



PERMIT APPLICATION

# AIR CONSTRUCTION PERMIT APPLICATION TO ALLOW BOILER MAINTENANCE ACTIVITIES

**Sugar Cane Growers Cooperative of Florida  
Glades Sugar House**

**Prepared For:** Sugar Cane Growers Cooperative of Florida  
1500 West Sugar House Road  
Belle Glade, FL 33430 USA

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

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

May 2015

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**APPLICATION FOR AIR PERMIT**

**LONG FORM**



# 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: <b>Sugar Cane Growers Cooperative of Florida</b>	
2. Site Name: <b>Glades Sugar House</b>	
3. Facility Identification Number: <b>0990026</b>	
4. Facility Location... Street Address or Other Locator: <b>1500 West Sugar House Road</b> City: <b>Belle Glade</b> County: <b>Palm Beach</b> Zip Code: <b>33430-0666</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: <b>Kathy Lockhart, Environmental Manager</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>Sugar Cane Growers Cooperative of Florida</b> Street Address: <b>1500 West Sugar House Road / P.O. Box 666</b> City: <b>Belle Glade</b> State: <b>FL</b> Zip Code: <b>33430-0666</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(561) 996-4779</b> ext.      Fax: <b>(561) 996-4780</b>	
4. Application Contact E-mail Address: <b>kdlockhart@scgc.org</b>	

#### 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 for allowing annual boiler maintenance, repair and replacement activities for the six boilers at Sugar Cane Growers Cooperative of Florida (SCGCF) Glades Sugar House.**

# APPLICATION INFORMATION

## Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
001	Boiler No. 1		N/A
002	Boiler No. 2		N/A
003	Boiler No. 3		N/A
004	Boiler No. 4		N/A
005	Boiler No. 5		N/A
006	Boiler No. 8		N/A

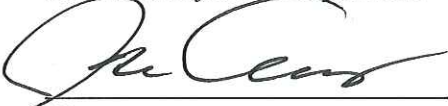
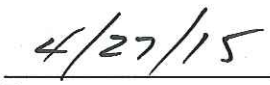
## Application Processing Fee

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 : <b>Jose F. Alvarez, Executive Vice President – C.O.O. and General Manager</b>
2. Owner/Authorized Representative Mailing Address... Organization/Firm: <b>Sugar Cane Growers Cooperative of Florida</b> Street Address: <b>1500 West Sugar House Road / P.O. Box 666</b> City: <b>Belle Glade</b> State: <b>FL</b> Zip Code: <b>33430-0666</b>
3. Owner/Authorized Representative Telephone Numbers... Telephone: <b>(561) 996-4759</b> ext. Fax: <b>(561) 996-4747</b>
4. Owner/Authorized Representative E-mail Address: <b>jfalvarez@scgc.org</b>
5. Owner/Authorized Representative Statement: <i>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.</i>   Signature   Date

## APPLICATION INFORMATION

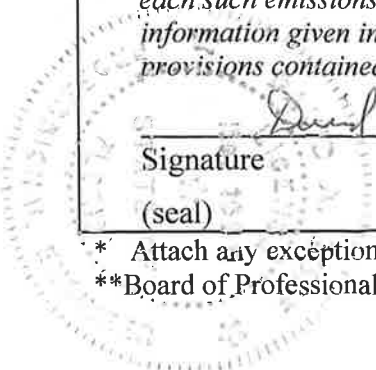
### Application Responsible Official Certification

**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:			
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):			
<input type="checkbox"/> 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.			
<input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively.			
<input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.			
<input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.			
3. Application Responsible Official Mailing Address...			
Organization/Firm:			
Street Address:			
City:	State:	Zip Code:	
4. Application Responsible Official Telephone Numbers...			
Telephone: ( )	ext.	Fax: ( )	
5. Application Responsible Official E-mail Address:			
6. Application Responsible Official Certification:			
<p>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.</p>			
_____ Signature		_____ Date	

**APPLICATION INFORMATION**

**Professional Engineer Certification**

1. Professional Engineer Name: <b>David A. Buff</b> Registration Number: <b>19011</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Golder Associates Inc.**</b> Street Address: <b>6026 NW 1st Place</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32607</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(352) 336-5600</b> ext. <b>21145</b> Fax: <b>(352) 336-6603</b>
4. Professional Engineer E-mail Address: <b>dbuff@golder.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , 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.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , 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 <input type="checkbox"/> , 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.</i> <i>(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 <input type="checkbox"/> , 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.</i>   Signature <u>David A. Buff</u> Date <u>5/4/15</u> (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 <b>17</b> East (km) <b>534.9</b> North (km) <b>2,953.3</b>		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) <b>26/42/06</b> Longitude (DD/MM/SS) <b>80/38/57</b>	
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>20</b>	6. Facility SIC(s): <b>2061</b>
7. Facility Comment :			

#### Facility Contact

1. Facility Contact Name: <b>Kathy Lockhart, Environmental Manager</b>
2. Facility Contact Mailing Address... Organization/Firm: <b>Sugar Cane Growers Cooperative of Florida</b> Street Address: <b>1500 West Sugar House Road / P.O. Box 666</b> City: <b>Belle Glade</b> State: <b>FL</b> Zip Code: <b>33430-0666</b>
3. Facility Contact Telephone Numbers: Telephone: <b>(561) 996-4779</b> ext.                      Fax: <b>(561) 996-4780</b>
4. Facility Contact E-mail Address: <b>kdlockhart@scgc.org</b>

#### 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. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> 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]?
<b>Sulfur Dioxide (SO2)</b>	<b>A</b>	<b>Y</b>
<b>Volatile Organic Compounds (VOC)</b>	<b>A</b>	<b>N</b>
<b>Particulate Matter (PM)</b>	<b>A</b>	<b>N</b>
<b>Particulate Matter (PM10)</b>	<b>A</b>	<b>N</b>
<b>Particulate Matter (PM2.5)</b>	<b>A</b>	<b>N</b>
<b>Carbon Monoxide (CO)</b>	<b>A</b>	<b>N</b>
<b>Nitrogen Oxides (NOX)</b>	<b>A</b>	<b>N</b>
<b>Sulfuric Acid Mist (SAM)</b>	<b>A</b>	<b>N</b>
<b>Hydrochloric Acid (H106)</b>	<b>A</b>	<b>N</b>
<b>Methanol (H115)</b>	<b>A</b>	<b>N</b>
<b>Naphthalene (H132)</b>	<b>A</b>	<b>N</b>
<b>Polycyclic Organic Matter (H151)</b>	<b>A</b>	<b>N</b>
<b>Total HAPs (HAPS)</b>	<b>A</b>	<b>N</b>
<b>Greenhouse Gases (GHGs)</b>	<b>A</b>	<b>N</b>
<b>Carbon Dioxide Equivalent (CO2e)</b>	<b>A</b>	<b>N</b>

