

PROCESS FLOW DIAGRAM



Attachment OC-EU3-I1. Process Flow Diagram
Paint Spray Booth
Okeelanta Corporation
South Bay, Florida

Process Flow Legend
Solid/Liquid
Gas

Golder Associates

ATTACHMENT OC-EU9-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT OC-EU9-I3

OKEELANTA CORPORATION
DESCRIPTION OF PAINT BOOTH ARRESTOR PADS

Arrestor Pad Type	Glass Fiber Paint Arrestor Pad
Manufacturer	Superior Glass Fibers, Inc.
Model Number	TGT 25-250-14-2-2-00
Dimensions	20” x 20” x 2.5”
Quantity	60
Average Paint Over Spray Removal Efficiency	94%
Paint Holding Capacity (lbs)	2.22

Source: Air Filter Testing Laboratories, Inc., Report No. 6269 (8/16/91).

PACKAGING LINES 16-19 WITH BAGHOUSE

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [10]
Packaging Lines 16-19 with Baghouse

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   Packaging Lines No. 16, 17, 18, and 19 located in Warehouse No. 3.

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		**February 21, 2014**	**20**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    This emission unit consists of four sugar packaging lines (Nos. 16, 17, 18, and 19) separate from the specialty sugar production located in Warehouse No. 3. Two of the packaging lines (Nos. 16 and 17) are used to package artificial sweeteners while the other two (Nos. 18 and 19) are used for packaging specialty sugars. The four packaging lines have a dust control system installed and vented to a single dust collector, which vents through the roof of the building.

EMISSIONS UNIT INFORMATION
Section [10]
Packaging Lines 16-19 with Baghouse

Emissions Unit Control Equipment/Method: Control **1** of **1**

1. Control Equipment/Method Description: **Fabric Filter – Low Temperature (T < 180 F)**
2. Control Device or Method Code: **018**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **181.2 TPD Packaged Sugar/Sweeteners**	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum production rate on an annual basis is 66,123 TPY based on 365 days of operation.** **Based on Permit No. 0990005-038-AV and 0990005-037-AC.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **P16**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **H**	6. Stack Height: **36** feet	7. Exit Diameter: **1.78** feet
8. Exit Temperature: **75**°F	9. Actual Volumetric Flow Rate: **3,400** acfm	10. Water Vapor: **0.5** %
11. Maximum Dry Standard Flow Rate: **3,356** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters based on the baghouse specifications for the four additional packaging lines.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Food and Agricultural – Sugar Cane Processing, Other Not Classified**		
2. Source Classification Code (SCC): **3-02-015-99**	3. SCC Units: **Tons processed**	
4. Maximum Hourly Rate: **7.55**	5. Maximum Annual Rate: **66,123**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum hourly and annual rates refer to the maximum dry sugar/sweetener packaging rate at Warehouse No. 3 of 181.2 ton/day and is based on 8,760 hours per year of operation.** **Permit Nos. 0990005-037-AC and 0990005-038-AV.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**018**		**NS**
PM10	**018**		**NS**
PM2.5	**018**		**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions:		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-297.620(4), Florida Administrative Code (F.A.C.), and Permit Nos. 0990005-037-AC and 0990005-038-AV.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU10-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU10-I3** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

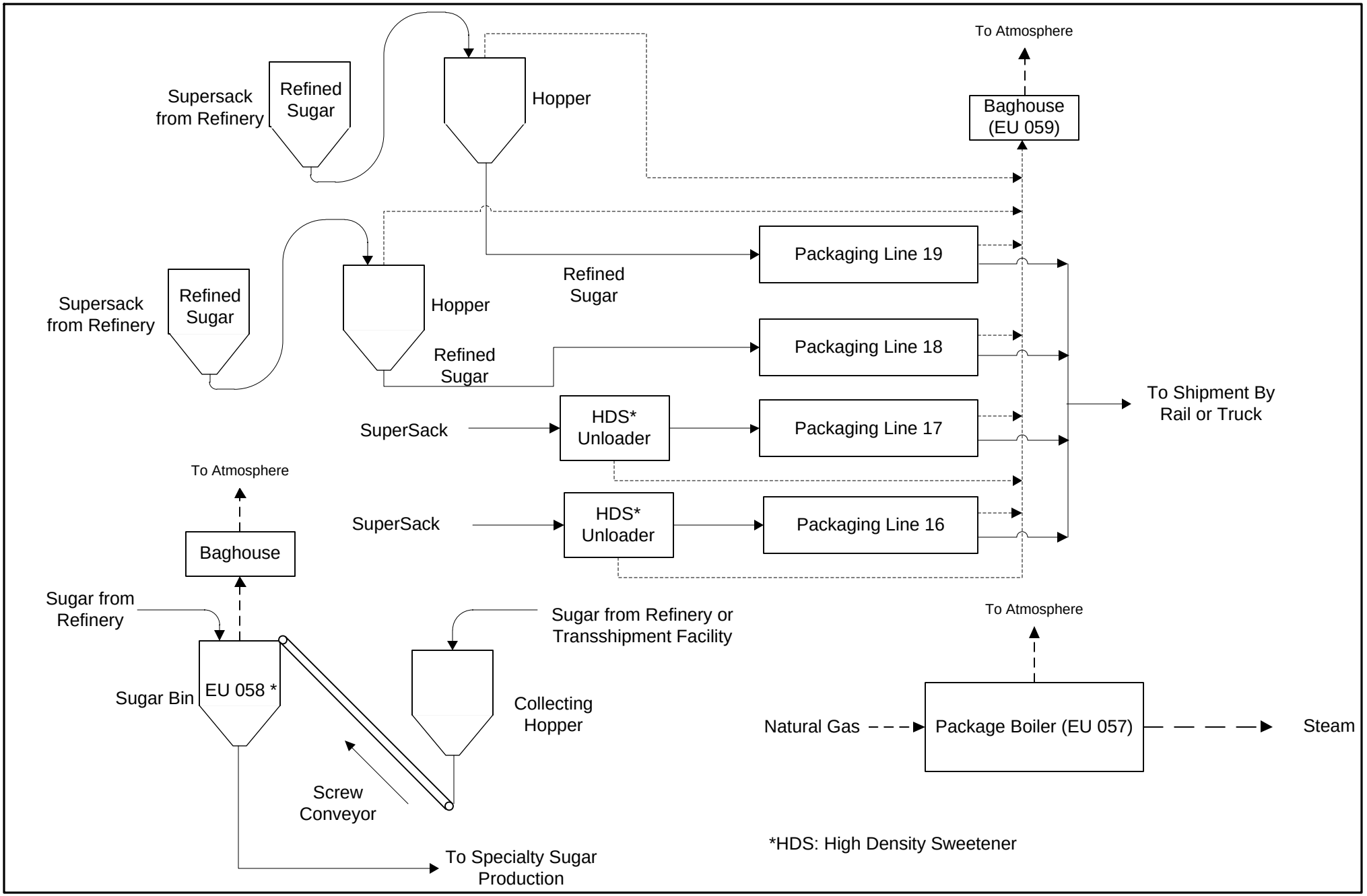
Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU10-IV1**
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU10-I1

PROCESS FLOW DIAGRAM



Attachment OC-EU10-I1
Warehouse No. 3, Packaging Line 16~19
Process Flow Diagram
Okeelanta Refinery
South Bay, FL

Process Flow Legend
Solid/Liquid
Gas
Steam

Golder Associates

ATTACHMENT OC-EU10-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT OC-EU10-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Control Equipment Parameters for Warehouse No. 3 Packaging Lines 16-19 Baghouse

Manufacturer	Mac Process Inc.
Model No.	Model: 55AVSC49-30
Outlet Temp (°F)	75
Outlet Gas Flow Rate (acfm)	3,400
Exhaust Gas Moisture Content (%)	0.5
Outlet Gas Flow Rate (dscfm)	3,356
Cleaning Method	Pulse Compressed Air
Bag Material	Polyester with PTFE Membrane
Total Area of Filter Media (ft^2)	1,536
Air to Cloth Ratio (cfm/ft^2)	2.2:1
Manufacturer's Guaranteed Outlet Loading (grains/acf)	0.01
Particulate Matter (lb/hr)	0.291

Note: All values are based on manufacturer's design information and are subject to revision.

Percent water vapor content represents typical content of "Kathbar" treated air.

ATTACHMENT OC-EU10-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTH DISTRICT
P.O. BOX 2549
FORT MYERS, FL 33902-2549

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

***FINAL PERMIT ***

Electronic Mail
Received Receipt Requested

PERMITTEE

Okeelanta Corporation
21250 U.S. Highway 27 South
South Bay, Florida 33493

Authorized Representative:
Mr. Jose Gonzalez, Vice President of Industrial Operations

Air Permit No. 0990005-037-AC
Permit Expires: **July 16, 2015**

Okeelanta Sugar Mill, Refinery, and Transshipment Facility.

Minor Source Air Construction Permit. Add Packaging Lines No. 16, 17, 18 & 19 and Revise Line 5

This is the final air construction permit, which authorizes Okeelanta Corporation to construct (add) four (4) additional sugar packaging lines (Packaging Lines No. 16, 17, 18 and 19), to be located in Warehouse No. 3. (One (1) of these packaging lines is actually the existing packaging line No. 5 located in the Transshipment Facility which is to be relocated to Warehouse No. 3. It will be replaced in the Transshipment Facility by a brown sugar packaging line of the same capacity and it will be re-designated as Packaging Line No. 5). The potential emissions from the packaging lines consists of particulate matter (PM) in the form of sugar dust, and all four (4) packaging lines are controlled by one (1) baghouse (EU-059). The proposed work will be conducted at the Okeelanta Sugar Mill, Refinery and Transshipment Facility, which is a sugar mill and refinery (Standard Industrial Classification Nos. 2061 and 2062). The facility is located in Palm Beach County at 21250 U.S. Highway 27 South, South Bay, Florida. The UTM coordinates are Zone 17, 524.90 km East, and 2940.10 km North.

