



Palatka Pulp and Paper Operations  
Consumer Products Division  
P.O. Box 919  
Palatka, FL 32178-0919  
(386) 325-2001

RECEIVED

MAY 28 2009

BUREAU OF AIR REGULATION

May 22, 2009

Mr. Jeffery F. Koerner, Air Permitting North Section  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**Re: Palatka, Florida Mill**  
**Facility ID No. 1070005**  
**No. 4 Lime Kiln Scrubber Upgrade**

Dear Mr. Koerner:

Georgia-Pacific Consumer Operations LLC (Georgia-Pacific) owns and operates an unbleached and bleached Kraft pulp and paper mill in Palatka, Putnam County, Florida (Palatka Mill). Georgia-Pacific respectfully requests authorization from the Florida Department of Environmental Protection (FL DEP) to upgrade the No. 4 Lime Kiln scrubber (Emissions Unit ID 017) to improve its performance and particulate matter removal efficiency. This will be accomplished by installing a dual orifice impingement tray and a chevron mist eliminator in the scrubber separator tank. These new scrubber components will help to agglomerate particulate matter emitted by the No. 4 Lime Kiln, greater than 1 micron in size, thereby reducing the overall particulate matter emission rate to the atmosphere. The Mill plans to install the new scrubber components during the scheduled annual outage in September 2009.

Enclosed with this submittal is the Department of Environmental Protection Division of Air Resource Management Application for Air Permit – Long Form and a process flow diagram to indicate the requested changes for the scrubber upgrade.

If there are any questions regarding this application, please do not hesitate to contact Mike Curtis at (386) 329-0918.

Sincerely,

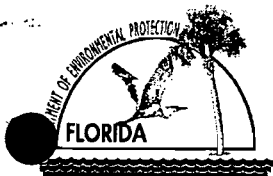
A handwritten signature in black ink, appearing to read 'Gary L. Frost', with a long horizontal line extending to the right.

Gary L. Frost  
Vice President and Mill Manager  
Georgia-Pacific LLC-Palatka Mill

GLF/wjg

Encl.

cc: Mike Curtis FL180  
Ron Reynolds FL180  
Wayne Galler GA030-09



# Department of Environmental Protection

## Division of Air Resource Management APPLICATION FOR AIR PERMIT - LONG FORM

**RECEIVED**

MAY 28 2009

BUREAU OF AIR REGULATION

### 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>Georgia-Pacific Consumer Operations LLC</b>	
2. Site Name: <b>Palatka Mill</b>	
3. Facility Identification Number: <b>1070005</b>	
4. Facility Location... Street Address or Other Locator: <b>215 County Road 216</b> City: <b>Palatka</b> County: <b>Putnam</b> Zip Code: <b>32177</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>Ron Reynolds, Environmental Engineer – Air Quality</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>Georgia-Pacific Consumer Operations LLC</b> Street Address: <b>P.O. Box 919</b> City: <b>Palatka</b> State: <b>FL</b> Zip Code: <b>32178-0919</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(386) 329-0967</b> ext. Fax: <b>(386) 328-0014</b>	
4. Application Contact E-mail Address: <b>ron.reynolds@gapac.com</b>	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application: <b>5/28/09</b>	3. PSD Number (if applicable):
2. Project Number(s): <b>1070005-0611-AC</b>	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

This application is being submitted to allow the mill to upgrade a portion of the Palatka Mill's No. 4 Lime Kiln scrubber to improve its performance and particulate matter removal efficiency. This will be accomplished by installing a dual orifice impingement tray and a chevron mist eliminator. These new scrubber components will help to agglomerate particulate matter emitted by the No. 4 Lime Kiln, greater than 1 micron in size, thereby reducing the overall particulate matter emission rate to the atmosphere. The Mill plans to install the new scrubber components at a regularly scheduled outage in September 2009.