## 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
<b>SO2</b>	<b>Y</b>	<b>See Comment</b>	<b>See Comment</b>		<b>See Comment</b>

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

**Item No. 3: Boiler No. 1 (Emission Unit ID No. 001)  
 Boiler No. 2 (Emission Unit ID No. 002)  
 Boiler No. 3 (Emission Unit ID No. 003)  
 Boiler No. 4 (Emission Unit ID No. 004)  
 Boiler No. 5 (Emission Unit ID No. 005)  
 Boiler No. 8 (Emission Unit ID No. 006)**

**Item No. 4: The SO<sub>2</sub> facility-wide emission cap is a daily limit of 14 tons per day.**

**Item No. 6: Permit No. 0990026-026-AV, Specific Condition A.10, and AC50-42476/PSD-FL-077 dated 10/28/81.**

### 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) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <b>March 2015</b>
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) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <b>March 2015</b>
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) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <b>March 2015</b>

#### Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input checked="" type="checkbox"/> Attached, Document ID: <b>Part B</b> _____
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: <b>Part B</b> _____
4. List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

#### Additional Requirements for FESOP Applications

- |   |
|---|
| 1. List of Exempt Emissions Units:<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> 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)<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> 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)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements)  |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)<br><input type="checkbox"/> Attached, Document ID: _____<br>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)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed<br><input type="checkbox"/> Not Applicable   |
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable  |
| 6. Requested Changes to Current Title V Air Operation Permit:<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> 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<sub>x</sub> 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**

**PART B**





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## 1.0 INTRODUCTION

Sugar Cane Growers Cooperative of Florida (SCGCF) operates a sugar mill located in Belle Glade, Palm Beach County, Florida (Glades Sugar House). The sugar mill consists of seven regulated emissions units – six (6) primarily carbonaceous (bagasse and residue) fuel-fired boilers, and one paint spray booth. The facility is currently operating under Title V Operating Permit No. 0990026-026-AV issued on August 7, 2014.

The facility operates on steam produced from the six boilers: Boiler Nos. 1, 2, 3, 4, 5, and 8. The total steam generating capacity of all six boilers is 1,207,854 pounds per hour (lb/hr). The boilers are currently permitted to burn carbonaceous fuel (bagasse and bagasse residue), fuel oil, natural gas, small quantities of on-spec used oil, and small quantities of non-hazardous waste contaminated soil that is generated on-site.

SCGCF is requesting an air construction permit that authorizes annual repairs to the six boilers at the mill. Bagasse, the primary fuel for the boilers, is the product of an agricultural operation involving the harvesting of sugarcane, and the processing of the sugarcane to extract sugar. The harvesting of the sugarcane from the fields inherently results in soil, sand, rocks and other impurities clinging to the raw sugarcane material being delivered to the sugar mill. The sugarcane is washed in the process, but it does not remove 100 percent of these materials. Materials/impurities making it through the washing process remain in the bagasse stream.

When the bagasse is fired in the boilers, the particles of soil, sand, rocks, etc. are entrained in the flue gas, causing wear and abrasion of the boiler internal parts (boiler tubes, furnace walls, internal ductwork, metal surfaces, etc.) as well as downstream equipment (air preheaters, economizers, fans, ductwork, etc.). This wear is more rapid and apparent in the sugar industry compared to other industries, such as pulp and paper mill boilers. As a result, sugar mills have a more aggressive off-season inspection and repair maintenance program to identify problems and perform required repairs. More frequent and more extensive repairs are required compared to other industries.

SCGCF is requesting an air construction permit from the Florida Department of Environmental Protection (FDEP) for boiler maintenance activities. The purpose of the air construction permit is to allow SCGCF to undergo off-season maintenance activities on the boilers at the mill, intended to maintain the boilers at their current steam production capabilities for the upcoming milling seasons and continued normal operating levels. A more detailed description of the proposed project is presented in Section 2.0. An air regulatory applicability analysis is presented in Section 3.0.



## 2.0 PROJECT DESCRIPTION

### 2.1 Existing Operations

#### 2.1.1 *Sugar Industry Practices*

The sugar industry in Florida is an agricultural operation that revolves around the seasonal harvest and processing of sugarcane from October through about March or April of each year. At a certain maturity, the sugar content of cane reaches its highest level and then begins to gradually decrease. It is important to cut the cane at the proper time to maximize sugar production. Once cut, purity of the sucrose begins to decline and the useful sugar content is reduced. Therefore, it is equally important to process the sugarcane as rapidly as possible.

For these reasons, the sugar mill boilers operate almost continually until the entire crop is processed. Also, facilities that can process the sugarcane as rapidly as possible will shorten the milling season and reduce operating costs. Therefore, reliability of the equipment is an important consideration.

The agricultural cycle in Florida provides a six to seven-month off season, which is used to perform boiler maintenance and repairs. Each sugar mill in Florida routinely performs a variety of off-season maintenance activities. Each facility performs work necessary to restore each boiler to the current operating levels and reliability for the upcoming year. The most common work performed includes tube replacements for the main generating bank, economizers, superheaters, and air heaters, in addition to repairs of the grates, refractory, wet scrubbers, ductwork, and stacks.

#### 2.1.2 *SCGCF*

The Glades Sugar House operates on steam produced from the six (6) boilers: Boiler Nos. 1, 2, 3, 4, 5, and 8. The total steam generating capacity of all six boilers is 1,207,854 lb/hr. The boilers at the SCGCF mill burn the biomass (bagasse) produced from the extraction of the sucrose in sugarcane, and generate steam which in turn is used to power the sugarcane milling operations at the facility. The boilers are currently capable of burning carbonaceous fuel (bagasse and bagasse residue), fuel oil, small quantities of on-specification used oil, small quantities of non-hazardous waste contaminated soil that is generated on-site, and natural gas. The sulfur content of the No. 6 fuel oil is limited to 2.4 percent.