This final permit is organized by the following sections.

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

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Fort Myers, Florida

_____ _____

Jon M. Iglehart Date
Director of
District Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on December 6, 2013 to the persons listed below.

Mr. Jose Gonzalez, Okeelanta Corporation: Jose.Gonzalez@floridacrystals.com
Mr. Matthew Capone, Okeelanta Corporation: Matthew.Capone@floridacrystals.com
Mr. David Buff, P.E., Golder Associates: dbuff@golder.com
Mr. James Stormer, Palm Beach County Health Department: james.stormer@doh.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) (Date)

PROPOSED PROJECT

This project will add four (4) additional sugar packaging lines (Packaging Lines No. 16, 17, 18 and 19), to be located in Warehouse No. 3. The additional packaging lines are a separate operation from the existing speciality Sugar production in Warehouse No. 3. Two (2) rooms are to be built into the interior of the warehouse. Two (2) packaging lines to package artificial sweeteners will be installed in one (1) room (Packaging Lines No. 16 and 17) and two (2) packaging lines for speciality sugars are to be housed in the second room (Packaging Lines No. 18 and 19). (One (1) of these packaging lines is actually the existing packaging line No. 5 located in the Transshipment Facility which is to be relocated to Warehouse No. 3. It will be replaced in the Transshipment Facility by a brown sugar packaging line of the same capacity and it will be re-designated as Packaging Line No. 5).

The potential emissions from the packaging lines consists of particulate matter (PM) in the form of sugar dust, and all four (4) packaging lines are controlled by one (1) dust collector (baghouse) (EU-059).

Facility ID No. 0990005

ID No.	Emission Unit Description
059	Dust Collection System (Baghouse) – 3,400 acfm (Emission control for Pkg. Lines 16, 17, 18 and 19)

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the South District Engineering and Permitting Section, Florida Department of Environmental Protection (Department). The South District's mailing address is P.O. Box 2549, Fort Myers, Florida 33902-2549. All documents related to applications for permits to operate an emissions unit shall be submitted to the South District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the South District Office and Palm Beach County Health Department. The mailing address and phone number of the South District Office is: P.O. Box 2549, Fort Myers, Florida 33902-2549 and (239) 344-5600. The mailing address and phone number of the Palm Beach County Health Department is: Post Office Box 29 West Palm Beach, Florida 33402-0029 and (561) 837-5900.

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions; and

   d. Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

8. Application for Air Operation or Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after

commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Sugar Mill

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
59	Dust Collection System (Baghouse) – 3,400 acfm (Emissions control for Pkg. Lines 16, 17, 18 and 19)

EQUIPMENT

1. The permittee is authorized to install one (1) MAC Equipment Dust collector (baghouse), Model 55AVSC49-30 with an outlet gas flow rate of 3,400 acfm. This equipment controls the PM emissions for all four (4) packaging lines. (No. 16, 17, 18 and 19). [Application No. 0990005-037-AC]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: Production Rate for the four (4) combined packaged Sugar/Sweeteners packaging lines (No. 16, 17, 18 and 19) is 181.2 Tons Per Day (TPD) [Rule 62-210.200(PTE), F.A.C.]

3. Restricted Operation: The hours of operation of are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

4. Emissions Standards: Visible Emissions (VE): The visible emissions from this emissions unit (EU-59), shall not exceed 5 percent opacity. [Rules 62-296.320(4) and 62-297.620(4), F.A.C.

5. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for **Visual Emissions (VE)**. 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.]

6. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the emissions unit shall be tested to demonstrate compliance with the emissions standards for Visual Emissions (VE). [Rule 62-297.310(7)(a)4, F.A.C.]

7. Compliance Tests Prior to Renewal: Compliance tests shall be performed for **VE** once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limit in Specific Condition No. 6. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C

8. Test Method:
   a. Tests to determine visible emissions shall be conducted in accordance with EPA Method 9, which is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C.
   b. The minimum observation period for a visible emissions compliance test shall be 30 minutes.
   c. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
   d. The permittee shall record the actual sugar processing rate for the emissions units being controlled and tested.

   [Rules 62-204.800 and 62-297.310(4), F.A.C.; 40 CFR 60, Appendix A;

9. 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 D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in Appendix A of 40 CFR 60 and is 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 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

11. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]

12. Test Reports: For each visible emissions test conducted, the permittee shall submit a test report to each Compliance Authority as soon as practical, but no later than 45 days after the last sampling run of each test is completed. Each test report shall include the information specified in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C.

SECTION 4. APPENDICES

Contents

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or 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 for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of 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 number

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

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

Fl: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B

General Conditions

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

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 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.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(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 are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed 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.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
   a. Have access to and copy any records that must be kept under conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   a. A description of and cause of noncompliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 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.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards

addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable);

    b. Determination of Prevention of Significant Deterioration (not applicable); and

    c. Compliance with New Source Performance Standards (not applicable).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        (1) The date, exact place, and time of sampling or measurements;

        (2) The person responsible for performing the sampling or measurements;

        (3) The dates analyses were performed;

        (4) The person responsible for performing the analyses;

        (5) The analytical techniques or methods used;

        (6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware 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.

SECTION 4. APPENDIX C

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

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

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

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

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

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

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

RECORDS AND REPORTS

10. 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 5 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.]

11. Emissions Computation and Reporting:

    a. *Applicability*. This rule sets forth required methodologies 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 this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) 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.

(a) 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.

(b) 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.

(c) 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.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) 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

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) 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:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) 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.

(c) 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 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.

(3) Mass Balance Calculations.

(a) 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:

1) 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

2) 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.

(b) 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.

(c) 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.

(4) Emission Factors.

a. 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.

1) 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.

2) 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.

3) 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.

b. 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.

(5) 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.

(6) 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.

(7) 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.

(8) 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(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

SECTION 4. APPENDIX D

Common Testing Requirements

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

COMPLIANCE TESTING REQUIREMENTS

1. 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.]

2. Applicable Test Procedures - 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.

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

3. 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.]

4. 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. 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,

3. 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 visible emissions, if there is an applicable standard.

4. 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.

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.

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

RECORDS AND REPORTS

5. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information.

a. The type, location, and designation of the emissions unit tested.

b. The facility at which the emissions unit is located.

c. The owner or operator of the emissions unit.

d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

f. The date, starting time and end time of the observation.

g. The test procedures used.

h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.

i. 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.

j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. 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.]

OKEELANTA CORPORATION
300 HP PACKAGE BOILER

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [11]
Okeelanta Corp - 300 hp Package Boiler

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
☒ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Warehouse No. 3 Package Boiler

3. Emissions Unit Identification Number: **057**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**20**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit
☐ CAIR Unit

9. Package Unit:
Manufacturer: **Clever Brooks** Model Number: **CBLE 200**

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
The Warehouse No. 3 Package Boiler is a 300 hp natural gas-fired package boiler located in Refined Sugar Warehouse No. 3.
The boiler is subject to 40 CFR 63 Subpart DDDDD

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **12.17** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Package Boiler**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **External Combustion Boilers; Industrial; Natural Gas; 10-100 MMBtu/hr**		
2. Source Classification Code (SCC): **1-02-006-02**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.0125**	5. Maximum Annual Rate: **104.5**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,020**
10. Segment Comment: **The 300 HP package boiler maximum hourly rate is based on 12.17 MMBtu/hr.**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
GHGs			**NS**
CO2e			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions:		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation _ of _

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20**% Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rules 62-296.320(4)(b)1. & 4., F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU10-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU11-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: **OC-EU11-IV1**
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU11-I2

FUEL ANALYSIS SPECIFICATION

ATTACHMENT OC-EU11-I2

DESIGN FUEL SPECIFICATIONS[a] FOR THE PACKAGE BOILER OKEELANTA CORPORATION

Parameter	Natural Gas
Specific Gravity	
Heating Value (Btu/lb)	
Heating Value (Btu/gal)	
Heating Value (Btu/scf)	1,028
Ultimate Analysis (dry basis percentage):	
Carbon	68.37
Hydrogen	21.82
Nitrogen	9.80
Oxygen	
Sulfur	
Ash/Inorganic	
Moisture	

[a] Represents average fuel characteristics.

Sources: New Hope Power Partnership, 2002; Combustion Engineering, 1981.

ATTACHMENT OC-EU11-IV1

IDENTIFICATION OF APPLICABLE REQUIREMENTS

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

April 14, 2010

Sent by Electronic Mail

Mr. Ricardo Lima, Vice President
Florida Crystals
8001 U.S. Highway 27 South
South Bay, Florida 33493

Re: Okeelanta Sugar Mill and Refinery
Facility ID No. 0990005
Specialty Sugar Product

Dear Mr. Lima:

This letter is to acknowledge receipt of a letter dated March 15, 2010 from Golder Associates Inc. on behalf of the Okeelanta Sugar Mill and Refinery. The letter states that the plant will be installing a 300 horsepower gas-fired boiler and bin filter to produce new specialty sugar product. You have determined that the boiler meets the categorical exemption criteria in Rule 62-210.300(3)(a)34 of the Florida Administrative Code (F.A.C.) and the bin filter meets the generic exemption criteria in Rule 62-210.300(3)(b)1, F.A.C. We will file this letter with other permit-related correspondence. If you have any questions, please call Jeff Koerner at 850-921-9536.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/jfk

This letter was sent electronically to the following people.

cc: Mr. Ricardo Lima, V.P. Okeelanta Sugar Corporation (ricardo_lima@floridacrystals.com)
Mr. Matt Capone, Okeelanta Sugar Corporation (matthew_capone@floridacrystals.com)
Mr. David Buff, Golder Associates Inc. (dbuff@golder.com)
Mr. Ajaya Satyal, DEP South District Office (ajaya.satyal@dep.state.fl.us)
Mr. James Stormer, Palm Beach County Health Department (james_stormer@doh.state.fl.us)
Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)
Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

OKEELANTA CORPORATION
UNREGULATED EMISSIONS UNITS

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☒ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   This emission unit addresses Okeelanta Sugar Mill and Refinery plant-wide unregulated emissions sources not addressed in other emission units. See Attachment OC-EU12-A2.