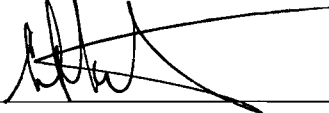


APPLICATION INFORMATION

Palatka, FL Mill  
No. 4 Lime Kiln Scrubber Upgrade  
May 2009

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name :	<b>Gary L. Frost Vice-President Operations</b>
2. Owner/Authorized Representative Mailing Address...	Organization/Firm: <b>Georgia-Pacific Consumer Operations LLC</b> Street Address: <b>P.O. Box 919</b> City: <b>Palatka</b> State: <b>FL</b> Zip Code: <b>32178</b>
3. Owner/Authorized Representative Telephone Numbers...	Telephone: <b>(386) 329-0063</b> ext. Fax: <b>(386) 312-1135</b>
4. Owner/Authorized Representative E-mail Address:	<b>gary.frost@gapac.com</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 <b>21 MAY 09</b>

**APPLICATION INFORMATION**

**Palatka, FL Mill  
No. 4 Lime Kiln Scrubber Upgrade  
May 2009**

**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: <b>Gary L. Frost Vice-President Operations</b>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" 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, CAIR source, or Hg Budget source.
3. Application Responsible Official Mailing Address... Organization/Firm: <b>Georgia-Pacific Consumer Operations LLC</b> Street Address: <b>P.O. Box 919</b> City: <b>Palatka</b> State: <b>FL</b> Zip Code: <b>32178</b>
4. Application Responsible Official Telephone Numbers... Telephone: <b>(386) 329-0063</b> ext. Fax: <b>(386) 312-1135</b>
5. Application Responsible Official E-mail Address: <b>gary.frost@gapac.com</b>

6. Application Responsible Official Certification:

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

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



APPLICATION INFORMATION

Palatka, FL Mill  
No. 4 Lime Kiln Scrubber Upgrade  
May 2009

Professional Engineer Certification

1. Professional Engineer Name: <b>Mark Aguilar</b> Registration Number: <b>52248</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Georgia-Pacific LLC</b> Street Address: <b>133 Peachtree Street NE</b> City: <b>Atlanta</b> State: <b>GA</b> Zip Code: <b>30303</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(404) 652-4293</b> ext. Fax: <b>(404) 232-4310</b>
4. Professional Engineer E-mail Address: <b>mjaguila@gapac.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i>  <p>(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</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p><i>Mark J. Aguilar</i> _____ Signature (seal)</p> <p><u>5/21/09</u> _____ Date</p>

\* Attach any exception to certification statement.



**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 checked="" 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:	





### 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: <u>07/2006</u>
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 type="checkbox"/>	Previously Submitted, Date: <u>07/2006</u>
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"/>		<input type="checkbox"/>	Previously Submitted, Date: <u>07/2006</u>

#### 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 or Modification:		
<input checked="" type="checkbox"/>	Attached, Document ID: PIPING & INSTRUMENTATION FLOW DIAGRAM		
3.	Rule Applicability Analysis:		
<input type="checkbox"/>	Attached, Document ID: _____		
4.	List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):		
<input type="checkbox"/>	Attached, Document ID: _____	<input checked="" type="checkbox"/>	
5.	Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.):		
<input type="checkbox"/>	Attached, Document ID: _____	<input checked="" type="checkbox"/>	Not Applicable
6.	Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.):		
<input type="checkbox"/>	Attached, Document ID: _____	<input checked="" type="checkbox"/>	Not Applicable
7.	Ambient Impact Analysis (Rule 62-212.400(5)(d), 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(5)(h)5., F.A.C.):		
<input type="checkbox"/>	Attached, Document ID: _____	<input checked="" type="checkbox"/>	Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(5)(e)1. 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

**Additional Requirements for FESOP Applications**

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):  
 Attached, Document ID:\_\_\_\_\_  Not Applicable (no exempt units at facility)

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

1. List of Insignificant Activities (Required for initial/renewal applications only):  
 Attached, Document ID:\_\_\_\_\_  Not Applicable (revision application)

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

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

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

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

6. Requested Changes to Current Title V Air Operation Permit:  
 Attached, Document ID:\_\_\_\_\_  Not Applicable

**Additional Requirements Comment**

## EMISSIONS UNIT INFORMATION

Section [1] of [1]