For firing carbonaceous fuel, Boiler Nos. 1, 2, and 3 have water cooled, pin-hole grates and Boiler Nos. 4, 5, and 8 have traveling grates. All boilers also have No. 6 fuel oil burners and five boilers have natural gas burners (all boilers except Boiler No. 3) which are used for startup, shutdown, and as a supplemental fuel. The following table presents the permitted steam rates and operating capacities of the boilers.



Boiler Description	Steam Production (lb/hr)	Fuel Burned	Heat Input (MMBtu/hr) <sup>a</sup>	Amount of Fuel Consumed (lb/hr) <sup>a</sup>
Boiler No. 1	139,700 (24-hour average)	Bagasse Residue No. 6 Fuel Oil Natural Gas	266.7 234.7 79.2 120.0	33,400 26,400 525 gal/hr 120,000 scf/hr
Boiler No. 2	138,154 (24-hour average)	Bagasse Residue No. 6 Fuel Oil Natural Gas	263.7 232.1 79.2 120.0	33,000 26,000 525 gal/hr 120,000 scf/hr
Boiler No. 3	110,000 (8-hour average)	Bagasse Residue No. 6 Fuel Oil Natural Gas	210.0 184.8 126.8 184.8	26,200 20,800 840 gal/hr 184,800 scf/hr
Boiler No. 4	300,000 (24-hour average)	Bagasse Residue No. 6 Fuel Oil Natural Gas	572.7 504.0 108.6 276.0	71,600 56,600 719 gal/hr 276,000 scf/hr
Boiler No. 5	230,000 (24-hour average)	Bagasse Residue No. 6 Fuel Oil Natural Gas	439.1 386.4 65.4 166.0	54,800 43,400 433.8 gal/hr 166,000 scf/hr
Boiler No. 8	290,000 (1-hour average)	Bagasse Residue No. 6 Fuel Oil Natural Gas	553.6 487.2 194.4 138.0	69,200 54,700 1,288 gal/hr 138,000 scf/hr

<sup>a</sup> Based upon 55% thermal efficiency and 8,000 Btu/lb (dry) while burning bagasse;  
62.5% thermal efficiency and 8,900 Btu/lb (dry) while burning residue;  
62.5% thermal efficiency and 151,000 Btu/gal while burning No. 6 fuel oil;  
62.5% thermal efficiency and 1,000 Btu/scf while burning natural gas.

Each of the boilers are equipped with mechanical multicyclone or baffle-type dust collectors, and each boiler has either one or two wet scrubbers to control particulate matter (PM) emissions. It is noted that the mechanical or baffle-type dust collectors are installed specifically for the purpose of protecting the ID fan from excessive wear and abrasion due to the abrasive particles in the flue gas stream by removing such particles.

During the off-season, operation of the boilers is restricted and limited to only Boiler Nos. 1, 2, 4, 5, and 8. Maximum annual operating hours are limited to 7,296 hours per year (hr/yr).

Emission limits applicable to the facility boilers are as follows:



Boiler Description	Nitrogen Oxides (lb/MMBtu)	Particulate Matter (lb/MMBtu)	Volatile Organic Compounds (lb/MMBtu)	Carbon Monoxide (lb/MMBtu)	Sulfur Dioxide (TPD)
Boiler No. 1	0.45 (Bagasse), 0.65 (Residue)	0.25 (carbonaceous fuel) 0.1 (fossil fuel)	0.7	N/A	14 (from all six boilers combined)
Boiler No. 2	0.45 (Bagasse), 0.65 (Residue)	0.25 (carbonaceous fuel) 0.1 (fossil fuel)	0.7	N/A	
Boiler No. 3	0.45 (Bagasse), 0.65 (Residue)	0.25 (carbonaceous fuel) 0.1 (fossil fuel)	0.7	N/A	
Boiler No. 4	0.45 (Bagasse), 0.65 (Residue)	0.20 (carbonaceous fuel) 0.1 (fossil fuel)	0.7	N/A	
Boiler No. 5	0.45 (Bagasse), 0.65 (Residue)	0.25 (carbonaceous fuel) 0.1 (fossil fuel)	0.7	N/A	
Boiler No. 8	123 lb/hr	0.137 (carbonaceous fuel) 0.1 (fossil fuel)	140 lb/hr	5.01	

The Glades Sugar House has an emissions cap for sulfur dioxide (SO<sub>2</sub>) emissions that applies to all six boilers. The emissions cap is 14 tons per day (TPD) of SO<sub>2</sub>. Any fuel oil burned in Boiler No. 8 on a daily basis must be replaced within 72 hours (excluding weekends) by the addition to the common fuel oil system of an equal or greater amount of No. 6 fuel oil with a maximum sulfur content of 1 percent.

## 2.2 Proposed Project

SCGCF is requesting an air construction permit to authorize boiler maintenance activities over the next three years. SCGCF is also proposing to provide annual reporting of boiler maintenance activities to the FDEP. In June 2003, U.S. Sugar Corporation (USSC) received an air construction permit from the FDEP for a 3-year boiler maintenance project (permit No. 0510003-022-AC). This air permit allowed USSC to undergo off-season maintenance activities on the boilers at the mill, intended to maintain the boilers at their current steam production capabilities for the upcoming milling seasons and continued normal operating levels. SCGCF is requesting a similar air construction permit for their off-season maintenance, repair and replacement activities.

The SCGCF boilers undergo routine maintenance, repair and replacement on an annual basis at the Mill, with most activities occurring during the off-season. The Mill has both a capital budget and an operating budget. Tables 2-1 and 2-2 present the boiler capital projects performed during the 2013-2014 and 2014-2015 fiscal years, respectively, excluding those projects performed under air construction permits. The projects that were performed under air construction permits are itemized in Table 2-3. The fiscal year runs from October through September, which includes the off-season repair period which generally runs from April through September. The cost of each project is shown in the tables.



SCGCF's annual operating budget, which covers annual repairs to the boilers, is similar each year, depending on needs. In the 2013-2014 fiscal year, the repairs totaled about \$1.4 million, while for the 2014-2015 fiscal year are budgeted for \$1.5 million. These repairs include primarily refractory repair, repairing traveling grates, fans, pumps, overhauling steam turbines, cleaning/washing boiler internals, minor tube replacements, repairs to ductwork and scrubbers, and repairs to belt conveyors and drives. Repairs occur primarily in the off-season, but also occur during the crop season as needed.