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**20**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    This emission unit contains the unregulated emission sources at Okeelanta Corporation that contribute to the facility-wide fugitive emissions not addressed in any other emission unit.

EMISSIONS UNIT INFORMATION
Section [12]
Okeelanta Corp - Unregulated Emissions Units

Emissions Unit Control Equipment/Method: Control **1** of **1**

1. Control Equipment/Method Description: **Fabric Filter Low Temperature (T< 180F): For Lime Silo during loading**
2. Control Device or Method Code: **018**

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate:	million Btu/hr
4. Maximum Incineration Rate:	pounds/hr tons/day
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **4**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION
Section [12]
Okeelanta Corp - Unregulated Emissions Units

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			**NS**
PM10			**NS**
VOC			**NS**
SO2			**NS**
NOx			**NS**
PM2.5			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions:		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation _ of _

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20**% Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rules 62-296.320(4)(b)1. & 4., F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU12-A2

LIST OF UNREGULATED EMISSION UNITS AND/OR ACTIVITIES

ATTACHMENT OC-EU12-A2
LIST OF UNREGULATED EMISSION UNITS AND/OR ACTIVITIES

The below listed emissions units and/or activities have been identified by Okeelanta as "unregulated emissions units". Emissions units and activities meeting the requirements in Rule 62-213.430(6)(b), F.A.C. are also considered insignificant for purposes of Title V permitting.

Okeelanta Corporation Sugar Mill and Refinery (ARMS ID No. 0990005)

ID No.	EU Description	Activities/Equipment
033	Sugar Refinery Miscellaneous Support Equipment	• Bagging Machines • Bulk Curing, Wet Sugar and Portable Overflow Bins • Centrifugals • De-Sweeteners • Evaporators and Condensers • Large and Small Heaters • Primary and Secondary Filters • Refined Sugar Handling, Storage Silo, and Sugar/Syrup Mixer • Rotex Screens • Silo Scale • Sugar Refinery Process Tanks (Blackwater, Clarifier, Liquor, Melted Sugar Storage, Melter, Mixer, Reactor, Scums, Secondary Treatment, Sweetwater, Syrup Storage Tanks, and Phosphoric Acid Storage and Distribution System) • Vacuum Pans with Condenser and non-Condensable Gas Vent • Isopropyl Alcohol Stored in Drums (Used in Vacuum Pans) • Powdered Activated Carbon Mixing Room • Refined Sugar Dust Collectors (Vented Inside Building) • Cooling Tower

036	Shop Activities	• Surface Coating Operations (Non-RACT Vehicle Painting) • Diesel Engine – Portable Air Compressor • Vehicle Repair (Body Shop) • Crawlers Repair Shop • Hydraulic Oil, Mineral Spirits, and Waste/Used Oil Storage Tanks • Mechanics' Trucks With Portable Air Compressors (Gasoline Engines) • Portable Pressure Cleaners (Gasoline Engines) • Steam Clean Station • Truck, Trailer, Service Vehicles, Wheel Tractor Repair Shops • Cold Cleaning Devices (parts washer) • Containers for Oil/Grease/Used Oil • Oil/Water Separator/Skimmer Equipment • Portable Welders • Pressurized LPG Tanks • Vacuum Cleaning Systems • Vehicle Generated Dust • Woodworking and Metal Working Operations
038	Sugar Mill Cane Dumping Area	• Cane Dumping, Handling, and Storage • Cane Knives, Shredding, and Conveying • Steam Clean Station • Oil/Water Separator/Skimmer
039	Sugarcane Processing Facility	• Bagacillo Cyclone and Handling Systems • Batch Mixers (<30 Cu. Ft.) • Carbonaceous Fuel Conveying, Handling and Storage Piles • Cold Cleaning Devices (Non-Halogenated Solvent) • Containers For Oils/Wax/Grease • Cooling Water Towers, Spray Ponds and Canals • Covered Conveyors/Drop Points • Diesel, Gasoline, Fuel Oil, Kerosene, Lube Oil, Waste and Used Oil Tanks • Electric Ovens For Drying • Gear Boxes, Reducers Vents • Handling Of Raw Sugar • Industrial Waste Water Tanks • Molasses Storage Tanks • Molasses Truck and Railcar Loadout Station • Molasses Receiving Station • Syrup Storage Tanks • Reclaim Sugar Bin and Remelter • Mud Ponds • Oil/Water Separator/Skimmer Equipment • Painting Operations • Portable Diesel Air Compressors • Portable Electric Generators • Portable Welders

039	Sugarcane Processing Facility	• Pressurized LPG Tanks • Process Water Filtration Intake Screens • Process Wide Flanges and Valves • Pump Operations • Scrubber Water Ponds and Troughs • Vacuum Cleaning Systems • Vehicle Generated Dust • Vents From Hydraulic/Lube Oil Reservoirs Woodworking and Metal Working Operations • Centrifugals With Mixers • Crystallizers/Receivers • Evaporator Cleaning Operations • Evaporators (W/ Non-Condensable Gas Vent) • Juice Heaters • Mud Filter Condensers Vacuum Pumps • Process Tanks (Batch, Clarified Juice, Coagulant Mix, Flash, Liming, Mingler, Mixer, Mud Mixing, Pan Feed, Magma, Mud Waste, Muriatic, Sugar Receiver, and Syrup Storage) • Isopropyl alcohol stored in drums • Isopropyl alcohol usage in vacuum pans • Rotary Vacuum Filters • Vacuum Pans with NCG vents, Condensers, And Pumps • Lime Storage Silo and Distribution Systems • Lime Silo Baghouse (5% Opacity) • Phosphoric Acid Storage and Distribution Systems • Sodium Hydroxide Storage and Distribution Systems • Mill Crown Wheel Removal Operations • Vertical Molasses Crystallizer • Cane Mills • Cush-cush Screens/Conveyors and DSM Screens • Hydrochloric Acid Tanks • Mill Turbines with Vents • Carbon Slurry Tank • Condensate Tank
040	Facility Fuel Tank Farm	• Diesel, Gasoline and Oil Tanks • Diesel and Gasoline Pumps and Loading Arms • Oil/Water Separator/Skimmer Equipment
041	Facility Potable Water System	• Hydrogen Sulfide Degasifiers • Membrane Cleaning Chemicals and Process Water Discharge Canal • Sulfuric Acid Storage and Distribution Systems • Disinfection System
042	Facility Sewer Plant	• Sewage Treatment Plant • Collection and Distribution Lift Station

044	Okeelanta Facility - Miscellaneous Unregulated Activities	• Forklift and crane operations • Bagasse conveyors to cogeneration boilers or biomass storage.
050	Transshipment Facility, Miscellaneous Support Equipment	• Containers for Oil/Grease/Ink • Diesel Tank • Vehicle Generated Dust • Refined Sugar Dust Collectors (Vented Inside Building) • Portable Vacuum Cleaners • Propane-Fired Water Heaters for Disinfection Process Vessels and Propane Tank • Steam Clean Station • Cold Cleaning Devices (Parts Washer) • Packaging Lines (Vented inside building) • Liquid Sugar Tanks (3)

OKEELANTA CORPORATION
RICE

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [13]
Okeelanta Corp - Reciprocating Internal Combustion Engines (RICE)

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

   Okeelanta Corp - Reciprocating Internal Combustion Engines (RICE)

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A			**49**

8. Federal Program Applicability: (Check all that apply)

   ☐ Acid Rain Unit

   ☐ CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
    Eleven on-site stationary Reciprocating Internal Combustion Engines (RICE), all of which are emergency engines. See Attachment OC-EU13-A11 for a more detailed description of the engines.

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control _____ of _____

1. Control Equipment/Method Description:
2. Control Device or Method Code:

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate:	million Btu/hr
4. Maximum Incineration Rate:	pounds/hr tons/day
5. Requested Maximum Operating Schedule:	**24** hours/day **7** days/week **52** weeks/year **8,760** hours/year
6. Operating Capacity/Schedule Comment: **The engines only operate during emergency situations and for limited hours for testing and maintenance.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Eleven emergency RICE.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **P**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines: Electric Generation; Distillate Oil (Diesel); Reciprocating**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.0015**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **136**
10. Segment Comment: **Emergency engines used infrequently. All engines fueled by diesel fuel.**		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			**NS**
PM10			**NS**
VOC			**NS**
SO2			**NS**
NOx			**NS**
PM2.5			**NS**
CO			**EL**
VOC			**NS**
GHGs			**NS**
CO2e			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: **See Attachment OC-EU13-A11** Reference: **40 CFR 63, Subpart ZZZZ and 40 CFR 60, Subpart IIII**		7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years	
10. Calculation of Emissions: **See Attachment OC-EU13-A11**		
11. Potential, Fugitive, and Actual Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **230 ppmvd @ 15% O2**	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: **ASTM D6522-00 (Reapproved 2005) or Method 10 of 40 CFR part 60, appendix A-4**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(4)(b).**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **1**

1. Parameter Code: **HOURS**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Non-resettable hour meter required for each emergency engine as required by NESHAP Subpart ZZZZ and NSPS Subpart IIII.**	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **OC-EU6-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT OC-EU13-A11

LIST OF RICE ENGINES

Attachment OC-EU13-A11
Information for Existing RICE Engines, Okeelanta Corporation