No. 4 Lime Kiln

### III. EMISSIONS UNIT INFORMATION

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

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

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

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



**EMISSIONS UNIT INFORMATION**

**Section [1] of [1]  
No. 4 Lime Kiln**

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

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

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

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

**Emissions Unit Description and Status**

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

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

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

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

2. Description of Emissions Unit Addressed in this Section: **No. 4 Lime Kiln**

3. Emissions Unit Identification Number: **017**

4. Emissions Unit Status Code: <b>A</b>	5. Commence Construction Date: <b>Sept. 2009</b>	6. Initial Startup Date: <b>Sept. 2009</b>	7. Emissions Unit Major Group SIC Code: <b>26</b>	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--	--	--	--

9. Package Unit:  
Manufacturer: \_\_\_\_\_ Model Number: \_\_\_\_\_

10. Generator Nameplate Rating: \_\_\_\_\_ MW

11. Emissions Unit Comment:  
The No. 4 Lime Kiln is an existing source. The applicant proposes a project with a construction date and initial startup date of September 2009.

**EMISSIONS UNIT INFORMATION**

**Section [1] of [1]**

**No. 4 Lime Kiln**

**Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description:

**Existing Venturi scrubber with new chevron mist eliminator and dual orifice impingement tray**

2. Control Device or Method Code(s): **053**



**EMISSIONS UNIT INFORMATION**

Section [1] of [1]

No. 4 Lime Kiln

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

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: <b>017</b>		2. Emission Point Type Code: <b>1</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: <b>V</b>	6. Stack Height: <b>131</b> feet	7. Exit Diameter: <b>4.4</b> feet	
8. Exit Temperature: <b>164</b> °F	9. Actual Volumetric Flow Rate: <b>58,900</b> acfm	10. Water Vapor: <b>34</b> %	
11. Maximum Dry Standard Flow Rate: <b>54,200 dscfm @ 10% oxygen</b>		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:  <b>Maximum Dry Standard Flow Rate is @ 10 percent oxygen.</b>  <b>Actual volumetric flow rate and exit temperature reflect observations at highest tested production rate.</b>			

**EMISSIONS UNIT INFORMATION**

Section [1] of [1]

No. 4 Lime Kiln

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

**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type): <b>Pulp and Paper and Wood Products, Sulfate (Kraft) Pulping, Lime Kiln: General</b>		
2. Source Classification Code (SCC): <b>3-07-001-06</b>		3. SCC Units: <b>Tons Air-dried Unbleached Pulp Produced</b>
4. Maximum Hourly Rate: <b>118</b>	5. Maximum Annual Rate: <b>675,250</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: <b>Maximum annual rate is based on maximum daily rate of 1,850 tons/day ADTUBP (monthly average). Throughput is equivalent to 19.44 tons/hr CaO lime production.</b>		

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

1. Segment Description (Process/Fuel Type): <b>In-Process Fuel Use: Residual Oil, Lime Kiln</b>		
2. Source Classification Code (SCC): <b>3-90-004-03</b>		3. SCC Units: <b>Thousand Gallons Burned</b>
4. Maximum Hourly Rate: <b>0.933</b>	5. Maximum Annual Rate: <b>8,173</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>2.35</b>	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>150</b>
10. Segment Comment: <b>Residual oil may include No. 6 fuel oil, on-spec used oil, or Tall Oil.</b>		

**EMISSIONS UNIT INFORMATION**

Section [1] of [1]