It is also noted that repairs to SCGCF boilers have accelerated over the last five years due to more of its sugarcane being grown on sandlands. The growers supplying SCGCF with cane are expanding their farms into sandlands, and this is expected to increase in the future. As in the case of USSC, growing of sugarcane on sandlands results in sand being transported with the cane to the sugar mill. Not all the sand is removed in the process, and once sand enters the boilers with the bagasse fuel, internal components in the path of the flue gas are subjected to increased abrasion. This in turns leads to increased frequency of repairs as well as increased magnitude of repairs.

Also, some repairs on the boilers have been accelerated in response to the impending Industrial Boiler MACT rule, which has a compliance date of January 31, 2016.

The off-season maintenance activities are intended to maintain the boilers at current steam production capabilities for the upcoming cane milling season and continued normal operating levels. SCGCF believes that the proposed maintenance, repair, and replacement of components are "routine" for the sugar industry, due to the nature of bagasse-fired boilers and as evidenced by U.S. Sugar's maintenance permit granted in 2003.

The maximum steam rate of each boiler will not change as a result of the activities, nor will the fuel feed rates or maximum heat input rates change. Presented in Figure 2-1 are the historical maximum steam production rates achieved during each boiler's annual compliance testing since 1993. The figure indicates that past repairs and maintenance performed on the boilers have not increased the maximum steam production capability of the boilers.

Shown in Figure 2-2 is the historical ratio of pounds of steam produced by the boilers per ton of sugarcane processed. This data shows that the sugarcane production process at SCGCF has fluctuated from year-to-year, reflecting varying steam production needs. These are likely due to influences from a number of factors, including weather, crop characteristics, etc. However, during the last two crop seasons, SCGCF has become more efficient, and the sugar mill process is requiring less steam per ton of cane ground. These data together demonstrate that the boilers have not increased steam production rates due to off-season repairs and maintenance.

In considering the maintenance project as a whole, SCGCF believes the maintenance activities constitute a routine effort to maintain the boilers at present operating conditions. The repairs mainly involve



components that are directly in the path of the boiler exhaust flue gas. Such work is typical off-season and crop season maintenance for the Florida sugar industry. The extent and frequency of repairs is normal compared to other similar facilities. SCGCF requests a minor source permit to authorize the on-going maintenance efforts and to provide a means to track progress.





### 3.0 AIR QUALITY REVIEW REQUIREMENTS

#### 3.1 PSD Review Requirements

The SCGCF Glades Sugar House is considered to be an existing major stationary facility because potential emissions of at least one prevention of significant deterioration (PSD) regulated pollutant exceeds 100 TPY [for example, potential nitrogen oxides (NO<sub>x</sub>) emissions currently exceed 100 TPY]. Therefore, PSD review is required for any pollutant for which the net increase in emissions due to a proposed modification is greater than the PSD significant emission rate (SER). PSD review is used to determine whether significant air quality deterioration will result from a new major facility or a major modification at an existing facility.

Rule 62-210.200(185) of the Florida Administrative Code (F.A.C.) defines “modification” as follows:

*Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.*

*(a) A physical change or change in the method of operation shall not include:*

- 1. Routine maintenance, repair, or replacement of component parts of an emissions unit; or*
- 2. A change in ownership of an emissions unit or facility.*

*(b) For any pollutant that is specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975.*

*(c) For any pollutant that is not specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would exceed any restriction on hours of operation or production rate included in any applicable Department air construction or air operation permit.*

SCGCF believes the maintenance, repair and replacements performed on each boiler are “routine”, and therefore would not constitute modifications under state and federal rules. In addition, SCGCF is not requesting an increase in the maximum steam production limit or heat input limit for any of the boilers.

A discussion is provided below regarding the nature, extent, purpose, frequency, and costs of the proposed activities, based on EPA's criteria for determining "routine" repair or replacement. These criteria are outlined in a May 2000 guidance letter from EPA that is commonly referred to as the Detroit Edison "Dense- Pack" Project.



### Nature

- Each of the boilers are major components of the mill and important to sugarcane processing.
- The proposed activities do not require any pre-approvals of state commissions.
- SCGCF has characterized the proposed work as routine for the sugar industry in Florida. The types of activities identified are commonly performed by all of the mills during the cane milling off-season and crop season.
- Most of the maintenance activities could not be performed while the boilers were functioning. However, the proposed work will be conducted during the normal six to seven month off-season, which is typically used to inspect each boiler and perform such repairs. Repairs are also made during the crop season as necessary.
- Most of the materials, equipment and resources necessary to carry out the planned activities are not on site. Labor for most of the work will be contracted to an outside company.

### Extent

- SCGCF does not propose to replace an entire emissions unit, but rather component parts of the boilers.
- Some repairs will take a significant amount of time to complete. However, the normal cycle of sugarcane processing affords more than sufficient time to complete the repairs.
- Most of the activities could be considered routine for the industry. This effort is reasonable compared to boilers at other Florida sugar mills.
- The proposed work does not require the addition of new types of parts to existing equipment, only the replacement with functionally equivalent components. The majority of work involves the replacement of steam tubing that has been worn due to abrasion, repair of traveling grates, refractory, etc. This type of replacement is common in Florida's sugar industry.

### Purpose

- SCGCF asserts that the purpose of the effort is not to extend the useful life of the units, but to maintain each boiler at current steam production capabilities for the upcoming cane milling seasons. Historical steam production records demonstrate that the steam production capabilities of the boilers have not increased, despite the annual repairs and maintenance that have taken place.
- The proposed work is intended to keep each boiler in its present operating condition. The repairs will not increase the capacity of any boiler or change the basic design parameters including fuel firing rates or heat input rates. The project will not increase the emission rates of any boiler, fuel capabilities, or the cane milling capacity of the plant.

### Frequency

- The majority of this project involves the replacements of steam tubing in the boiler, air heater and economizers, which is performed relatively frequently in the life of a typical sugar mill boiler. Similarly, grates and refractory are also repaired fairly frequently. Overfire air and distributor air fans are replaced less frequently. Ductwork is repaired/replaced annually.
- These types of repairs are typically performed at the Glades Sugar House mill.



