

**RECEIVED**

MAR 01 2002

BUREAU OF AIR REGULATION

**CONSTRUCTION PERMIT APPLICATION  
FOR PELLET COOLER**

**SOUTHERN GARDENS  
CITRUS PROCESSING CORPORATION**

**CLEWISTON, FLORIDA**

**Prepared For:**

**Southern Gardens Citrus Processing Corporation  
755 C.R. 833, P.O. Box 130  
Clewiston, Florida 33440**

**Prepared By:**

**Golder Associates Inc.  
6241 NW 23rd Street, Suite 500  
Gainesville, Florida 32653-1500**

**February 2002  
0237520**

**DISTRIBUTION:**

**4 Copies - Agency**

**2 Copies - Southern Gardens**

**2 Copies - Golder Associates Inc.**



# Department of Environmental Protection

## Division of Air Resources Management

### APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

##### Identification of Facility

1. Facility Owner/Company Name: <b>Southern Gardens Citrus Processing Corp.</b>	
2. Site Name: <b>Southern Gardens Citrus Processing Corp.</b>	
3. Facility Identification Number: <b>0510015</b> [ ] Unknown	
4. Facility Location: Street Address or Other Locator: <b>755 C.R. 833; P.O. Box 130</b> City: <b>Clewiston</b> County: <b>Hendry</b> Zip Code: <b>33440</b>	
5. Relocatable Facility? [ ] Yes [ <b>X</b> ] No	6. Existing Permitted Facility? [ <b>X</b> ] Yes [ ] No

##### Application Contact

1. Name and Title of Application Contact: <b>Derek Pridgen, Environmental Engineer</b>	
2. Application Contact Mailing Address: Organization/Firm: <b>Southern Gardens Citrus Processing Corp.</b> Street Address: <b>755 CR 833; P.O. Box 130</b> City: <b>Clewiston</b> State: <b>FL</b> Zip Code: <b>33440</b>	
3. Application Contact Telephone Numbers: Telephone: <b>( 863 ) 983 - 3030</b> Fax: <b>( 863 ) 983 - 3060</b>	

##### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	<b>3/1/05</b>
2. Permit Number:	<b>0510015-011-AC</b>
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Purpose of Application**

**Air Operation Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

Initial Title V air operation permit for an existing facility which is classified as a Title V source.

Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit number to be revised: \_\_\_\_\_

Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: \_\_\_\_\_

Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

**Air Construction Permit Application**


This Application for Air Permit is submitted to obtain: (Check one)

Air construction permit to construct or modify one or more emissions units.

Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Air construction permit for one or more existing, but unpermitted, emissions units.

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Tristan Chapman, Vice President, General Manager</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: <b>Southern Gardens Citrus Processing Corp.</b> Street Address: <b>755 CR 833</b> City: <b>Clewiston</b> State: <b>FL</b> Zip Code: <b>33440</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>( 863 ) 983 - 3030</b> Fax: <b>( 863 ) 983 - 3060</b>
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [ ], if so) or the responsible official (check here [ ], if so) of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.</i>   _____ Signature  2-27-02 _____ Date

\* Attach letter of authorization if not currently on file.

**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>6241 NW 23rd Street, Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653-1500</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>( 352 ) 336 - 5600</b> Fax: <b>( 352 ) 336 - 6603</b>

4. 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.*

*If the purpose of this application is to obtain a Title V source 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 schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], 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.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision 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

*2/25/2002*  
\_\_\_\_\_  
Date

(seal)

\* Attach any exception to certification statement.

**Scope of Application**

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
	No. 4 Pellet Cooler	AC1B	

**Application Processing Fee**

Check one: [ ] Attached - Amount: \$: \_\_\_\_\_ [ X ] Not Applicable

**Construction/Modification Information**

1. Description of Proposed Project or Alterations:

This application is for the addition of a new pellet cooler (No. 4 Pellet Cooler). The pellet cooler will only operate when the No. 3 Pellet Cooler is shut down. The existing No. 1 and No. 2 Pellet Coolers will be removed.

2. Projected or Actual Date of Commencement of Construction: **15 Mar 2002**

3. Projected Date of Completion of Construction: **30 Oct 2002**

**Application Comment**

[Empty box for Application Comment]

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: <b>17</b> East (km): <b>487.5</b> North (km): <b>2958.0</b>			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): <b>26 / 44 / 30</b> Longitude (DD/MM/SS): <b>81 / 7 / 30</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>2037</b>
7. Facility Comment (limit to 500 characters):			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Derek Pridgen, Environmental Engineer</b>
2. Facility Contact Mailing Address: Organization/Firm: <b>Southern Gardens Citrus Processing Corp.</b> Street Address: <b>P.O. Box 130</b> City: <b>Clewiston</b> State: <b>FL</b> Zip Code: <b>33440</b>
3. Facility Contact Telephone Numbers: Telephone: <b>( 863 ) 983 - 3030</b> Fax: <b>( 863 ) 983 - 3060</b>



**Facility Regulatory Classifications**

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):  <b>HAPs classification is based on limited test data.</b>	

**List of Applicable Regulations**

<b>All Federal regulatory citations reflect the rule language as of June 2000.</b>	
<b>All State regulatory citations reflect the rule language as of June 2000.</b>	
<b>Only those rules, regulations, and ordinances specifically identified herein apply to this facility.</b>	
<b>Attachment SG-FE-A, Title V core list, effective date 3/25/97.</b>	
<b>Citrus Industry Legislation (FLL 403.08725).</b>	