Engines	Engine Make	Model	Man. Date	Duty	Horse Power Rating (HP)	Displacement (L/Cylinder)	Fuel	Subject to ZZZZ Existing/New	CO Limit (ppmvd @ 15% O_2)
West IWW SW Pond	CASE	p170	2009	Non-Emergency	173	1.12	Diesel	New	Meets Subpart IIII, Tier 3 Certified
East IWW SW pond	CASE	P170	2010	Non-Emergency	173	NA	Diesel	New	Meets Subpart IIII, Tier 3 Certified
Ditch 10/11 Pump	CASE	P170	2008	Non-Emergency	173	1.12	Diesel	New	Meets Subpart IIII, Tier 3 Certified
Recircualtion Canal 11-12-AS-N-Mill Lot	CASE	PX170	2008	Non-Emergency	173	1.12	Diesel	New	Meets Subpart IIII, Tier 3 Certified
Mill Intake Water East 11-12-AS-N-Mill	CASE	P170	2008	Non-Emergency	173	1.12	Diesel	New	Meets Subpart IIII, Tier 3 Certified
Cachasa Pond Pump	CASE	P170	2009	Non-Emergency	173	1.13	Diesel	New	Meets Subpart IIII, Tier 3 Certified
DC Drainage Pump	JOHN DEERE	4045DF270B	2006	Non-Emergency	80	1.13	Diesel	New	Meets Subpart IIII, Tier 2 engine
Ditch 10 North Drainage- Between fuel islands	CASE	P170	New	Non-Emergency	173	1.12	Diesel	New	Meets Subpart IIII, Tier 3 Certified
Fire Pump#1 Rock Pit by Cooling Tower	JOHN DEERE	6068	2002	Emergency	160	1.13	Diesel	Existing	Work Practice Standard
Fire Pump#2 Rock Pit by Cooling Tower	JOHN DEERE	6068	2002	Emergency	160	1.13	Diesel	Existing	Work Practice Standard
DC Fire Pump	DETROIT	8V92	2000	Emergency	525	NA	Diesel	Existing	Not Subject to ZZZZ

Note: CO testing is a one-time, initial test. After the initial test demonstrates compliance, O&M and/or parameter monitoring may be required, depending on size of the engine.

CAM PLAN

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1.0 EMISSION UNITS REQUIRING CAM PLANS

1.1 CAM Rule Applicability Definition

On October 15, 2014, the Florida Department of Environmental Protection (FDEP) issued a revised Title V air operation permit (Permit No. 0990005-038-AV) to Okeelanta Corporation (Okeelanta) for the operation of the Okeelanta sugarcane processing and sugar refining operations and the adjacent New Hope Power Company's (NHPC's) power generation operations. The facility is operated by the Okeelanta Corporation (ARMS ID No. 0990005) and the New Hope Power Company (ARMS ID No. 0990332). Okeelanta operates an existing sugar mill (SIC No. 2061) and sugar refinery (SIC No. 2062) and NHPC operates a cogeneration plant (SIC No. 4911). Several revisions have been made to the Title V air operation permit in the last five years. The most recent Title V permit (038-AV) expires on July 16, 2015, and the renewal application is due to the FDEP by December 3, 2014.

As part of the Title V renewal application, a Compliance Assurance Monitoring (CAM) Plan must be submitted as required by regulations adopted in Title 40, Part 64 of the Code of Federal Regulations (40 CFR 64). This regulation has been incorporated by reference in Rule 62-204.800(12), Florida Administrative Code (F.A.C.), and implemented in Rule 62-213.440(4)(b)3., F.A.C.

CAM plans are required for all Title V permitted emissions units using control devices to meet federally enforceable emission limits or standards, and that have pre-control emissions greater than "major" source thresholds. The term "major" is defined as in the Title V regulations (40 CFR 70.2), but applied on a source-by-source basis. For most non-hazardous pollutants, the major source threshold is 100 tons per year (TPY). For hazardous air pollutants (HAPs), the threshold is 10 TPY for an individual HAP, and 25 TPY for total HAPs combined.

The CAM rules contain specific exemptions from applicability of CAM. Specifically exempted from CAM are emission limitations or standards promulgated under the following: Stratospheric Ozone Regulations contained in 40 CFR 82; the Acid Rain Program contained in 40 CFR 72; or those that are part of an emissions cap included in the Title V Permit. Also exempt are emission limitations or standards proposed after November 15, 1990, under the following: New Source Performance Standards (NSPS) contained in 40 CFR 60; and National Emission Standards for Hazardous Air Pollutants (NESHAPs) promulgated in 40 CFR 63. These limitations and standards have monitoring requirements equivalent to CAM included as part of the standard.

Inherent process equipment (IPE), or equipment that may have the effect of controlling emissions but is installed for the primary purpose of product recovery or raw material recovery, is also exempt from CAM (40 CFR 64.1). In addition, CAM does not apply to any emission limit or standard for which the Title V permit specifies a continuous compliance determination method [40 CFR 64.2(b)(1)(vi)], provided that the

method does not include an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device.

1.2 Emissions Units Requiring CAM Plans

A review of emissions units at Okeelanta sugar mill and sugar refinery, including packaging and transshipment activities, and at NHPC's cogeneration facility, was conducted to determine the applicability of the CAM Rule. This evaluation was conducted for each emissions unit and regulated pollutant. First, the existence of a "control device" as defined by the CAM Rule was determined on a source-by-source basis for each pollutant. "Control device" is defined in Part 64 as:

> *… equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The types of equipment that may commonly be used as control devices include, but are not limited to, fabric filters, mechanical collectors, electrostatic precipitators, inertial separators, afterburners, thermal or catalytic incinerators, adsorption devices (such as carbon beds), condensers, scrubbers (such as wet collection and gas absorption devices), selective catalytic or non-catalytic reduction systems, flue gas recirculation systems, spray dryers, spray towers, mist eliminators, acid plants, sulfur recovery plants, injection systems (such as water, steam, ammonia, sorbent or limestone injection), and combustion devices independent of the particular process being conducted at an emissions unit (e.g., the destruction of emissions achieved by venting process emission streams to flares, boilers or process heaters). For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics. If an applicable requirement establishes that particular equipment which otherwise meets this definition of a control device does not constitute a control device as applied to a particular pollutant-specific emissions unit, then that definition shall be binding for purposes of this part.*

Those emissions units without control devices were eliminated from further consideration. The remaining emissions units were then evaluated on a pollutant-by-pollutant basis to determine if a control device was used to meet a federally enforceable emission limit or standard. Each pollutant without a federally enforceable emission limit or standard, emitted from a given emissions unit, was eliminated from further consideration.

Uncontrolled annual emissions were then determined for each remaining source-pollutant combination. If uncontrolled emissions for a pollutant emitted from a given emissions unit were below major source thresholds, as defined by the CAM Rule, that pollutant was not further considered.

Specific exemptions to the applicability of the CAM Rule were also considered in this evaluation. Each pollutant-specific emissions unit at Okeelanta Sugar Mill and NHPC, and its applicability to CAM, is described below.

1.2.1 NHPC Cogeneration Boilers A, B, and C

Cogeneration Boilers A, B, and C at the NHPC cogeneration facility are biomass-fired hybrid suspension grate steam boilers manufactured by Zurn and designed to produce approximately 506,100 lb/hr of steam at 1,500 pounds per square inch (psig) and 975 degrees Fahrenheit (°F). The boilers have a maximum heat input rate of 760 MMBtu/hr when firing bagasse, 400 MMBtu/hr when firing natural gas, and 490 MMBtu/hr when firing very low sulfur distillate oil.

The boilers have several control devices: a selective non-catalytic reduction system (SNCR) to reduce NOx emissions; and mechanical dust collectors and an electrostatic precipitator (ESP) to reduce particulate matter (PM) emissions. Each of the boilers is also subject to federally enforceable emission limits for CO, NOx, sulfur dioxide (SO_2), PM, PM with aerodynamic size less than 10 micrometers (PM_{10}), VOC, and Hg. Note that the Hg control system has been removed and is only required to be re-installed in the event that the Hg emissions limit for the cogeneration boilers is exceeded. Since CO, SO_2, and VOC emissions are not controlled by any control devices, these pollutants are exempt from the requirements of CAM. As shown in Table 1, and described below, uncontrolled PM and NOx emissions are greater than 100 TPY.

Uncontrolled NOx, PM/PM10, and Hg emissions from the NHPC boilers are estimated in Table 2. Annual emissions were calculated using the alternative fuel usage scenarios: 100-percent biomass (wood or bagasse), 75.1-percent biomass and 24.9-percent fuel oil, and 75.1-percent biomass and 24.9-percent natural gas. Uncontrolled emission factors based on fuel analysis or AP-42 were used in the calculations. In the combination fuel scenarios involving biomass and fuel oil or natural gas, the worst-case emission factors for either bagasse or wood combustion were used for each pollutant.

Since NOx is controlled by a control device and uncontrolled NOx emissions are more than the major source threshold of 100 TPY, NOx was initially determined to be a pollutant that requires CAM. However, each of the cogeneration boilers has a continuous emission monitoring system (CEMS), per Specific Condition No. A.7 of Permit No. 0090005-038-AV, to measure and record the emissions of NOx from the boiler and demonstrate compliance with the NOx CEMS. The CAM Rules contained in 40 CFR 64 specify that emission limitations or standards for which a Part 70 or 71 permit specifies a continuous compliance demonstration method are exempt from the requirements of CAM [40 CFR 64.2(b)(1)(vi)]. Therefore, a CAM Plan for NOx is not required for each of the cogeneration boilers.

PM/PM_{10} emissions from each of the Boilers A, B, and C are controlled by an ESP and the uncontrolled emissions are more than the major source threshold of 100 TPY. Therefore, CAM is required for PM/PM_{10}.

As shown in Table 1, uncontrolled Hg emissions from each of the Boilers A, B, and C are less than the major source threshold of 100 TPY. As a result, CAM is not required for Hg.