## Cost

- None of the repairs approach 50% of the fixed capital costs to replace (or reconstruct) any boiler. Replacement of an entire boiler would be approximately \$30 in equipment and installation costs, depending on size. SCGCF estimates that the annual maintenance costs in the operating budget for the entire "boiler room" will total approximately \$1.5 million for the 2014-2015 fiscal year. These costs totaled \$1.4 million for the last fiscal year (2013-2014). The total maintenance, repair and replacement costs each year in the operating budget represent about 5% of the estimated cost to replace each boiler.
- Less frequent repairs are paid out of the capital budget. Many of these repairs have been conducted under an air construction permit issued by FDEP.

The above categories are interrelated. No one factor by itself would conclusively render a project to be routine or not. Many of the individual proposed activities are typically performed for sugar mill boilers in Florida and are considered routine. Nevertheless, SCGCF is submitting an application for an air construction permit to authorize these activities.

## **3.2 New Source Performance Standards and NESHAP Applicability**

### **3.2.1 NSPS Subpart Db**

The six boilers at the mill are not currently subject to New Source Performance Standards (NSPS) Subpart Db (40 CFR 60, Subpart Db) for industrial, commercial, and institutional steam generating units. Subpart Db regulates emissions of SO<sub>2</sub>, and NO<sub>x</sub>, and PM. Subpart Db is applicable to certain industrial boilers with a heat input capacity of 100 MMBtu/hr or greater, which were constructed, modified, or reconstructed after June 19, 1984. Subpart Db does not regulate the burning of bagasse fuel, but does regulate (if applicable) the burning of fuel oil and natural gas.

The boilers at SCGCF will not become subject to 40 CFR 60, Subpart Db, as a result of the proposed project. An existing source can become subject to the NSPS if it is "modified" or "reconstructed." Modification under NSPS is any physical change or change in the method of operation that causes an increase in any pollutant regulated under the NSPS, on a lb/hr basis. However, section 60.14(e) states the following:

*The following shall not, by themselves, be considered modifications under this part:*

*(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and §60.15.*

The routine maintenance and other repairs to the SCGCF facility's boilers will not, and are not intended, to increase emission rates or steam production rates of the boilers. Therefore, modification will not be triggered under NSPS.



Reconstruction under NSPS is any replacement of components of a boiler where the total cost is greater than 50 percent of the total cost of constructing an entirely new emissions unit. A new boiler of similar size and design to the existing boilers would cost approximately \$30 million. The proposed maintenance, repairs and replacements to the facility's boilers will cost much less than \$15 million per boiler. Therefore, the cost of the proposed activities for each boiler will be less than 50 percent of the cost of replacing each boiler at the facility, and the activities will not constitute "reconstruction" for the boilers.

Based on the above analysis of emissions to the atmosphere, costs of the proposed project, and the regulatory treatment of maintenance, repair and replacement, the facility's boilers will not be subject to the NSPS Subpart Db due to the proposed project.

### **3.2.2 NESHAPs Subpart DDDDD**

EPA is currently in the process of finalizing revised National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for the category of industrial, commercial, and institutional boilers and process heaters (Industrial Boiler MACT). EPA finalized 40 CFR Part 63, Subpart DDDDD on January 31, 2013, and then issued a Boiler MACT reconsideration proposal on January 21, 2015. This proposed rule has not yet been finalized.

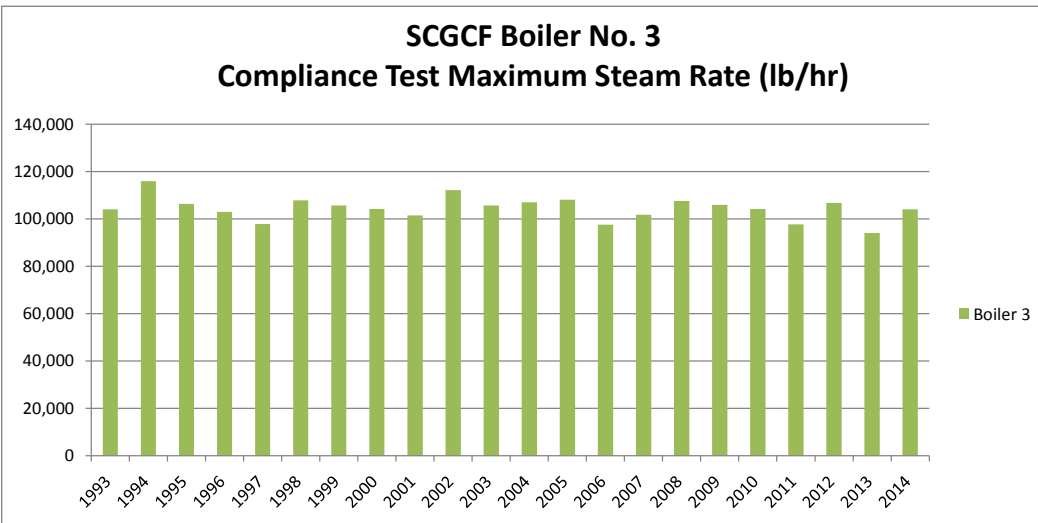
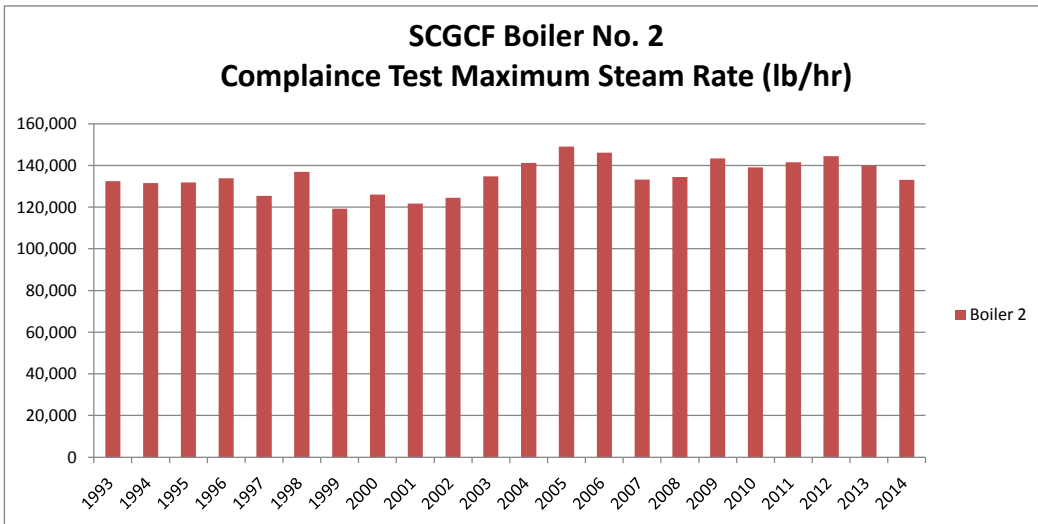
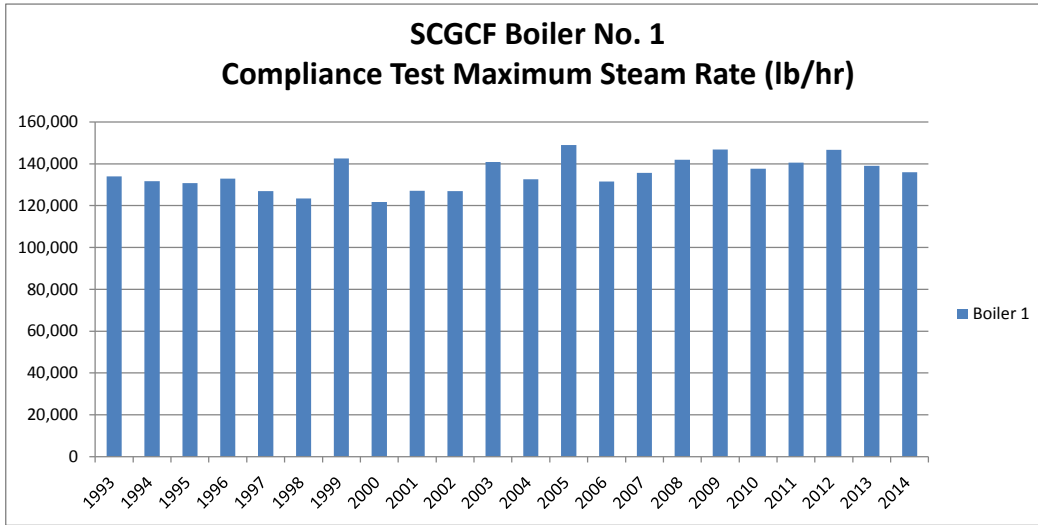
The SCGCF boilers will be regulated as industrial boilers, which are defined in the Industrial Boiler MACT standards as "a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity." A source (e.g., a mill) is a "major source" if its potential emissions of any individual HAP is equal to or greater than 10 tons per year (TPY), or if its potential emission of all HAPs combined is equal to or greater than 25 TPY.