## B. FACILITY POLLUTANTS

### List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
PM	A				Particulate Matter-Total
PM <sub>10</sub>	A				Particulate Matter-PM <sub>10</sub>
SO <sub>2</sub>	A				Sulfur Dioxide
NO <sub>x</sub>	A				Nitrogen Oxides
CO	A				Carbon Monoxides
VOC	A				Volatile Organic Compounds
HAPs	A				Total Hazardous Air Pollutants
H115	A				Methanol

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [ X ] Attached, Document ID: <u>SG-FE-1</u> [ ] Not Applicable    [ ] Waiver Requested
2. Facility Plot Plan: [ X ] Attached, Document ID: <u>SG-FE-2</u> [ ] Not Applicable    [ ] Waiver Requested
3. Process Flow Diagram(s): [ X ] Attached, Document ID: <u>SG-FE-3</u> [ ] Not Applicable    [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID: _____ [ X ] Not Applicable    [ ] Waiver Requested
5. Fugitive Emissions Identification: [ ] Attached, Document ID: _____ [ X ] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [ X ] Attached, Document ID: <u>Attachment A</u> [ ] Not Applicable
7. Supplemental Requirements Comment:

**Additional Supplemental Requirements for Title V Air Operation Permit Applications**

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input checked="" type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: <u>June 18, 1999</u> ) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

**ATTACHMENT SG-FE-A  
FACILITY REGULATIONS**

# Title V Core List

Effective:03/25/97

[**Note:** The Title V Core List is intended to simplify the completion of the "List of Applicable Regulations" that apply facility-wide (see Subsection II.B. of 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.

Requirements that apply to emissions units must be identified in Subsection III.B. of DEP Form No. 62-210.900(1), Application for Air Permit - Long Form.

Applicants must identify all "applicable requirements" in order to claim the "permit shield" described at Rule 62-213.460, F.A.C.]

***Federal:*** (description)

~~40 CFR 61: National Emission Standards for Hazardous Air Pollutants (NESHAP)~~  
~~40 CFR 61, Subpart M: NESHAP for Asbestos.~~

~~40 CFR 82: Protection of Stratospheric Ozone.~~  
~~40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).~~  
~~40 CFR 82, Subpart F: Recycling and Emissions Reduction.~~

***State:*** (description)

**CHAPTER 62-4, F.A.C.: PERMITS, effective 10-16-95**

- 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
- 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.
- 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 62-103, F.A.C.: RULES OF ADMINISTRATIVE PROCEDURE, effective 12-31-95**

- 62-103.150, F.A.C.: Public Notice of Application and Proposed Agency Action.
- 62-103.155, F.A.C.: Petition for Administrative Hearing; Waiver of Right to Administrative Proceeding

## Title V Core List

Effective:03/25/97

### **CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS,** effective 03-21-96

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.

62-210.300(3)(a), F.A.C.: Full Exemptions.

62-210.300(3)(b), F.A.C.: Temporary Exemption.

62-210.300(5), F.A.C.: Notification of Startup.

62-210.300(6), F.A.C.: Emissions Unit Reclassification.

62-210.350, F.A.C.: Public Notice and Comment.

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.

62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.

62-210.650, F.A.C.: Circumvention.

62-210.900, F.A.C.: Forms and Instructions.

62-210.900(1) Application for Air Permit - Long Form, Form and Instructions.

62-210.900(5) Annual Operating Report for Air Pollutant Emitting Facility, Form and  
Instructions.

### **CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION,** effective 03-20-96

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.

62-213.420, F.A.C.: Permit Applications.

62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.

62-213.440, F.A.C.: Permit Content.

62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.

62-213.900(1) Major Air Pollution Source Annual Emissions Fee Form, Form and  
Instructions.