1.2.2 NHPC Materials Handling and Storage Operations

The materials handling and storage operations at the NHPC cogeneration facility include truck and railcar unloading operations, storage piles, transfer operations, conveyors, screens, crushers, hoppers and silos for handling and storing biomass (bagasse and wood), ash (fly and bottom), and a mercury removal agent (carbon). Baghouse control devices are used for controlling PM emissions from the fly ash and mercury control agent silos. Note that the mercury control system is currently inactive and is only required to be re-installed and operated in the event that the Hg emissions limit for the cogeneration boilers is exceeded.

This emissions unit is only regulated by an opacity standard, for which a CAM plan is not required.

1.2.3 Okeelanta Trans-Shipment Facility

The Trans-shipment Facility at the Okeelanta sugar mill consists of multiple emissions units:

- EU 018 - Central Vacuum System No. 1
- EU 019 - Sugar Packaging Lines
- EU 020 - Sugar Grinder
- EU 030 - Sugar Silo Nos. 1-3
- EU031 - Railcar Unloading Receivers No. 1
- EU032 - Railcar Unloading Receivers No. 2
- EU045 - Powdered Sugar Dryer/Cooler, Packaging Lines 8A and 8B
- EU046 - Powdered Sugar Hopper
- EU047 - Sugar Packaging Lines 12-14
- EU049 - Inactive Baghouse

These emission points are control devices to reduce the potential total PM emissions from the facility. Maximum throughput rate of the Trans-shipment Facility is 1,300 tons of refined sugar per day.

Each emissions unit at the Transshipment Facility has a control device; however, there is no emission limit for PM for each unit. As a result, these emission units are not subject to the CAM requirements.

1.2.4 Okeelanta Sugar Refinery

The Sugar Refinery unit at the Okeelanta sugar mill and refinery consists of multiple emissions units:

- Two Central Dust Collection Systems (EU 021 and 022)
- Fluidized Bed Dryer/Cooler with Baghouse (EU 025)
  - Used as the primary sugar drying system
- Cooler Nos. 1 and 2 (EU 023 and 024)
  - Used to cool dried sugar leaving the rotary dryer
- Bulk Load-out operation (EU 034)
  - Used to load sugar into either trucks or railcars
- Transfer Bulk Load-out station (EU 035)

  - Used to supply sugar to the Transshipment Facility.
- Alcohol Usage in Refinery (EU 047)
- “A & C” Systems (EU 054 and 055)
- Packaging Lines 16-19 (in Warehouse No. 3) (EU 059)

The six wet rotoclones, the baghouse, and process enclosures reduce the PM emissions from the sugar refinery. Refined sugar production in the refinery is limited to 490,000 TPY and 1,350 tons per day (TPD).

EU 035 (Transfer Bulk Load-out operation), and EU 047 (Alcohol Usage in Refinery) have no control devices and, therefore, are exempt from the CAM requirements. Each of the EUs 021, 022, 023, 024, 025, 054 and 055 at the sugar refinery has a control device; however, there is no emission limit for PM or PM_{10} for each individual emissions unit. As a result, these emissions units are not subject to the CAM requirements.

1.2.5 Paint Spray Booth

Okeelanta operates a paint spray booth at the sugar mill facility, which is used to repaint farm equipment that is used in the agricultural fields, trailers for the delivery of the cane to the mill, as well as other vehicles. The paint spray booth has glass fiber paint arrestor pads, which are used to reduce PM emissions.

The paint spray booth emits volatile organic compounds (VOC) and PM and has a federally enforceable emission limit for VOC. Since there are no control devices for VOC, CAM is not required for VOC. There is a control device for PM, but no PM emission limit. Therefore, a CAM Plan is not required for PM

2.0 PARTICULATE MATTER EMISSIONS FROM COGENERATION BOILERS A, B, AND C

2.1 Emissions Unit Identification

NHPC Cogeneration Boilers A, B, and C.

2.2 Applicable Regulations, Emissions Limits, and Monitoring Requirements

Cogeneration Boilers A, B, and C at the NHPC cogeneration plant are biomass-fired hybrid suspension grate steam boilers manufactured by Zurn and designed to produce approximately 506,100 lb/hr of steam each. Each boiler has a PM emission limit of 0.026 lb/MMBtu and 19.8 lb/hr, and a NOx emission limit of 0.15 lb/MMBtu and 114.0 lb/hr.

Compliance with the NOx emission standard is determined by data collected by the NOx continuous emission monitoring system (CEMS) in terms of “lb/MMBtu of heat input”. Compliance with the PM standard is determined by the average of three test runs conducted in accordance with U.S. Environmental Protection Agency (EPA) Method 5. Each boiler also has a stack opacity limit of 20-percent as a 6-minute block average, except for one 6-minute block per hour that is less than or equal to 27-percent opacity is allowed. Compliance with the opacity standard is determined by a continuous opacity monitoring system (COMS), which measures opacity continuously based on 1-minute averages.

2.3 Control Technology Description

PM emissions from each of the Boilers A, B, and C are controlled by mechanical dust collectors and an electrostatic precipitator (ESP). NOx emissions are controlled by a selective non-catalytic reduction (SNCR) system. A detailed description of the control equipment is included in the Title V renewal application, Attachment OC-EU1-I3.

2.4 Monitoring Approach

The monitoring approach is based on monitoring opacity of each boiler stack through the existing COMS at each stack. The monitoring approach is summarized in the table below.

	Indicator No. 1
Indicator	Opacity
Measurement Approach	Continuous opacity monitoring system (COMS).
Indicator Range	An excursion is defined as any 1-hour block average of opacity greater than 15%, excluding periods of startup, shutdown, and malfunction pursuant to Rule 62-210.700, F.A.C. An excursion will trigger an evaluation of operation of the boiler and ESP. Corrective action will be taken as necessary. Excursions trigger recordkeeping and reporting requirements.
Data Representativeness	Opacity measurements are made in the stack. A sustained step increase of opacity may be related to higher particulate matter emissions resulting from problems with the boiler or control equipment.
Verification of Operational Status	N/A
QA/QC Practices and Criteria	The COMs must be maintained and calibrated in accordance with the applicable requirements of the permit and 40 CFR 60.
Monitoring Frequency	The COMS must continuously report opacity and determine a 1-hour block average from the average of all valid 1-minute averages collected during the period.
Data Collection Procedures	One-minute averages are recorded through the DAS. Daily reports with all hourly averages are generated. One-hour block averages are determined from the average of all the valid 1-minute averages during a block hour.
Averaging Period	The averaging period for opacity observations is a 1-hour block average.

2.5 Justification

The CAM Rule, in 40 CFR 64.3(d)(1), states that if a COMS is required pursuant to other authority under the CAA or state or local law, the owner or operator shall use such system to satisfy the requirements of this part. NHPC uses data from the COMS for each of the Boilers A, B, and C stacks, and monitors the 1-hour block average opacity to assure compliance with the PM emission standard.

The NHPC boilers are subject to CAM for PM emissions, not visible emissions. Annual compliance tests for PM are performed via EPA Method 5 and consist of three test runs, each typically exceeding 1 hour in duration each. The opacity data NHPC has used to correlate with PM emissions are based on the average opacity for the duration of the test run (approx. 60 minutes) (see discussion below). Therefore, a 1-hour block averaging time for the CAM opacity indicator is appropriate for compliance assurance of PM emissions. At least three other power plants in Florida have received averaging times of 1-hour block duration for their CAM Plans. NHPC's current CAM Plan is based on a 1-hour block average.

For the NHPC boilers, compliance with the PM standard is currently determined by the average of three test runs conducted in accordance with EPA Method 5. Data for the compliance test runs from 2005 through 2014 were collected and are summarized in Table 3. Based on the opacity data from the COMS,

which were also collected during the test runs, an opacity versus PM emission rate plot for all boilers combined was generated, which is shown in Figure 1. The plot indicates a general increase in opacity as the PM emission rate increases.

The variability in opacity versus load or opacity versus PM emission rate is typical, with occasional sudden spikes and dips. A sudden and sustained step-increase in opacity usually indicates a potential problem with the ESP.

Using the same basis as for current Title V CAM Plan for NHPC, the indicator range for the NHPC Boilers A, B, and C is set at 15 percent opacity. This is 25-percent lower than the opacity limit of 20-percent, above which may indicate potential problems with the ESP.

When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence, to determine the action required (if any) to correct the situation. All excursions will be documented and reported.