No. 4 Lime Kiln

**E. EMISSIONS UNIT POLLUTANTS**

**List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<b>PM</b>	<b>053</b>		<b>EL</b>
<b>PM<sub>10</sub></b>	<b>053</b>		<b>EL</b>
<b>SO<sub>2</sub></b>		<b>053</b>	<b>EL</b>
<b>NO<sub>x</sub></b>			<b>EL</b>
<b>CO</b>			<b>EL</b>
<b>VOC</b>			<b>EL</b>
<b>TRS</b>			<b>EL</b>
<b>Pb</b>			<b>NS</b>
<b>Sulfuric Acid Mist (SAM)</b>			<b>NS</b>
<b>H017 (Benzene)</b>			<b>NS</b>
<b>H051 (m-Cresol)</b>			<b>NS</b>
<b>H095 (Formaldehyde)</b>			<b>NS</b>
<b>H100 (Hexachlorocyclopentadiene)</b>			<b>NS</b>
<b>H115 (Methanol)</b>			<b>NS</b>
<b>H120 (Methyl Ethyl Ketone)</b>			<b>NS</b>
<b>H132 (Naphthalene)</b>			<b>NS</b>
<b>H144 (Phenol)</b>			<b>NS</b>
<b>H169 (Toluene)</b>			<b>NS</b>
<b>H174 (1,2,4- Trichlorobenzene)</b>			<b>NS</b>
<b>H187 (o-Xylene)</b>			<b>NS</b>
<b>HAPs</b>			<b>NS</b>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

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

1. Pollutant Emitted: <b>PM</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>22.9 lb/hour                      100.3 tons/year</b>	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year	
6. Emission Factor: <b>0.55 lb/ton CaCO<sub>3</sub> &amp; inerts</b>  Reference: <b>BACT limit Permit No. PSD-FL-380</b>	7. Emissions Method Code: <b>0</b>
8. Calculation of Emissions:  <b>Hourly = 0.55 lb/ton CaCO<sub>3</sub> &amp; inerts x 82,986 lb CaCO<sub>3</sub> &amp; inerts/hr x 1 ton / 2,000 lb = 22.9 lb/hr</b> <b>Annual = 22.9 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 100.3 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

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

**Allowable Emissions** Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: <b>BACT</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>0.55 lb/ton CaCO<sub>3</sub> &amp; inerts</b>	4. Equivalent Allowable Emissions: <b>22.9 lb/hour      100.3 tons/year</b>
5. Method of Compliance: <b>Annual stack test using EPA Method 5.</b>	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: <b>MACT II</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>1.217 lb PM/ton BLS</b>	4. Equivalent Allowable Emissions: <b>lb/hour      tons/year</b>
5. Method of Compliance: <b>Bubble of 1.217 lb PM/ton BLS from EU017 (Lime Kiln), EU018 (#4 Recovery Boiler) and EU019 (Smelt Dissolving Tanks).</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>1070005-058-AV Permit Condition D.4 (b)</b>	

**Allowable Emissions** Allowable Emissions of

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



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

**(Optional for unregulated emissions units.)**

**Potential/Estimated Fugitive Emissions**

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

1. Pollutant Emitted: <b>PM<sub>10</sub></b>	2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>22.5</b> lb/hour <b>98.6</b> tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: <b>PM<sub>10</sub> = 98.3% of PM emissions</b> Reference: <b>AP-42, Table 10.2-4, lime kiln with venturi scrubber</b>		7. Emissions Method Code: <b>3</b>
8. Calculation of Emissions:  <b>Hourly = 0.983 x 22.9 lbs/hr = 22.5 lbs/hr</b> <b>Annual = 0.983 x 100.3 tons/yr = 98.6 tons/yr</b>		
9. Pollutant Potential/Estimated Fugitive Emissions Comment:		

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions 1 of 1

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

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

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

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

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

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [5] of [28]  
Total Reduced Sulfur

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>TRS (as H<sub>2</sub>S)</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>5.7 lb/hour                      25.1 tons/year</b>	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year	
6. Emission Factor: <b>20 ppmvd @ 10% O<sub>2</sub> as H<sub>2</sub>S</b>  Reference: <b>BACT limit PSD-FL-380</b>	7. Emissions Method Code: <b>0</b>
8. Calculation of Emissions: <b>Based on 20 ppmvd at 10% oxygen (existing limit)</b> <b>Flow rate = 54,200 dscfm (@ 10% oxygen)</b>  <b>Corresponding mass emission limits are calculated as follows:</b>  <b>Hourly emission rate = (20 ft<sup>3</sup> TRS/10<sup>6</sup> ft<sup>3</sup> air x 34 lb/lb-mole x 60 min/hr x 54,200 dscf/min / 385.1 ft<sup>3</sup>/lb-n = 5.7 lbs/hour</b> <b>Annual emission rate = 5.7 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 25.1 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [6] of [28]