## Title V Core List

Effective:03/25/97

**CHAPTER 62-256, F.A.C.: OPEN BURNING AND FROST PROTECTION FIRES, effective 11-30-94**

**CHAPTER 62-257, F.A.C: ASBESTOS NOTIFICATION AND FEE, effective 03/24/96**

**CHAPTER 62-281, F.A.C: MOTOR VEHICLE AIR CONDITIONING REFRIGERANT RECOVERY AND RECYCLING, effective 03-07-96**

**CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-13-96**

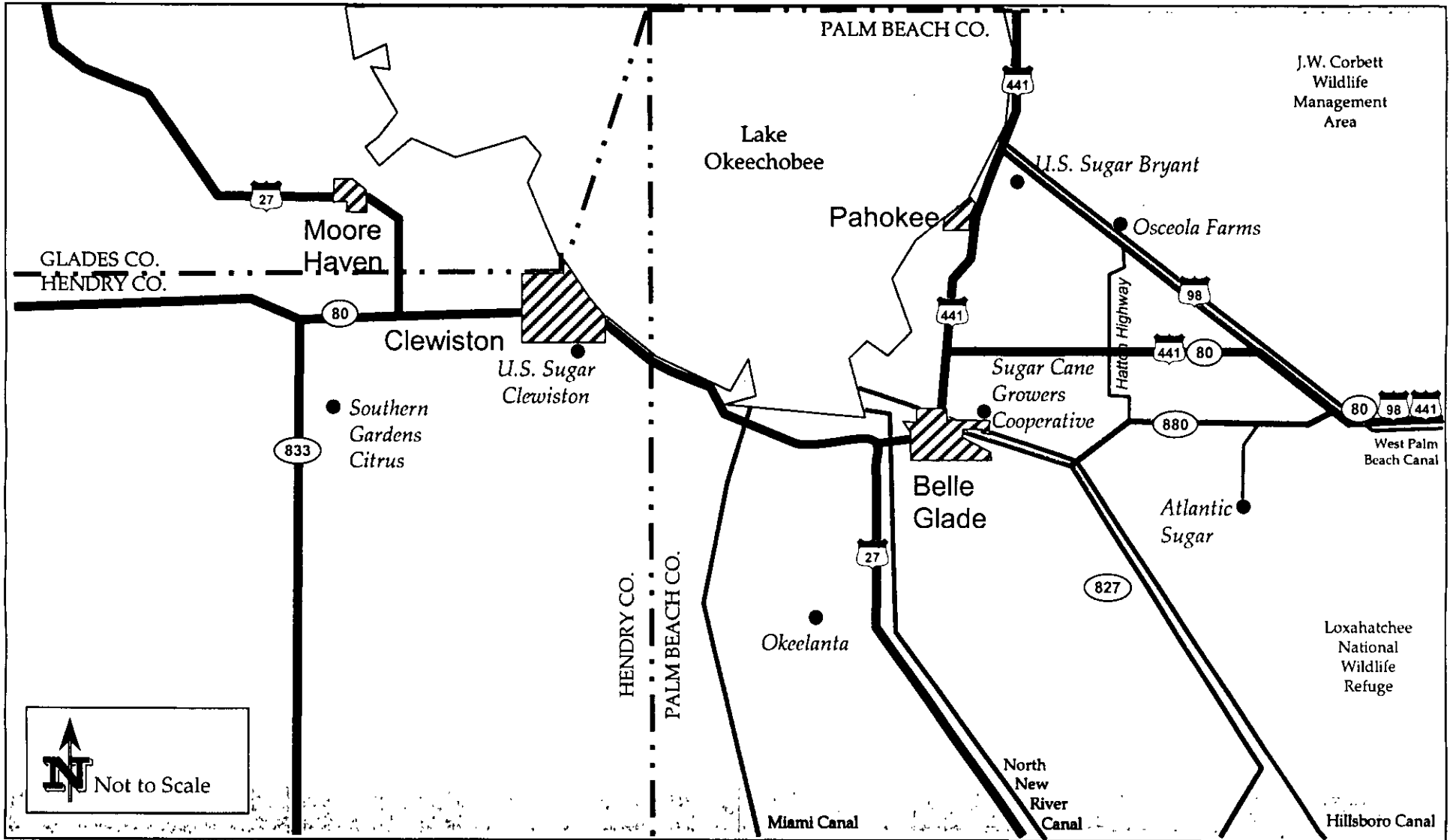
62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

62-296.320(3), F.A.C.: Industrial, Commercial, and Municipal Open Burning Prohibited

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter



**ATTACHMENT SG-FE-1**  
**AREA MAP**



**Attachment SG-FE-1**  
 Location of Southern Gardens Citrus Processing Corporation

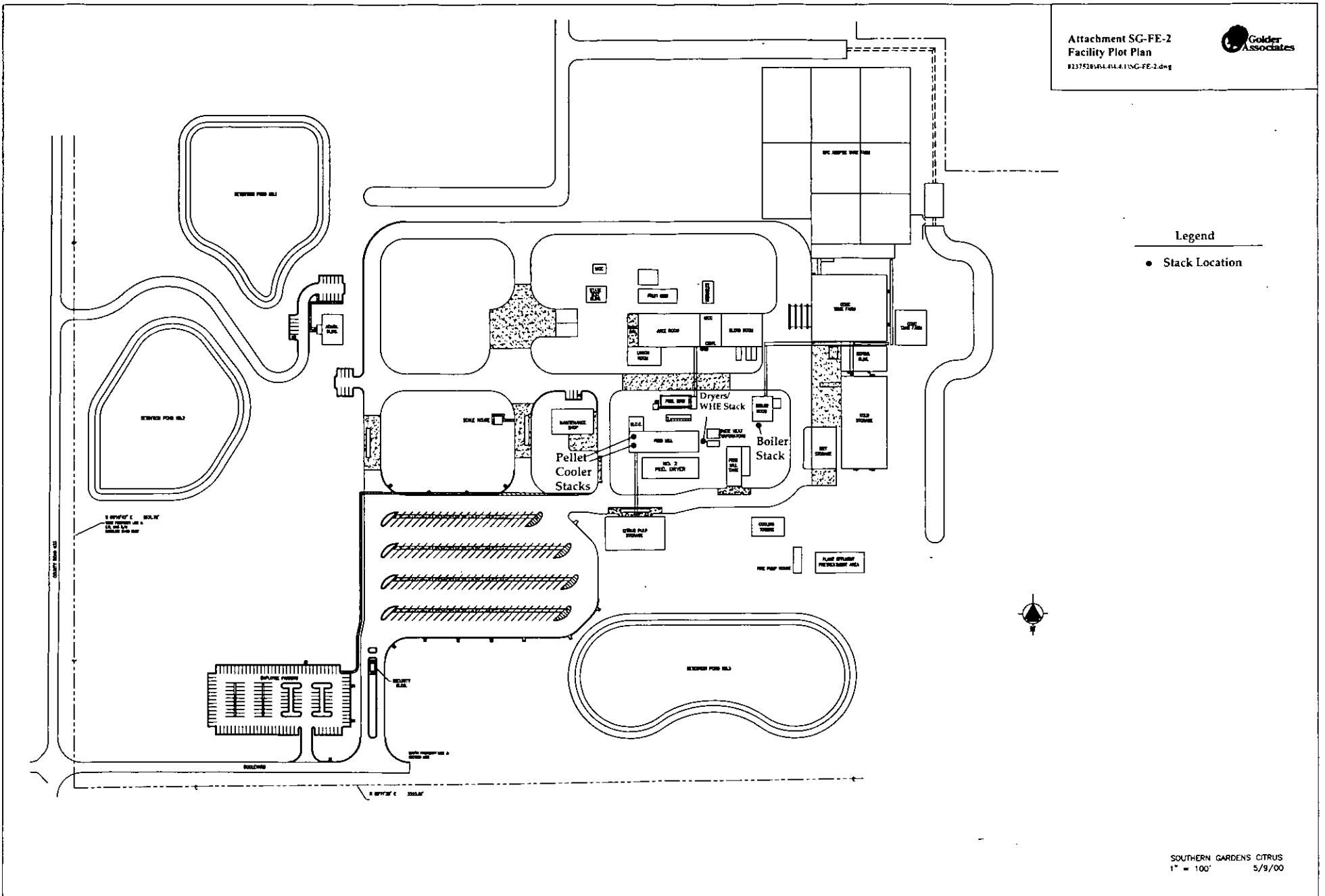
Source: Golder Associates Inc., 2001.