TABLES

Table 1. CAM Applicability Determination for Okeelanta Corporation and New Hope Power Company

Emission Source	Title V EU ID	Control Equipment	Pollutants with Emission Limits	Uncontrolled Emission Rate (TPY)	CAM Plan Required? (Yes/No)	Comments
New Hope Power Boilers A, B, C						
Cogenration Boiler (each)	001, 002, 003	ESP	PM	7,223.5	Yes	PM uncontrolled emissions >100 TPY.
		ESP	PM_{10}	7,223.5	Yes	PM_{10} uncontrolled emissions >100 TPY.
		SNCR	NO_x	732.3	No	Title V permit specifies continuous compliance determination method.
		None	CO	--	No	No control device.
		None	SO_2	--	No	No control device.
		None	VOC	--	No	No control device.
		Carbon Injection	Hg	0.018	No	Hg uncontrolled emissions <100 TPY.
New Hope Power Material Handling and Storage Operations						
Fly Ash Silo	004	Baghouse	None	93.9	No	No emission limit.
Mercury Reagent Silo		Baghouse	None	0.1	No	No emission limit.
Okeelanta - Transshipment Facility						
Central Vacuum System	018	Baghouse	None	<100	No	No emission limit.
Sugar Packaging Lines	019	Baghouse	None	3.7	No	No emission limit.
Sugar Grinder	020	Baghouse	None	<100	No	No emission limit.
Sugar Silo Nos. 1, 2, and 3	030	Baghouse	None	1.8	No	No emission limit.
Railcar Unloading Receiver No. 1	031	Baghouse	None	<100	No	No emission limit.
Railcar Unloading Receiver No. 2	032	Baghouse	None	<100	No	No emission limit.
Powdered Sugar Dryer/Cooler	045	Baghouse	None	<100	No	No emission limit.
Powdered Sugar Hopper	046	Baghouse	None	<100	No	No emission limit.
Packaging Lines (12- 14)	047	Baghouse	None	1.7	No	No emission limit.
Baghouse (Inactive)	049	Baghouse	None	0.0	No	No emission limit.
Packaging Lines (16- 19)	059	Baghouse	None	--	No	No emission limit.
Okeelanta- Sugar Refinery						
Central Dust Collection System No. 1	021	Rotoclone	PM	4,632.7	Yes	No unit specific emission limit.
		Rotoclone	PM_{10}	185.3	Yes	No unit specific emission limit.
Central Dust Collection System No. 2	022	Rotoclone	PM	537.7	Yes	No unit specific emission limit.
		Rotoclone	PM_{10}	18.4	No	No unit specific emission limit.
Cooler No. 1 / Rotoclone No. 3	023	Rotoclone	PM	227.5	Yes	No unit specific emission limit.
		Rotoclone	PM_{10}	9.1	No	No unit specific emission limit.
Cooler No. 2 / Rotoclone No. 4	024	Rotoclone	PM	227.5	Yes	No unit specific emission limit.
		Rotoclone	PM_{10}	9.1	No	No unit specific emission limit.
Fluidized Bed Dryer	025	Baghouse	PM	5,400.0	Yes	No unit specific emission limit.
		Baghouse	PM_{10}	216.0	Yes	No unit specific emission limit.
Bulk load-out Operations	034	Baghouse	PM	--	No	No unit specific emission limit.
		Baghouse	PM_{10}	--	No	No unit specific emission limit.
Transfer Bulk Load-out Operations	035	None	PM	--	No	No control device.
		None	PM_{10}	--	No	No control device.
Alcohol Usage in Refinery	043	None	PM	--	No	No control device.
		None	PM_{10}	--	No	No control device.
A System - AAF/Wet Rotoclone No.6	054	Rotoclone	PM	460.9	Yes	No unit specific emission limit.
		Rotoclone	PM_{10}	18.4	No	No unit specific emission limit.
C System - AAF/Wet Rotoclone No.7	055	Rotoclone	PM	307.3	Yes	No unit specific emission limit.
		Rotoclone	PM_{10}	12.3	No	No unit specific emission limit.
Okeelanta Paint Booth	048	None	VOC	--	No	No control device

Table 2. Maximum Annual Uncontrolled Emissions Per Boiler
New Hope Power Company Cogeneration Facility

Regulated Pollutant	Biomass: Uncontrolled Emission Factor (lb/MMBtu)	Biomass: Activity Factor (10^{12} Btu/yr)	Biomass: Uncontrolled Annual Emissions (TPY)	Alternate Fuel: Uncontrolled Emission Factor (lb/MMBtu)	Alternate Fuel: Activity Factor (10^{12} Btu/yr)	Alternate Fuel: Uncontrolled Annual Emissions (TPY)	Total Annual Uncontrolled Emissions Per Boiler (TPY)
100% Bagasse							
Particulate (PM)	2.17 (1)	6.658	7223.5	--	--	--	7,223.5 [a]
Nitrogen oxides	0.17 (1)	6.658	565.9	--	--	--	565.9
Mercury	1.3E-06 (2)	6.658	0.0043	--	--	--	0.004
100% Wood							
Particulate (PM)	0.56 (3)	6.658	1864.1	--	--	--	1,864.1
Nitrogen oxides	0.22 (3)	6.658	732.3	--	--	--	732.3 [a]
Mercury	5.4E-06 (3)	6.658	0.0180	--	--	--	0.018 [a]
75.1% Biomass / 24.9% Fuel Oil [b]							
Particulate (PM)	2.17 (1)	5.000	5424.8	0.014 (4)	1.658	11.6	5,436.45
Nitrogen oxides	0.22 (3)	5.000	550.0	0.174 (4)	1.658	144.2	694.21
Mercury	5.4E-06 (3)	5.000	0.0135	3.0E-06 (4)	1.658	0.0025	0.016
75.1% Biomass / 24.9% Natural Gas [b]							
Particulate (PM)	2.17 (1)	5.000	5424.8	0.0075 (5)	1.658	6.2	5,431.06
Nitrogen oxides	0.22 (3)	5.000	550.0	0.186 (5)	1.658	154.2	704.15
Mercury	5.4E-06 (3)	5.000	0.0135	2.6E-07 (5)	1.658	2.11E-04	0.014

[a] Denotes maximum annual emissions for any fuel scenario.

[b] Utilizes the worst-case emission factor for either bagasse or wood.

References

(1) Bagasse combustion in sugar mills, AP-42, Table 1.8-1.
(2) Fuel analysis data from sugar industry.
(3) Wood combustion, AP-42, Tables 1.6-1, 1.6-2, and 1.6-4.
(4) Fuel oil combustion, AP-42, Tables 1.3-1 and 1.3-10.
(5) Natural gas combustion, AP-42, Tables 1.4-1, 1.4-2, and 1.4-4.

Table 3. Stack Test Opacity Data, Boilers A, B, and C
New Hope Power Company

Run	Period Start	Period End	Average Opacity (%)	Average PM Emissions lb/MMBtu	Average PM Emissions lb/hr
Boiler A					
Run 1	03/28/2014 09:44	03/28/2014 10:55	2.78	0.0054	3.11
Run 2	03/28/2014 12:22	03/28/2014 13:32	2.83	0.0031	1.77
Run 3	03/28/2014 14:14	03/28/2014 15:17	2.93	0.0024	1.4
Run 1	04/17/2013 11:00	04/17/2013 14:00	5.66	0.0074	4.48
Run 2	04/17/2013 15:40	04/17/2013 16:44	5.49	0.0032	1.84
Run 3	04/17/2013 17:35	04/17/2013 19:00	5.19	0.0073	4.27
Run 1	01/19/2012 08:24	01/19/2012 09:58	5.17	0.0080	5.0
Run 2	01/19/2012 10:52	01/19/2012 12:01	4.73	0.0060	3.4
Run 3	01/19/2012 13:20	01/19/2012 14:30	4.76	0.0050	3.0
Run 1	03/07/2011 10:27	03/07/2011 11:32	3.21	0.0082	4.7
Run 2	03/07/2011 13:28	03/07/2011 17:17	4.2	0.0061	3.1
Run 3	03/08/2011 12:50	03/07/2011 14:15	3.28	0.0064	3.4
Run 1	03/18/2009 09:05	03/18/2009 10:14	5.2	0.0230	13.70
Run 2	03/18/2009 11:50	03/18/2009 12:58	6.4	0.0272	14.80
Run 3	03/20/2009 13:44	03/20/2009 14:49	4.9	0.0119	6.90
Run 1	02/08/2008 09:29	02/08/2008 10:31	4.98	0.0132	8.63
Run 2	02/08/2008 11:22	02/08/2008 12:25	4.7	0.0129	8.46
Run 3	02/08/2008 14:15	02/08/2008 15:17	6.1	0.0127	8.32
Run 1	02/15/2007 09:24	02/15/2007 10:26	3.2	0.0133	8.07
Run 2	02/15/2007 10:56	02/15/2007 11:58	3.3	0.0109	6.56
Run 3	02/15/2007 12:29	02/15/2007 13:30	6.9	0.0141	8.15
Run 1	02/14/2006 10:50	02/14/2006 11:51	1.2	0.0133	8.07
Run 2	02/14/2006 12:22	02/14/2006 13:24	2.2	0.0109	6.56
Run 3	02/14/2006 13:45	02/14/2006 14:49	1.1	0.0141	8.15
Run 1	02/24/2005 13:31	02/24/2005 14:38	9.7	0.0138	10.49
Run 2	02/24/2005 15:08	02/24/2005 16:11	10.1	0.0177	13.45
Run 3	02/24/2005 16:47	02/24/2005 17:45	10.5	0.0172	13.07
Boiler B					
Run 1	03/12/2014 12:15	03/12/2014 13:29	2.49	0.0016	0.83
Run 2	03/12/2014 15:18	03/12/2014 16:43	2.49	0.0043	2.17
Run 3	03/12/2014 17:25	03/12/2014 18:52	2.61	0.0018	0.88
Run 1	03/01/2013 11:30	03/01/2013 12:45	3.08	0.0043	2.32
Run 2	03/01/2013 13:30	03/01/2013 14:37	3.25	0.0053	2.82
Run 3	03/01/2013 15:25	03/01/2013 16:30	3.21	0.0115	6.23
Run 1	01/17/2012 09:32	01/17/2012 11:05	1.78	0.0070	4.1
Run 2	01/17/2012 12:44	01/17/2012 14:26	1.91	0.0090	4.7
Run 3	01/17/2012 16:00	01/17/2012 17:38	1.68	0.0070	4.3
Run 1	03/09/2011 09:30	03/09/2011 10:48	2.39	0.0170	10
Run 2	03/09/2011 12:05	03/09/2011 13:05	2.84	0.0190	11.3
Run 3	03/09/2011 14:50	03/09/2011 16:08	2.14	0.0190	10.1
Run 1	03/19/2009 09:25	03/19/2009 10:32	1.7	0.0048	2.80
Run 2	03/19/2009 11:44	03/19/2009 12:50	1.8	0.0078	4.80
Run 3	03/19/2009 15:00	03/19/2009 16:33	1.6	0.0069	4.10
Run 1	10/14/2008 10:31	10/14/2008 11:38	5.96	0.0295	20.00
Run 2	10/15/2008 09:37	10/15/2008 10:42	3.75	0.0279	16.69
Run 3	10/15/2008 13:20	10/15/2008 14:28	2.7	0.0176	10.80
Run 1	02/07/2008 09:47	02/07/2008 10:49	8.9	0.0134	8.90
Run 2	02/07/2008 11:18	02/07/2008 12:21	7.8	0.0131	8.52
Run 3	02/07/2008 12:48	02/07/2008 13:50	7.8	0.0125	8.17
Run 1	02/14/2007 09:55	02/14/2007 10:58	3.2	0.0136	7.91
Run 2	02/14/2007 12:30	02/14/2007 13:32	2.6	0.0143	7.99
Run 3	02/14/2007 14:03	02/14/2007 15:05	3.2	0.0133	7.75
Run 1	02/15/2006 10:11	02/15/2006 11:15	2.2	0.0091	5.59
Run 2	02/15/2006 11:58	02/15/2006 13:01	2.2	0.0097	6.53
Run 3	02/15/2006 13:40	02/15/2006 14:50	2.7	0.0112	7.50
Run 1	02/23/2005 13:55	02/23/2005 15:01	14.2	0.0143	10.87
Run 2	02/23/2005 15:46	02/23/2005 16:49	13.7	0.0174	13.22
Run 3	02/24/2005 09:23	02/24/2005 10:27	7.8	0.0117	8.89
Boiler C					
Run 1	03/11/2014 11:35	03/11/2014 12:45	2.81	0.0009	0.51
Run 2	03/11/2014 13:26	03/11/2014 14:34	2.95	0.0543	33.8
Run 3	03/11/2014 15:57	03/11/2014 17:07	2.48	0.0010	0.6
Run 1	02/27/2013 14:57	02/27/2013 16:02	1.7	0.0060	3.17
Run 2	02/27/2013 16:54	02/27/2013 17:59	1.9	0.0022	1.22
Run 3	02/28/2013 08:42	02/28/2013 09:49	2.02	0.0063	3.27
Run 1	1/19/2012 18:09	1/19/2012 19:16	4.02	0.0080	4.4
Run 2	1/19/2012 8:37	1/19/2012 9:52	5.35	0.0080	4.5
Run 3	1/19/2012 10:52	1/19/2012 12:04	4.06	0.0060	3.3
Run 1	3/24/2011 9:25	3/24/2011 10:44	3.49	0.0059	3.32
Run 2	3/24/2011 11:11	3/24/2011 12:19	2.85	0.0068	3.7
Run 3	3/24/2011 13:04	3/24/2011 14:17	2.78	0.0043	2.44
Run 1	10/15/2008 18:07	10/15/2008 19:18	8.6	0.0163	10.48
Run 2	10/16/2008 09:38	10/16/2008 10:45	6.1	0.0223	14.36
Run 3	10/16/2008 11:34	10/16/2008 12:41	6.4	0.0215	12.73
Run 1	02/06/2008 10:18	02/06/2008 11:22	6.5	0.0154	9.74
Run 2	02/06/2008 11:56	02/06/2008 12:59	4.1	0.0144	9.48
Run 3	02/06/2008 13:26	02/06/2008 14:29	4.2	0.0157	10.12
Run 1	02/13/2007 12:11	02/13/2007 14:05	4.8	0.0151	8.68
Run 2	02/13/2007 14:37	02/13/2007 15:41	4.7	0.0133	8.02
Run 3	02/13/2007 16:20	02/13/2007 17:22	5.3	0.0159	9.09
Run 1	02/16/2006 11:15	02/16/2006 12:20	10.4	0.0191	13.44
Run 2	02/16/2006 12:52	02/16/2006 13:55	10.6	0.0203	13.02
Run 3	02/16/2006 14:30	02/16/2006 15:32	9.3	0.0194	12.14
Run 1	02/22/2005 14:15	02/22/2005 15:19	6.5	0.0132	10.03
Run 3	02/23/2005 08:53	02/23/2005 09:56	6	0.0060	4.56