No. 4 Lime Kiln

Total Reduced Sulfur

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>BACT</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>20 ppmvd @ 10% O<sub>2</sub></b>	4. Equivalent Allowable Emissions: <b>5.7 lb/hour 25.1 tons/year</b>
5. Method of Compliance: <b>EPA Method 16 or 16A</b>	
6. Allowable Emissions Comment (Description of Operating Method):	

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

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

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [7] of [28]

No. 4 Lime Kiln

Sulfur Dioxide

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>SO<sub>2</sub></b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>9.1 lb/hour                      40.0 tons/year</b>	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year	
6. Emission Factor: <b>16.9 ppmv @ 10% O<sub>2</sub></b> Reference: <b>BACT Permit No. PSD-FL-380</b>	7. Emissions Method Code: <b>0</b>
8. Calculation of Emissions:  <b>Hourly emission rate = (16.9 ft<sup>3</sup> TRS/10<sup>6</sup> ft<sup>3</sup> air x 64 lb/lb-mole x 60 min/hr x 54,200 dscf/min / 385.1 ft<sup>3</sup>/lb-n = lbs/hour</b> <b>Annual emission rate = 9.1 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 40.0 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [8] of [28]  
Sulfur Dioxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>9.1 lb/hr</b>	4. Equivalent Allowable Emissions: <b>9.1 lb/hour 40.0 tons/year</b>
5. Method of Compliance: <b>EPA Method 8</b>	
6. Allowable Emissions Comment (Description of Operating Method):	

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

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

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

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

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [9] of [28]

No. 4 Lime Kiln

Nitrogen Oxides

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>NO<sub>x</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>54.2 lb/hour                      237.4 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>140 ppmvd @ 10% O<sub>2</sub></b>  Reference: <b>BACT; Permit No. PSD-FL-380</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions: <b>Based on 140 ppmvd at 4% oxygen</b> <b>Flow rate = 54,200 dscfm (@ 10% oxygen)</b>  <b>Corresponding mass emission limits are calculated as follows:</b> <b>Hourly emission rate = (140 ft<sup>3</sup> NO<sub>x</sub>/10<sup>6</sup> ft<sup>3</sup> air x 46 lb/lb-mole x 60 min/hr x 54,200 dscf/min / 385.1 ft<sup>3</sup>/lb-n = 54.2 lbs/hour</b>  <b>Annual emission rate = 54.2 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 237.4 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [10] of [28]  
Nitrogen Oxides

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>BACT</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>140 ppmvd @ 10% O<sub>2</sub></b>	4. Equivalent Allowable Emissions: <b>54.2 lb/hour      237.4 tons/year</b>
5. Method of Compliance: <b>EPA Method 7E</b>	
6. Allowable Emissions Comment (Description of Operating Method):	

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

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

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

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



EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [11] of [28]  
Carbon Monoxide

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>CO</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>16.3 lb/hour</b> <b>71.4 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>69 ppmvd @ 10% O<sub>2</sub></b>  Reference: <b>BACT; Permit No. PSD-FL-380</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions:  <b>Based on 69 ppmvd at 10% oxygen</b> <b>Flow rate = 54,200 dscfm (@ 4% oxygen)</b>  <b>Corresponding mass emission limits are calculated as follows:</b> <b>Hourly emission rate = (69 ft<sup>3</sup> CO/10<sup>6</sup> ft<sup>3</sup> air x 28 lb/lb-mole x 60 min/hr x 54,200 dscf/min / 385.1 ft<sup>3</sup>/lb-n = 16.3 lbs/hour</b> <b>Annual emission rate = 16.3 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 71.4 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [12] of [28]