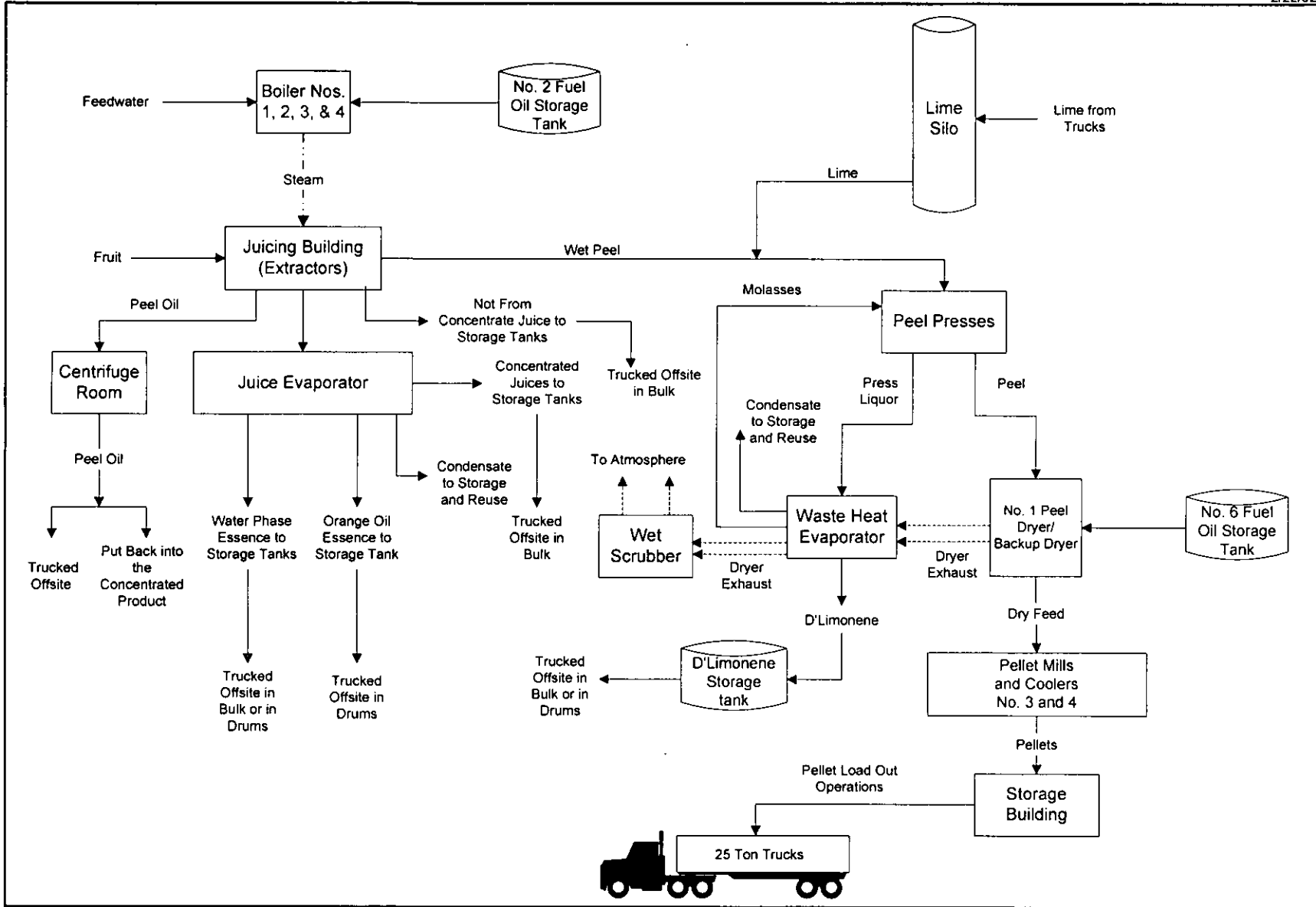
**ATTACHMENT SG-FE-2  
FACILITY PLOT PLAN**

Legend

- Stack Location



**ATTACHMENT SG-FE-3  
PROCESS FLOW DIAGRAM**



Attachment SG-FE-3  
 Southern Gardens Citrus Processing Corporation  
 Process Flow Diagram with New Equipment  
 Clewiston, Florida

Process Area: Overall Plant Process

Filename: SG-FIGS.VSD

Latest Revision Date: 2/22/02

Process Flow Legend:

Solid / Liquid	→
Gas	→
Steam	→



**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION  
(All Emissions Units)**

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in This Section: (Check one) <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> 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. Regulated or Unregulated Emissions Unit? (Check one) <input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. <input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):  <p style="text-align: center;"><b>No. 4 Pellet Cooler</b></p>			
4. Emissions Unit Identification Number: ID:		<input checked="" type="checkbox"/> No ID <input type="checkbox"/> ID Unknown	
5. Emissions Unit Status Code: <b>C</b>	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: <b>20</b>	8. Acid Rain Unit? <input type="checkbox"/>
9. Emissions Unit Comment: (Limit to 500 Characters)  <p style="text-align: center;"><b>4-Digit SIC code = 2037. This emissions unit consists of a new pellet cooler.</b></p>			

**Emissions Unit Control Equipment**

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

A cyclone is an integral part of the process and is not considered as control equipment.