FIGURES

Figure 1
PM vs. Opacity
Boilers A, B, and C - NHPC (2005-2014)

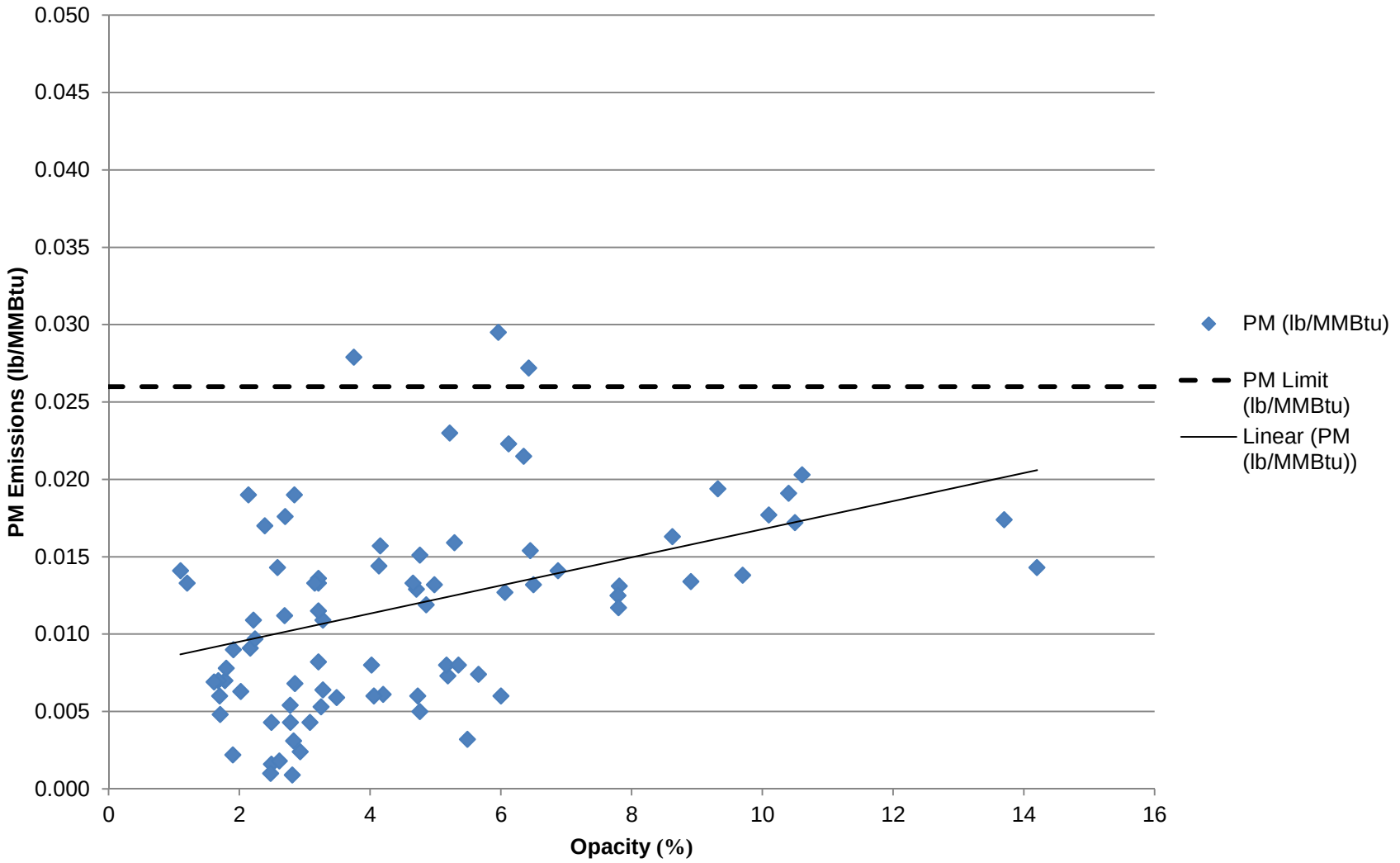


Figure 2
PM vs. Opacity
Boiler A - NHPC (2005-2014)