No. 4 Lime Kiln

Carbon Monoxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>BACT</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>69 ppmvd @ 10% O<sub>2</sub></b>	4. Equivalent Allowable Emissions: <b>16.3 lb/hour      71.4 tons/year</b>
5. Method of Compliance: <b>EPA Method 10</b>	
6. Allowable Emissions Comment (Description of Operating Method):	

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

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

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

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

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [13] of [28]  
Sulfuric Acid Mist

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>SAM</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>0.4 lb/hour</b> <b>1.8 tons/year</b>	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year	
6. Emission Factor: <b>3.6% of SO<sub>2</sub> is SO<sub>3</sub></b>  Reference:	7. Emissions Method Code: <b>2</b>
8. Calculation of Emissions:  <b>Assume 3.6% of sulfur dioxide is sulfates</b> <b>9.1 lbs/hour x 0.036 = 0.33 lb/hour (as sulfates)</b>  <b>Hourly = 0.33 lb/hour (as sulfates) x 98 lbs SAM/lb-mole SAM x lb-mole SAM/lb-mole SO<sub>3</sub> x lb-mole SO<sub>3</sub>/80 lbs SO<sub>3</sub> = 0.4 lb/hour</b> <b>Annual = 0.4 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 1.8 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [14] of [28]

No. 4 Lime Kiln

Volatile Organic Compounds

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>VOC</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>9.4 lb/hour                      41.2 tons/year</b>		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year			
6. Emission Factor: <b>70 ppmvd @ 10% O<sub>2</sub></b>  Reference: <b>BACT; Permit No. PSD-FL-380</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions:  <b>Based on 70 ppmvd at 10% oxygen</b> <b>Flow rate = 54,200 dscfm (@ 10% oxygen)</b>  <b>Corresponding mass emission limits are calculated as follows:</b>  <b>Hourly emission rate = (70 ft<sup>3</sup> VOC/10<sup>6</sup> ft<sup>3</sup> air x 16 lb/lb-mole x 60 min/hr x 54,200 dscf/min / 385.1 ft<sup>3</sup>/lb-n = 9.4 lbs/hour</b> <b>Annual emission rate = 9.4 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 41.2 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [15] of [28]

No. 4 Lime Kiln

Volatile Organic Compounds

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS

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

Allowable Emissions Allowable Emissions  1  of  1

1. Basis for Allowable Emissions Code: <b>BACT</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>70 ppmvd @ 10% O<sub>2</sub></b>	4. Equivalent Allowable Emissions: <b>9.4 lb/hour      41.2 tons/year</b>
5. Method of Compliance: <b>EPA Method 25A and 3Aor 3B</b>	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions      of    

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

Allowable Emissions Allowable Emissions      of    

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

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [16] of [28]  
Lead

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Pb</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>3.1E-03 lb/hour      0.014 tons/year</b>	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to                      tons/year	
6. Emission Factor: <b>1.6E-04 lb Pb/ton CaO</b>  Reference: NCASI Technical Bulletin 858, Table 16C (median)	7. Emissions Method Code: <b>5</b>
8. Calculation of Emissions:  <b>Hourly = 19.44 tons CaO/hour x 1.6E-04 lb Pb/ton CaO = 3.1E-03 lb/hour</b> <b>Annual = 3.1E-03 lb/hr x 8,760 hr/yr x 1 ton / 2,000 lb = 0.014 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>Note NCASI Emission Factor reflect data for lime kilns with a wet scrubber</b>	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [17] of [28]

No. 4 Lime Kiln

Benzene

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Benzene</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.13 lb/hour                      0.56 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to    tons/year			
6. Emission Factor: <b>6.6E-03 lb/ton CaO</b> Reference: <b>NCASI Technical Bulletin #858, Table 16A (highest in range; no mean or median available)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>Hourly = 0.0066 lb/ton CaO x 19.44 ton CaO/hr = 0.13 lb/hr</b> <b>Annual = 0.13 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 0.56 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [18] of [28]