The SCGCF sugar mill is an existing major source of HAPs because the potential emissions of an individual HAP from the six SCGCF boilers combined is greater than 10 TPY, and the potential emissions of all HAPs combined is greater than 25 TPY.

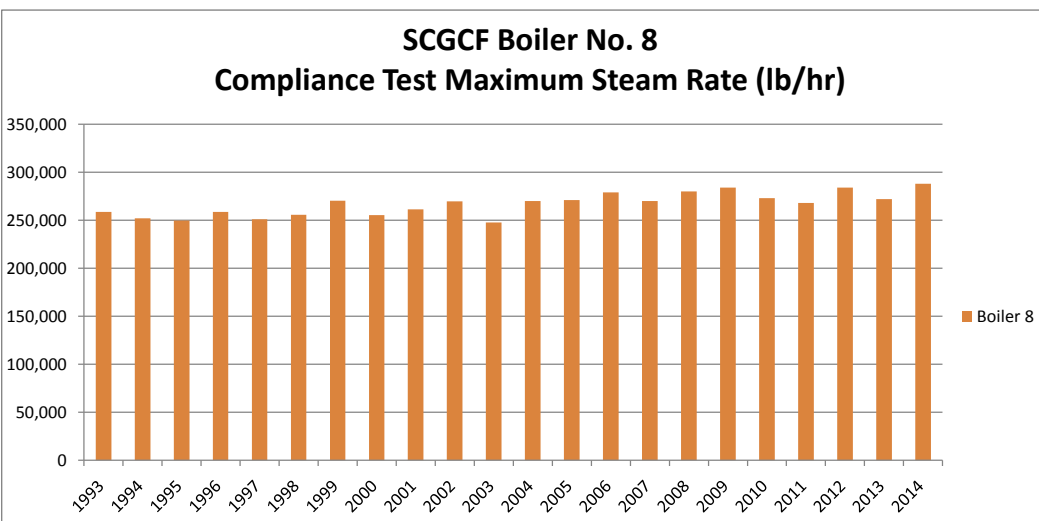
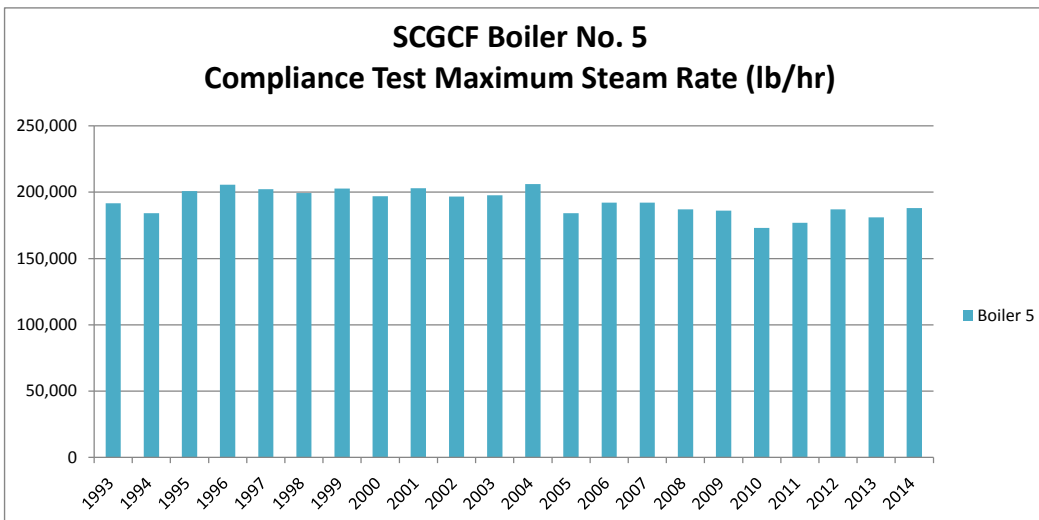
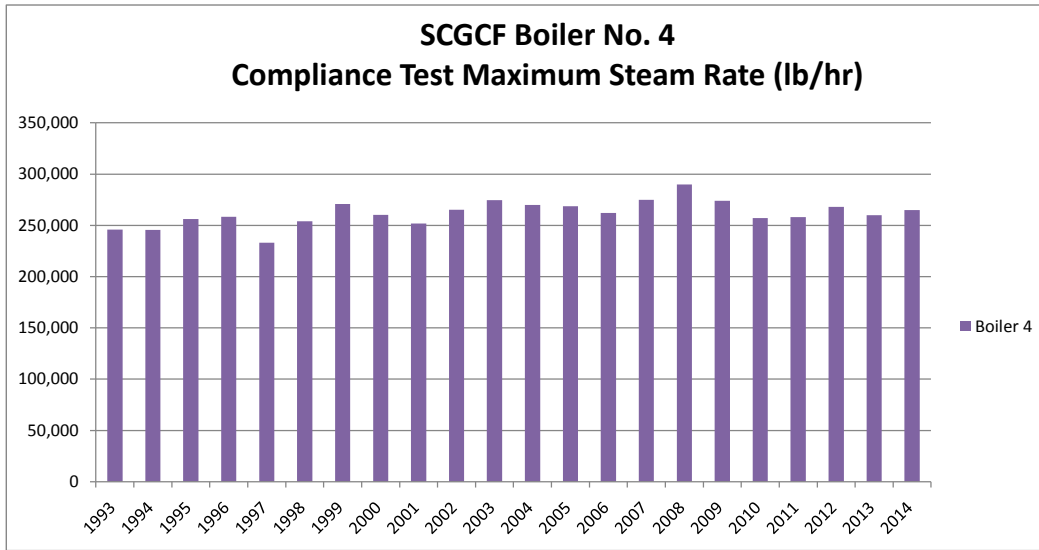
Thus, the SCGCF boilers will be regulated as a major source under the Industrial Boiler MACT regulations. The Industrial Boiler MACT standards set emission limits for various subcategories of boilers, such as stoker, suspension burner, fluidized bed, hybrid suspension grate, etc. The proposed routine maintenance, repair and replacement project will not change the applicability of the Boiler MACT rule to the SCGCF boilers.