2. Control Device or Method Code(s):

**Emissions Unit Details**

1. Package Unit:	
Manufacturer:	Model Number:
2. Generator Nameplate Rating:	MW
3. Incinerator Information:	
Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F



**B. EMISSIONS UNIT CAPACITY INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Heat Input Rate:		mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:	<b>46,000 lb/hr</b>	
4. Maximum Production Rate:	<b>46,000 lb/hr</b>	
5. Requested Maximum Operating Schedule:		
	<b>24</b> hours/day	<b>7</b> days/week
	<b>36</b> weeks/year	<b>6,000</b> hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	<p><b>Maximum rates relate to total pounds of citrus peel.</b></p>	

**C. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**List of Applicable Regulations**

62-296.320(4)(a), F.A.C. Process Weight Table
62-296.320(4)(b), F.A.C. General Visible Emissions Standards
62-297.310(2), F.A.C. General Compliance Test Requirements
62-297.310(4)(a), F.A.C. General Compliance Test Requirements
62-297.310(5), F.A.C. General Compliance Test Requirements
62-297.310(7)(a)1., F.A.C. General Compliance Test Requirements
62-297.310(7)(a)3., F.A.C. General Compliance Test Requirements
62-297.310(7)(a)4.a., F.A.C. General Compliance Test Requirements
62-297.310(7)(a)9., F.A.C. General Compliance Test Requirements
62-297.310(8), F.A.C. General Compliance Test Requirements
62-297.401(9), F.A.C. EPA Method Nine
FLL 403.08725(1) Compliance Requirements
FLL 403.08725(2)(c) Permitted Emission Limits
FLL 403.08725(2)(e)2. Permitted Emission Limits
FLL 403.08725(2)(g)2. Permitted Emission Limits
FLL 403.08725(3)(a) Emissions Determination and Reporting
FLL 403.08725(3)(b) Emissions Determination and Reporting
FLL 403.08725(3)(d) Emissions Determination and Reporting
FLL 403.08725(3)(h) Emissions Determination and Reporting
FLL 403.08725(3)(i)1. Emissions Determination and Reporting
FLL 403.08725(3)(i)2. Emissions Determination and Reporting
FLL 403.08725(3)(h) Emissions Determination and Reporting
FLL 403.08725(4)(a)1. Emissions Trading

**D. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram? <b>Pellet Cooler Stack</b>		2. Emission Point Type Code: <b>1</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: <b>V</b>	6. Stack Height: <b>40 feet</b>	7. Exit Diameter: <b>2 feet</b>	
8. Exit Temperature: <b>110 °F</b>	9. Actual Volumetric Flow Rate: <b>13,900 acfm</b>	10. Water Vapor: <b>%</b>	
11. Maximum Dry Standard Flow Rate: <b>dscfm</b>		12. Nonstack Emission Point Height: <b>feet</b>	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters):  <b>Exit stack of cyclone.</b>			

**E. SEGMENT (PROCESS/FUEL) INFORMATION  
(All Emissions Units)**

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

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  <b>Food and Agriculture, Feed Manufacture, Pellet Cooler</b>		
2. Source Classification Code (SCC): <b>3-02-008-16</b>		3. SCC Units: <b>Tons Processed</b>
4. Maximum Hourly Rate: <b>23</b>	5. Maximum Annual Rate: <b>100,000</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>0</b>
10. Segment Comment (limit to 200 characters):  <b>Hourly and annual rates refer to total dry citrus peel through cooler.</b>		

**Segment Description and Rate:** Segment   of

1. Segment Description (Process/Fuel Type ) (limit to 500 characters):		
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 (limit to 200 characters):		

**F. EMISSIONS UNIT POLLUTANTS  
(All Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			EL
PM <sub>10</sub>			EL
VOC			NS

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units -**  
**Emissions-Limited and Preconstruction Review Pollutants Only)**

Potential/Fugitive Emissions

1. Pollutant Emitted: <b>PM</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>5.0 lb/hour                      15.0 tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/>	
5. Range of Estimated Fugitive Emissions: [ ] 1            [ ] 2            [ ] 3            _____ to _____ tons/year			
6. Emission Factor: <b>5.0 lb/hr</b> Reference: <b>Proposed Limit</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions (limit to 600 characters):  <b>5.0 lb/hr x 6,000 hr/yr + 2,000 lb/ton = 15.0 TPY</b>			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):  <b>Hours of operation are limited to 6,000 hr/yr.</b>			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: <b>5.0 lb/hr</b>		4. Equivalent Allowable Emissions: <b>5.0 lb/hour            15.0 tons/year</b>	
5. Method of Compliance (limit to 60 characters):  <b>VE &lt; 5% opacity</b>			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):  <b>As per FLL 403.08725(3)(i)1., compliance tests are waived as long as compliance with visible emission limit is demonstrated.</b>			

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units -**  
**Emissions-Limited and Preconstruction Review Pollutants Only)**