No. 4 Lime Kiln

m-Cresol

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>m-Cresol</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>1.85E-01 lb/hour      0.81 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>9.5E-03 lb/ton CaO</b> Reference: <b>NCASI Technical Bulletin #858, Table 16A (median)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>Hourly = 0.0095 lb/ton CaO x 19.44 ton CaO/hr = 0.185 lb/hr</b> <b>Annual = 0.185 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 0.81 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			



EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [19] of [28]

No. 4 Lime Kiln

Formaldehyde

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Formaldehyde</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>0.23 lb/hour</b> <b>1.0 tons/year</b>	4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: <b>1.2E-02 lb/ton CaO</b> Reference: <b>NCASI Technical Bulletin #858, Table 16A (median)</b>	7. Emissions Method Code: <b>5</b>
8. Calculation of Emissions:  <b>Hourly = 0.012 lb/ton CaO x 19.44 ton CaO/hr = 0.23 lb/hr</b> <b>Annual = 0.23 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 1.0 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [20] of [28]

No. 4 Lime Kiln

Hexachlorocyclopentadiene

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Hexachlorocyclopentadiene</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>0.19 lb/hour                      0.85 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to    tons/year			
6. Emission Factor: <b>0.01 lb/ton CaO</b> Reference: <b>NCASI Technical Bulletin #858, Table 16A (median)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>Hourly = 0.01 lb/ton CaO x 19.44 ton CaO/hr = 0.19 lb/hr</b> <b>Annual = 0.19 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 0.85 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [21] of [28]

No. 4 Lime Kiln

Methanol

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Methanol</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>1.6E-01 lb/hour      0.68 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>8.0E-03 lb/ton CaO</b> Reference: <b>NCASI Technical Bulletin #858, Table 16A (median)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>Hourly = 0.008 lb/ton CaO x 19.44 ton CaO/hr = 0.16 lb/hr</b> <b>Annual = 0.16 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 0.68 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
 No. 4 Lime Kiln

Page [22] of [28]  
 Methyl Ethyl Ketone

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
 POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Methyl Ethyl Ketone</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>3.38 lb/hour                      14.8 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>1.74E-01 lb/ton CaO</b>  Reference: <b>NCASI Technical Bulletin #858, Table 16A (highest in range; no mean or median available)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>Hourly = 0.174 lb/ton CaO x 19.44 ton CaO/hr = 3.38 lb/hr</b> <b>Annual = 3.38 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 14.8 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [23] of [28]

No. 4 Lime Kiln

Naphthalene

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Naphthalene</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>0.25 lb/hour</b> <b>1.1 tons/year</b>	4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to    tons/year	
6. Emission Factor: <b>1.3E-02 lb/ton CaO</b>  Reference: <b>NCASI Technical Bulletin #858, Table 16A (median)</b>	7. Emissions Method Code: <b>5</b>
8. Calculation of Emissions:  <b>Hourly = 0.013 lb/ton CaO x 19.44 ton CaO/hr = 0.25 lb/hr</b> <b>Annual = 0.23 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 1.1 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [24] of [28]  
Phenol

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Phenol</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>3.1E-01 lb/hour      1.36 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to    tons/year			
6. Emission Factor: <b>1.6E-02 lb/ton CaO</b> Reference: <b>NCASI Technical Bulletin #858, Table 16A (highest in range; no mean or median available)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>Hourly = 0.016 lb/ton CaO x 19.44 ton CaO/hr = 0.31 lb/hr</b> <b>Annual = 0.31 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 1.36 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [25] of [28]

No. 4 Lime Kiln

Toluene

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Toluene</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>4.7E-01 lb/hour      2.04 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: <b>2.4E-02 lb/ton CaO</b>  Reference: <b>NCASI Technical Bulletin #858, Table 16A (highest in range; no mean or median available)</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  <b>Hourly = 0.024 lb/ton CaO x 19.44 ton CaO/hr = 0.47 lb/hr</b> <b>Annual = 0.47 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 2.04 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