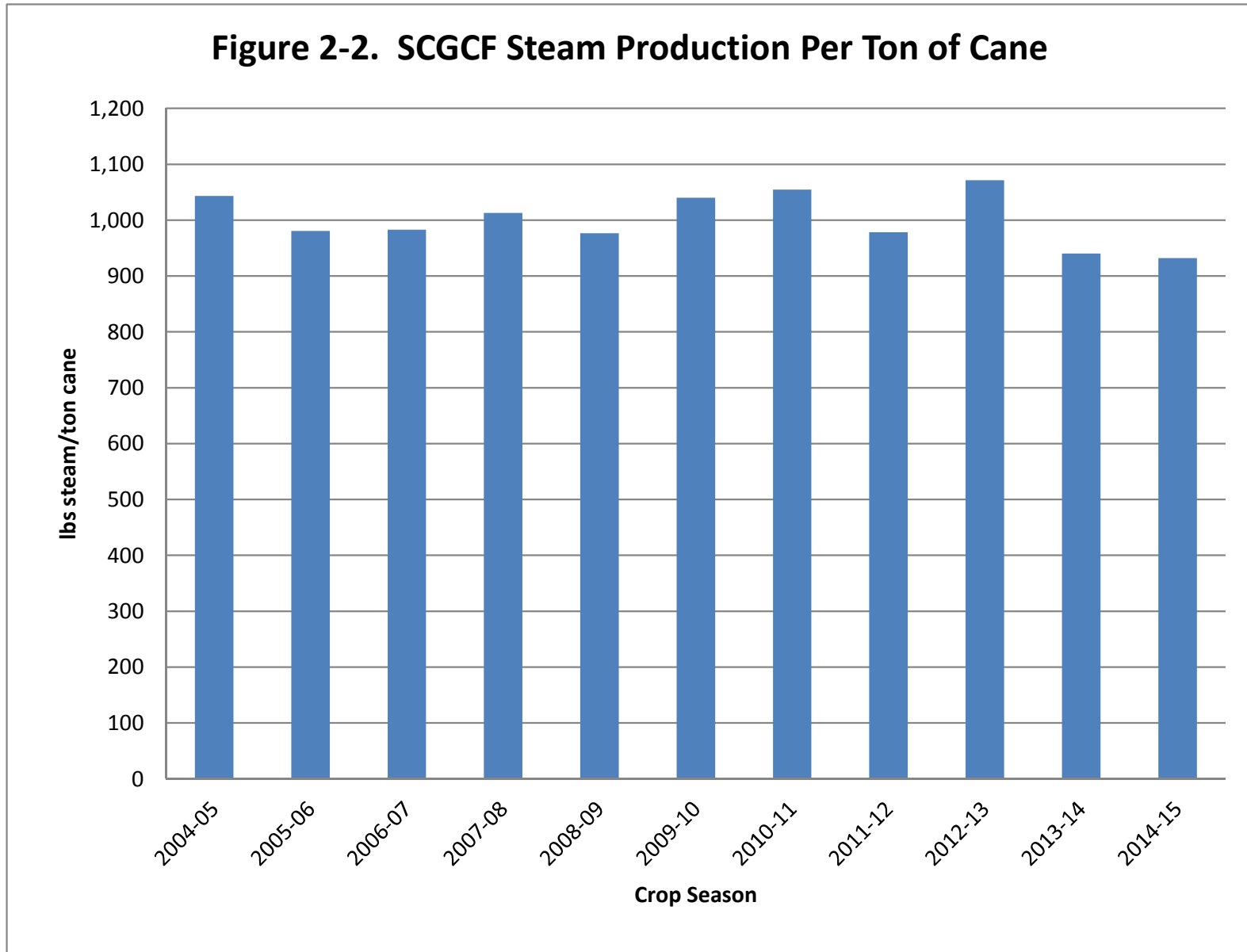
## FIGURES

**Figure 2-1. Historical Maximum Steam Rates for Boilers, SCGCF**



**Figure 2-1. Historical Maximum Steam Rates for Boilers, SCGCF**







## TABLES

**Table 2-1. Fiscal Year 2014 Capital Projects Spending for Department 08 (Boiler Room)**

<b>2014 and Previous Years Spending</b>		
Account	Description	Cost (\$)
<b><u>Boiler No. 1</u></b>		
150-10-05-136-300	BLR #1 & 2 ID FAN SOFT STARTERS (08)	12,363
150-10-05-142-300	BLR #1 & #2 FORCE DRAFT AIR FLOWMETER (08)	27,510
		<b>39,873</b>
<b><u>Boiler No. 2</u></b>		
150-10-05-121-300	REPLACE BLR #2 AIR HEATER TUBES (08)	111,453
		<b>111,453</b>
<b><u>Boiler No. 3</u></b>		
		<b>None</b>
<b><u>Boiler No. 4</u></b>		
150-10-05-127-300	REPLACE BLR #4 AIR HEATER TUBES (08)	531,584
		<b>531,584</b>
<b><u>Boiler No. 5</u></b>		
150-10-05-075-300	REPLACE WATER WALL HEADERS ON BOILER #5	13,837
150-10-05-123-300	REPLACE BLR #5 CASING (08)	150,181
150-10-05-141-300	BLR #5 UNDERGRATE AIR FLOWMETER (08)	64,121
150-10-05-151-300	REPLACE DUST COLLECTOR FOR BLR #5 (08)	267,936
		<b>496,074</b>
<b><u>Boiler No. 8</u></b>		
150-10-05-109-300	BOILER #8 UNDERGRATE AIR FLOWMETER (08)	21,209
150-10-05-128-300	REPLACE BLR #8 NEW AIR PRE-HEATER (08)	240,693
150-10-05-129-100	REPLACE DUCTWORK BLR #8 (08)	7,370
150-10-05-129-300	REPLACE DUCTWORK BLR #8 (08)	147,530
		<b>416,802</b>
<b><u>Boilers - General</u></b>		
150-10-05-022-100	BC1E BAGASSE CONVEYOR STRUCTURE (08)	1,904
150-10-05-022-300	BC1E BAGASSE CONVEYOR STRUCTURE (08)	3,389
150-10-05-074-100	BOILERS LEVEL ALARM SYSTEM (08)	5,387
150-10-05-143-100	SCRUBBER WATER AUTOMATION (08)	3,876
150-10-05-143-300	SCRUBBER WATER AUTOMATION (08)	33,572
150-10-05-146-300	BLR #1 TO #5 ROOF REPLACEMENT (08)	193,450
150-10-10-432-300	GENERAL STRUCTURAL REPAIRS (08)	239
150-10-10-434-300	BOILERS 5 & 8 REFRACTORY REPAIRS (08)	87,826
150-10-10-459-300	REPLACE BAGASSE CONVEYOR CHAIN (08)	43,328
150-10-10-460-300	BOILER 3 & 4 REFRACTORY REPAIRS (08)	84,792
150-10-10-464-300	GENERAL STRUCTURAL REPAIRS (08)	65,218
		<b>522,979</b>