Potential/Fugitive Emissions

1. Pollutant Emitted: <b>PM<sub>10</sub></b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>5.0</b> lb/hour <b>15.0</b> tons/year	4. Synthetically Limited? <input checked="" type="checkbox"/>
5. Range of Estimated Fugitive Emissions: [ ] 1        [ ] 2        [ ] 3        _____ to _____ tons/year	
6. Emission Factor: <b>5.0 lb/hr</b> Reference: <b>FLL 403.08725(2)(e)2.</b>	7. Emissions Method Code: <b>0</b>
8. Calculation of Emissions (limit to 600 characters):  <b>5.0 lb/hr x 6,000 hr/yr ÷ 2,000 lb/ton = 15.0 TPY</b>	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):  <b>Proposed hours of operation are 6,000 hr/yr.</b>	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>OTHER</b>	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: <b>5.0 lb/hr</b>	4. Equivalent Allowable Emissions: <b>5.0</b> lb/hour <b>15.0</b> tons/year
5. Method of Compliance (limit to 60 characters):  <b>VE &lt; 5% opacity</b>	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):  <b>As per FLL 403.08725(3)(i)1., compliance tests are waived as long as compliance with visible emission limit is shown. Limit set forth in FLL 403.08725(2)(e)2.</b>	

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units -**  
**Emissions-Limited and Preconstruction Review Pollutants Only)**

**Potential/Fugitive Emissions**

1. Pollutant Emitted: <b>VOC</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>156.4</b> lb/hour		272.3 tons/year	
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		4. Synthetically Limited? [ X ]	
6. Emission Factor: <b>6.800 lb/ton peel</b> Reference: <b>See Att. SG-EU1-G8</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions (limit to 600 characters):  <b>23.0 TPH x 6.800 lb/ton = 156.4 lb/hr</b>  <b>100,000 TPY x 5.446 lb/ton + 2,000 lb/ton = 272.3 TPY</b>			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			



**H. VISIBLE EMISSIONS INFORMATION**  
 (Only Regulated Emissions Units Subject to a VE Limitation)

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

1. Visible Emissions Subtype: <b>VE05</b>	2. Basis for Allowable Opacity: [ ] Rule [ <b>X</b> ] Other
3. Requested Allowable Opacity: Normal Conditions: <b>5 %</b> Exceptional Conditions: <b>5 %</b> Maximum Period of Excess Opacity Allowed: <b>5</b> min/hour	
4. Method of Compliance: <b>EPA Method 9</b>	
5. Visible Emissions Comment (limit to 200 characters):  <b>FLL 403.08725(2)(g)2.</b>	

**I. CONTINUOUS MONITOR INFORMATION**  
 (Only Regulated Emissions Units 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: <span style="float:right">Serial Number:</span>	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)****Supplemental Requirements**

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>SG-EU2-J1</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment A</u> <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:          

**Additional Supplemental Requirements for Title V Air Operation Permit Applications**

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

**ATTACHMENT SG-EU1-G8  
CALCULATION OF EMISSIONS**

Attachment SG-EU1-G8. Future Potential Emissions for the Backup Pellet Cooler at Southern Gardens Citrus Processing Corporation

Regulated Pollutant	Emission Factor	Reference	Short-Term Activity Factor <sup>a</sup>	Maximum Hourly Emissions (lb/hr)	Annual Activity Factor <sup>b</sup>	Annual Emissions (TPY)
Particulate (PM)	5.0 lb/hr	1	--	5.0	6,000 hr/yr	15.0
Particulate (PM <sub>10</sub> )	5.0 lb/hr	2	--	5.0	6,000 hr/yr	15.0
VOC						
Early/Mids	4.093 lb/ton	3	23.0 TPH	94.1	--	--
Valencia	6.800 lb/ton	3	23.0 TPH	156.4	--	--
Annual Average	5.447 lb/ton	3	--	--	100,000 TPY	272.3

Footnotes:

<sup>a</sup> Based on proposed maximum throughput rate of 23 TPH.

<sup>b</sup> Based on 20 million boxes of fruit per year; 10.0 lb peel per box; and 6,000 hr/yr.

References:

1. Based on permit limit of existing coolers (Permit No. 0510015-007-AC; PSD-FL-299).

2. Particulate matter (PM<sub>10</sub>) limit for pellet coolers from FLL 403.08725(2)(e)2.

3. Emissions based on General FCPA Emission Factor, proposed maximum production rates and:

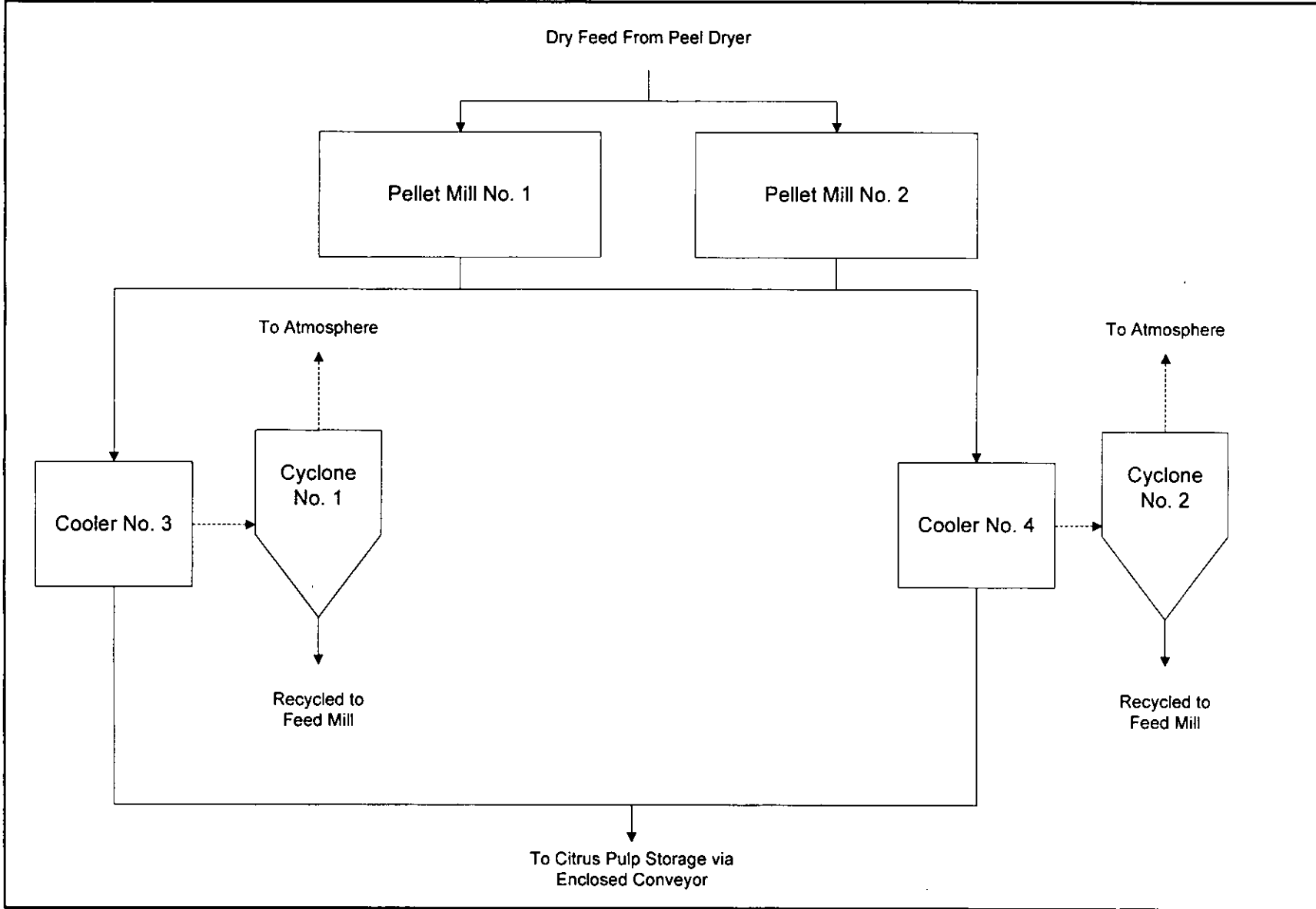
    Early/Mids -- 0.4548 lb oil/box and a hourly minimum of 50% oil recovery.

    Valencia -- 0.7555 lb oil/box and a hourly minimum of 50% oil recovery.

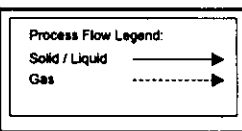
    Annual Average - assumes a 50/50 mix of Valencia and Early/Mids and an annual average of 50% oil recovery

    Based on 90 lb of fruit/box; 10.0 lb bone dry peel/box; 9% of oil to dryer emitted from pellet cooler.

**ATTACHMENT SG-EU1-J1**  
**PROCESS FLOW DIAGRAM**



Attachment SG-EU1-J1  
Southern Gardens Citrus Processing  
Corporation Process Flow Diagram  
Clewiston, Florida



Emission Unit: Citrus Pellet Mill  
Process Area: Pellet Mill and Cooler



ATTACHMENT A



**TABLE OF CONTENTS**

1.0 INTRODUCTION ..... 1

2.0 PROJECT DESCRIPTION..... 1

    2.1 EXISTING OPERATIONS ..... 1

    2.2 PROPOSED CHANGES TO FACILITY..... 2

    2.3 AIR EMISSIONS ..... 2

3.0 RULE APPLICABILITY ..... 3

    3.1 FLORIDA CITRUS INDUSTRY LEGISLATION..... 3

    3.2 PSD APPLICABILITY ..... 4

## **1.0 INTRODUCTION**

Southern Gardens Citrus Processing Corporation (SGCPC) is a citrus processing facility located in Hendry County, west of Clewiston (see application form, Attachment SG-FE-1). This air construction permit application is requesting authorization to install a new pellet cooler (No. 4 Pellet Cooler) as an alternate to the existing No. 3 Pellet Cooler. The existing Nos. 1 and 2 Pellet Coolers will be removed as part of this project.

The SGCPC facility was originally permitted in June 1992 and began initial operations in January 1994. SGCPC currently holds a Title V Operating Permit (Permit No. 0510015-004-AV). Emissions units included in the Title V permit include four process steam boilers, a citrus peel dryer/waste heat evaporator (WHE), two pellet mills and three pellet coolers, a lime silo, four fuel oil storage tanks, three d-limonene storage tanks, and other insignificant emissions units. The facility was also issued an air construction permit for a backup peel dryer in 2001.

A plot plan of the SGCPC facility showing the location of the new equipment is presented in Attachment SG-FE-2. An overall process flow diagram is presented in Attachment SG-FE-3.

All permit limitations currently existing for the Nos. 1 and 2 Pellet Coolers, including particulate matter (PM) emission limits and operating hour restrictions, will apply to the No. 4 Pellet Cooler. The No. 4 Pellet Cooler will have the ability to operate in lieu of the existing No. 3 Pellet Cooler, i.e., SGCPC may elect to operate the No. 4 Pellet Cooler at any time instead of the No. 3 Pellet Cooler. As such, no emissions increase will occur due to the operation of the backup pellet cooler.