Page [26] of [28]  
1,2,4-Trichlorobenzene

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>1,2,4-Trichlorobenzene</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>9.14E-01 lb/hour      4.0 tons/year</b>	4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: <b>4.7E-02 lb/ton CaO</b>  Reference: <b>NCASI Technical Bulletin #858, Table 16A (highest in range; no mean or median available)</b>	7. Emissions Method Code: <b>5</b>
8. Calculation of Emissions:  <b>Hourly = 0.047 lb/ton CaO x 19.44 ton CaO/hr = 0.914 lb/hr</b> <b>Annual = 0.914 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 4.0 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

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

1. Pollutant Emitted: <b>o-Xylene</b>	2. Total Percent Efficiency of Control:
3. Potential Emissions: <b>2.6 lb/hour                      11.2 tons/year</b>	4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to    tons/year	
6. Emission Factor: <b>1.32E-01 lb/ton CaO</b>  Reference: <b>NCASI Technical Bulletin #858, Table 16A (highest in range; no mean or median available)</b>	7. Emissions Method Code: <b>5</b>
8. Calculation of Emissions:  <b>Hourly = 0.132 lb/ton CaO x 19.44 ton CaO/hr = 2.6 lb/hr</b> <b>Annual = 2.6 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 11.2 ton/yr</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [1] of [1]

Page [28] of [28]

No. 4 Lime Kiln

Total HAPs

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

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

1. Pollutant Emitted: <b>Total HAPS</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>9.8 lb/hour                      42.9 tons/year</b>		4. Synthetically Limited? Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to    tons/year			
6. Emission Factor: <b>4.99E-01 lb/ton CaO</b> Reference: <b>NCASI Technical Bulletin #858, Table Nos. 16A, 16C</b>		7. Emissions Method Code: <b>5</b>	
8. Calculation of Emissions:  Note emission factor for total HAPs is the sum of individual HAP emission factors.  <b>Hourly = 0.499 lb/ton CaO x 19.44 ton CaO/hr = 9.8 lb/hr</b> <b>Annual = 9.8 lb/hr x 8,760 hr/yr x 1 ton /2,000 lb = 42.9 ton/yr</b>			
9. Pollutant Potential/Estimated Fugitive Emissions Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [1]  
No. 4 Lime Kiln

G. VISIBLE EMISSIONS INFORMATION

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

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

1. Visible Emissions Subtype: <b>VE20</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>20 %</b> Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance: <b>DEP Method 9</b>	
5. Visible Emissions Comment:  <b>Due to moisture interference, the visible emission limiting standard pursuant to F.A.C. Rule 62-296.320(4) is not applicable and is deferred to F.A.C. Rule 62-296.404(2)(b).</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_ of \_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions:                      %                      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	



EMISSIONS UNIT INFORMATION

Section [1] of [1]

No. 4 Lime Kiln

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

<p>1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <b>7/2006</b></p>
<p>2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date _____</p>
<p>3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input checked="" type="checkbox"/> Attached, Document ID: <b>See PFD</b> <input type="checkbox"/> Previously Submitted, Date: _____</p>
<p>4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Compliance Demonstration Reports/Records</p> <p><input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____</p> <p><input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____</p> <p><input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p> <p>Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.</p>
<p>7. Other Information Required by Rule or Statute</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

**EMISSIONS UNIT INFORMATION**

Section [1] of [1]

No. 4 Lime Kiln

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

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

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

5. Acid Rain Part Application

- Certificate of Representation (EPA Form No. 7610-1)
- Copy Attached, Document ID:
- Acid Rain Part (Form No. 62-210.900(1)(a))
- Attached, Document ID:
- Previously Submitted, Date:
- Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
- Attached, Document ID:
- Previously Submitted, Date:
- New Unit Exemption (Form No. 62-210.900(1)(a)2.)
- Attached, Document ID:
- Previously Submitted, Date:
- Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
- Attached, Document ID:
- Previously Submitted, Date:
- Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
- Attached, Document ID:
- Previously Submitted, Date:
- Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
- Attached, Document ID:
- Previously Submitted, Date:
- Not Applicable

**Additional Requirements Comment**