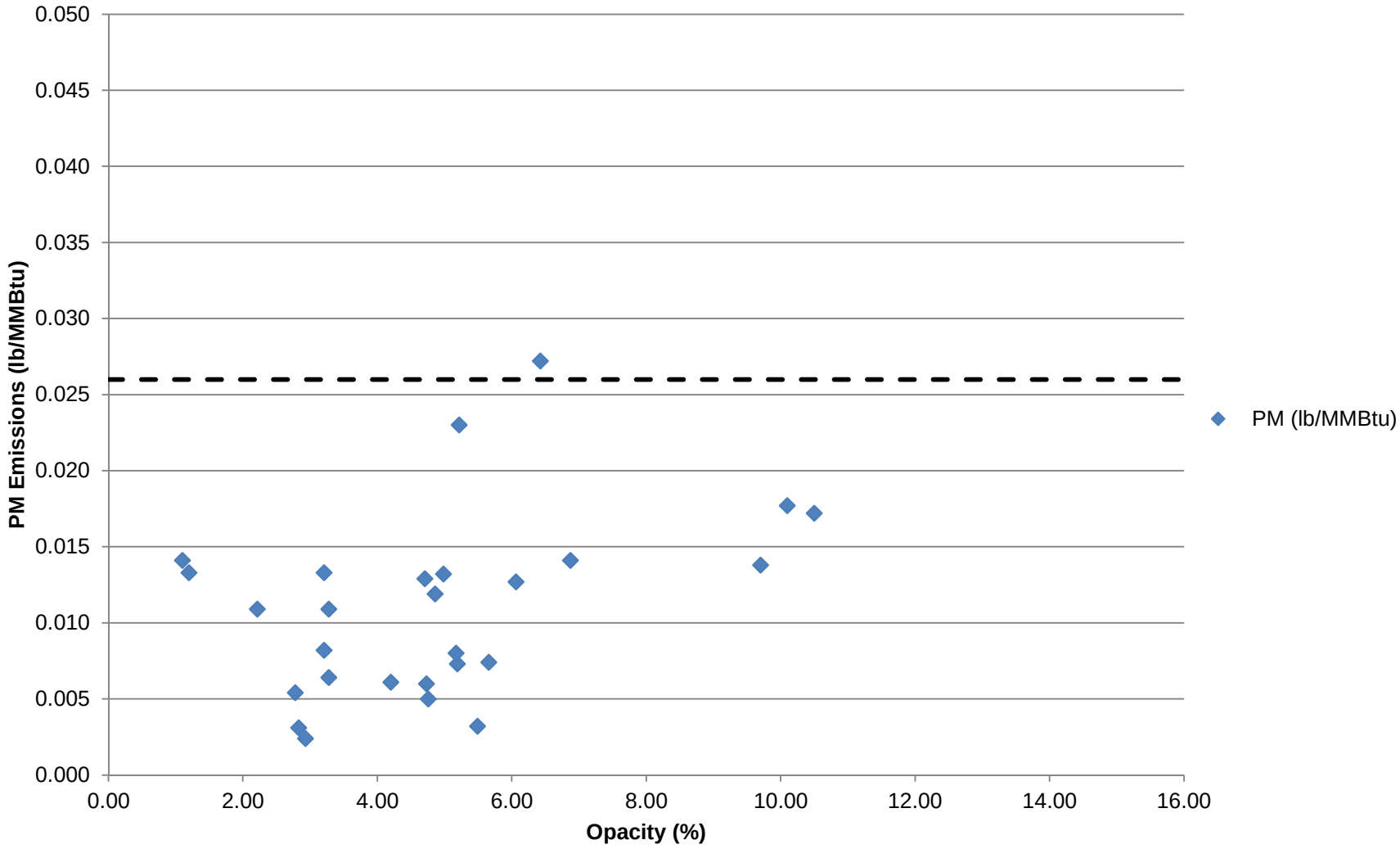


Figure 3
PM vs. Opacity
Boiler B - NHPC (2005-2014)

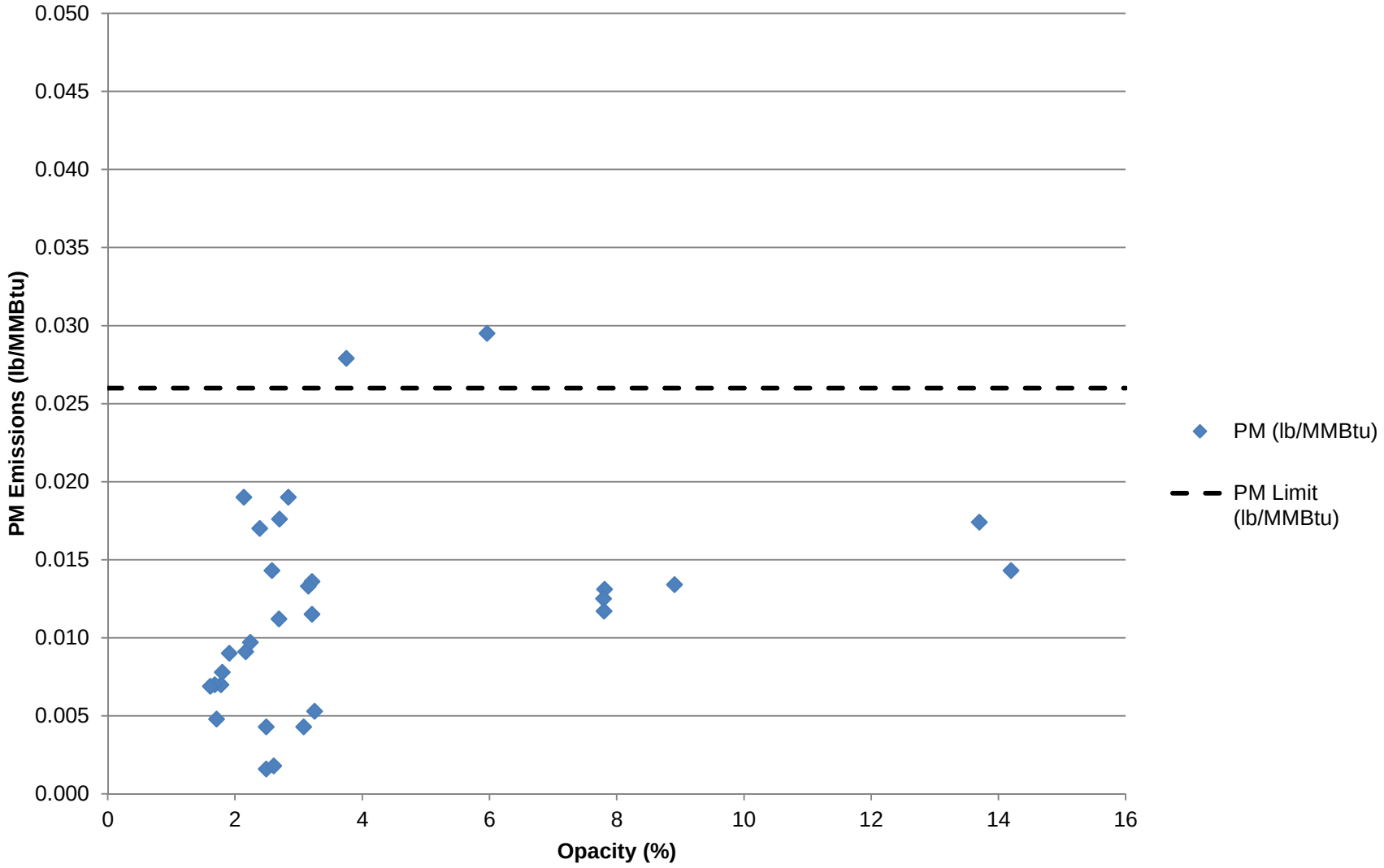
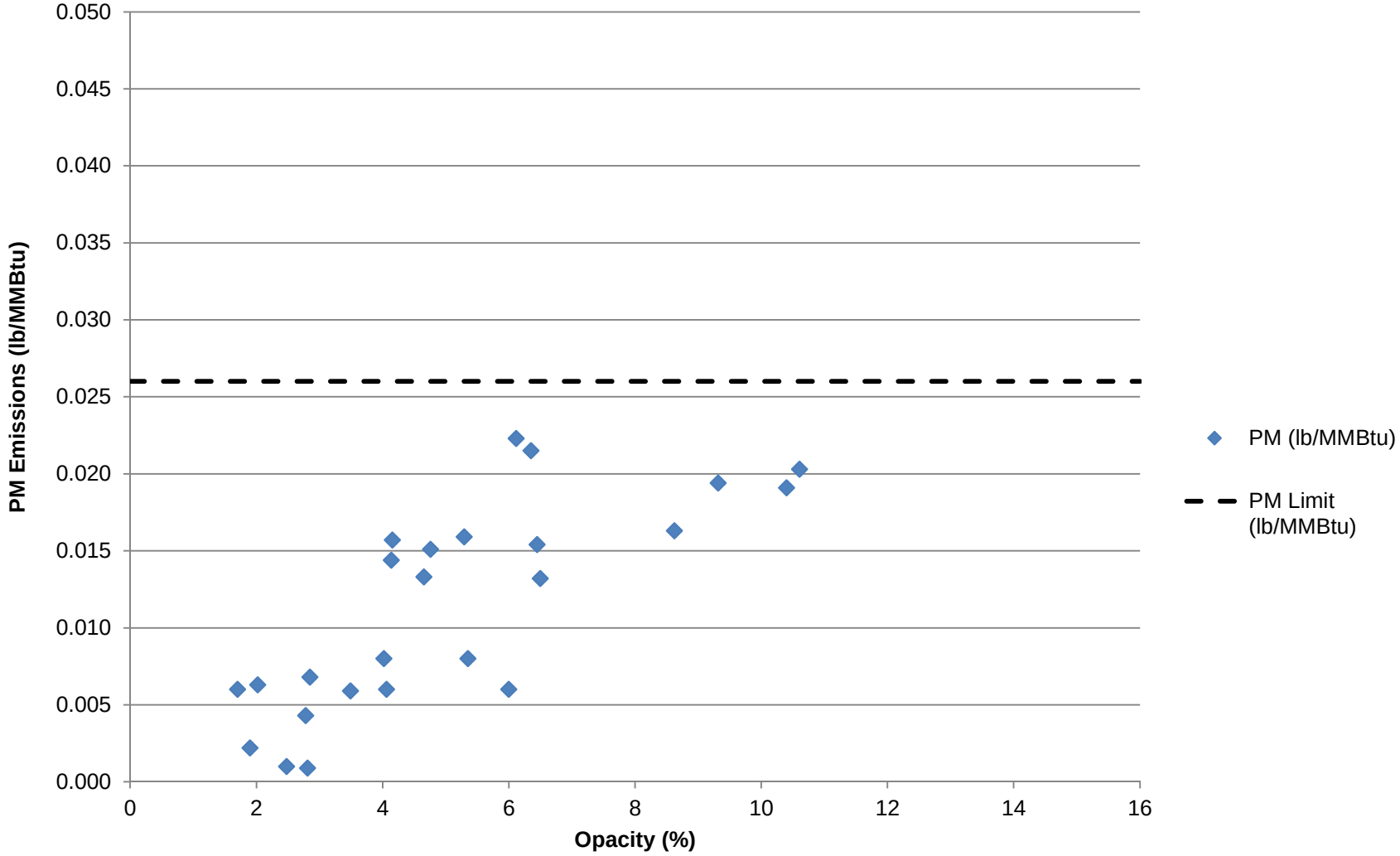


Figure 4
PM vs. Opacity
Boiler C - NHPC (2005-2014)



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