## **2.0 PROJECT DESCRIPTION**

### **2.1 EXISTING OPERATIONS**

The SGCPC facility currently has a total of thirty-nine (39) citrus juice extractors, one citrus feed mill, two pellet mills with three pellet coolers, four steam boilers, and seven volatile organic liquid (VOL) storage tanks. The facility includes other equipment such as juice evaporators and refrigerated juice storage tanks to process the citrus juice into saleable products. An air construction and prevention of significant deterioration (PSD) permit (permit no. 0510015-007-AC/PSD-FL-299) was issued in December 2000 for the addition of three new extractors, adding to the existing 36 extractors. The PSD permit limited the feedmill operation to the equivalent of 20 million boxes of fruit per year.

SGCPC's pellet mill area consists of two pellet mills and three pellet coolers (Nos. 1, 2, and 3 Pellet Coolers). The maximum permitted process rate through the pellet mill is 23.0 TPH, total both mills. The No. 3 Pellet Cooler operates alone, while the Nos. 1 and 2 Pellet Coolers are used simultaneously for standby operation when the No. 3 Pellet Cooler is shutdown for repair or maintenance. The Nos. 1 and 3 Pellet Coolers utilize a common cyclone collector, while the No. 2 Pellet Cooler has its own cyclone collector. The cyclones are considered as inherent control equipment since they are utilized to collect product. The total maximum operating hours of the pellet mill are 6,000 hr/yr.

## **2.2 PROPOSED CHANGES TO FACILITY**

SGCPC is proposing to install a new pellet cooler (No. 4 Pellet Cooler). This new pellet cooler will be similar to the existing No. 3 Pellet Cooler. The proposed pellet cooler will be operated whenever the No. 3 Pellet Cooler is shutdown (i.e., both pellet coolers will not operate simultaneously). The No. 4 Pellet Cooler will utilize the existing cyclone collector, serving the No. 2 Pellet Cooler, for product collection. The maximum process rate of dried citrus pellets for the new cooler will be 23.0 TPH. The operation of the No. 3 Pellet Cooler and the backup No. 4 Pellet Cooler combined will not exceed 6,000 hours per year.

SGCPC is also proposing to remove the existing Nos. 1 and 2 Pellet Coolers. These units have been operated as a backup to the No. 3 Pellet Cooler. The operation of these units will no longer be necessary once the new backup pellet cooler has been installed.

## **2.3 AIR EMISSIONS**

The future maximum emissions from the No. 4 Pellet Cooler are presented in Attachment SG-EU1-G8. Since the coolers are similar, the potential emissions of the No. 4 Pellet Cooler are the same as the potential emissions of the No. 3 Pellet Cooler. Note that these emissions reflect the maximum operation of the new cooler for 6,000 hours per year. These emissions would only occur if the No. 4 Pellet Cooler was the only cooler to operate at the facility during the course of a year. In reality, the combined total emissions from both pellet coolers will not exceed those shown in Attachment SG-EU1-G8.

The future potential emissions of the No. 4 Pellet Cooler are based on the equivalent of 20 million boxes per year processed through the feedmill; 10.0 pounds of peel per box and 6,000 hours of operation per year. Maximum potential volatile organic compound (VOC) emissions are based on the General FCPA emission factors and an average oil recovery of 50 percent.

The addition of the No. 4 Pellet Cooler will not affect any emissions units upstream or downstream. There will not be a change in emissions with this project since the No. 4 Pellet Cooler will only operate when the No. 3 Pellet Cooler is not operating. The combined hours of operation for the pellet coolers will not exceed the pellet coolers' current limit of 6,000 hours during any consecutive 12 months.

### **3.0 RULE APPLICABILITY**

#### **3.1 FLORIDA CITRUS INDUSTRY LEGISLATION**

The citrus industry legislation [FLL 403.0872(12)] establishes standards that all existing citrus juice processing facilities must comply with starting July 1, 2002, in lieu of current air construction and operating permits. These standards apply to facilities that have a fruit processing capacity of 2 million boxes per year or more. For the purpose of this legislation, "new sources" means emissions units constructed or added to a facility on or after July 1, 2000. The following sections describe the requirements of this legislation and how it applies to this project.

New emission units must comply with this legislation upon startup. The citrus industry legislation establishes limits for particulate matter of 10 microns or less (PM<sub>10</sub>) and visible emissions (VE) for citrus pellet coolers. The PM<sub>10</sub> standard for the pellet cooler is 5 lb/hr. The VE limit for the pellet cooler is 5 percent.

Under this legislation, SGCPC will not have to test the PM emissions from the pellet cooler as long as compliance with the applicable VE limit is demonstrated. If the pellet cooler does not comply with the VE standard, a compliance test will need to be conducted within 30 days after the visible emissions test. PM emissions must be tested with Environmental Protection Agency (EPA) Method 5, provided that all PM emissions are assumed to PM<sub>10</sub>. Tests for VE must be conducted using EPA Method 9.

### 3.2 PSD APPLICABILITY

Although PSD review for the proposed project is not required under the citrus industry legislation, an analysis is presented herein in the event that EPA ultimately disapproves of the legislation, and retroactive PSD applicability analysis is required.

The No. 4 Pellet Cooler will be used when the existing No. 3 Pellet Cooler is not operating. There will not be any increase in emissions due to this project since the potential emissions of the new cooler will not exceed the current potential emissions. Therefore, PSD review is not applicable to this project.