<b>Total 2014 Spending</b>		<b>2,118,764</b>

**Table 2-2. Fiscal Year 2015 Projected Capital Projects Spending for Department 08 (Boiler Room)**

<b>2015 Spending</b>		
Account	Description	Cost (\$)
<b><u>Boiler No. 3</u></b>		
150-10-10-472-300	REPAIR BOILER #3 ID FAN (08)	35,626
		<b>35,626</b>
<b><u>Boiler No. 4</u></b>		
150-10-05-101-300	DEMISTER FOR SCRUBBER #4 (08)	16
150-10-05-127-300	REPLACE BLR #4 AIR HEATER TUBES (08)	9,210
		<b>9,226</b>
<b><u>Boiler No. 5</u></b>		
150-10-05-123-300	REPLACE BLR #5 CASING (08)	22,400
150-10-05-151-300	REPLACE DUST COLLECTOR FOR BLR #5 (08)	266,567
		<b>288,967</b>
<b><u>Boiler No. 8</u></b>		
150-10-05-128-300	REPLACE BLR #8 NEW AIR PRE-HEATER (08)	26,105
150-10-05-129-300	REPLACE DUCTWORK BLR #8 (08)	42,400
		<b>68,505</b>
<b><u>Boilers - General</u></b>		
150-10-05-143-100	SCRUBBER WATER AUTOMATION (08)	4,908
150-10-05-146-300	BLR #1 TO #5 ROOF REPLACEMENT (08)	193,450
		<b>198,358</b>
<b>Total 2015 Spending (Projected)</b>		<b>600,681</b>

**Table 2-3. 2014 and 2015 Spending Under Air Construction Permits (Boiler Room)**

<b>2014 Spending</b>		
Account	Description	Cost (\$)
<b><u>Boiler No. 1</u></b>		
150-10-05-052-300 <sup>a</sup>	NEW MEMBRANE WATER WALL FOR BLR #1 (08)	8,204,012
150-10-05-122-300	REPLACE DUST COLLECTOR BLR #1	430,928
		<b>8,634,940</b>
<b><u>Boiler No. 2</u></b>		
150-10-05-125-300	REPLACE DUST COLLECTOR FOR BLR #2 (08)	325,319
150-10-05-126-300	REPLACE BLR #2 CASING (08)	336,184
150-10-05-139-300	BLR #2 WATER WALL REFURBISHMENT (08)	5,465,213
		<b>6,126,716</b>
<b><u>Boiler No. 5</u></b>		
150-10-05-078-300	ADD'L GAS BURNER FOR BLR #5 (08)	22,766
		<b>22,766</b>
<b>Total 2014 Spending</b>		<b>14,784,422</b>
<b>2015 Spending</b>		
Account	Description	Cost (\$)
<b><u>Boiler No. 1</u></b>		
150-10-05-122-300	REPLACE DUST COLLECTOR BLR #1	31,210
		<b>31,210</b>
<b><u>Boiler No. 2</u></b>		
150-10-05-125-300	REPLACE DUST COLLECTOR FOR BLR #2 (08)	45,061
150-10-05-139-300	BLR #2 WATER WALL REFURBISHMENT (08)	1,550,127
		<b>1,595,187</b>
<b>Total 2015 Spending</b>		<b>1,626,397</b>

<sup>a</sup> Includes 2013 expenditures.