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BUREAU OF AIR REGULATION

**APPLICATION TO REVISE  
SO<sub>2</sub> EMISSION LIMITS FOR NOS. 3 AND 4  
COMBINATION BOILERS**

***SMURFIT-STONE CONTAINER ENTERPRISES  
PANAMA CITY MILL***

**Prepared For:**

**Smurfit-Stone Container Enterprises, Inc.  
Panama City, Florida**

**Prepared By:**

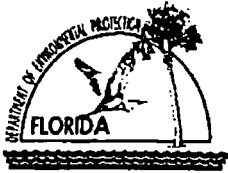
**Golder Associates Inc.  
6241 NW 23rd Street, Suite 500  
Gainesville, Florida 32653-1500**

**December 2007**

**0637645**

**4 Copies – FDEP  
2 Copies – SSCE  
2 Copy - Golder**

**APPLICATION FOR AIR PERMIT – LONG FORM**



# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

#### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes 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/renewal Title V air operation permit.

**Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option)** – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

#### Identification of Facility

|  |  |
|--|--|
| 1. Facility Owner/Company Name: <b>Smurfit-Stone Container Enterprises, Inc.</b>   |  |
| 2. Site Name: <b>Panama City Mill</b>  |  |
| 3. Facility Identification Number: <b>0050009</b>  |  |
| 4. Facility Location...:<br>Street Address or Other Locator: <b>One Everitt Avenue</b><br>City: <b>Panama City</b> County: <b>Bay</b> Zip Code: <b>32402</b> |  |
| 5. Relocatable Facility?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | 6. Existing Title V Permitted Facility?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

#### Application Contact

|   |  |
|---|--|
| 1. Application Contact Name: <b>Tom Clements, Environmental Superintendent</b>  |  |
| 2. Application Contact Mailing Address...<br>Organization/Firm: <b>Smurfit-Stone Container Enterprises, Inc.</b><br>Street Address: <b>One Everitt Avenue</b><br>City: <b>Panama City</b> State: <b>FL</b> Zip Code: <b>32402</b> |  |
| 3. Application Contact Telephone Numbers...<br>Telephone: <b>(850) 785-4311</b> ext.470 Fax: <b>(850) 763-8530</b>  |  |
| 4. Application Contact Email Address: <b>tmclemen@smurfit.com</b>   |  |

#### Application Processing Information (DEP Use)

|  |   |
|--|---|
| 1. Date of Receipt of Application: <b>12/14/07</b> | 3. PSD Number (if applicable): <b>PSD-FL-388A</b> |
| 2. Project Number(s): <b>0050009-024-nc</b>        | 4. Siting Number (if applicable):                 |

## APPLICATION INFORMATION

### Purpose of Application

This application for air permit is 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 to revise maximum allowable SO<sub>2</sub> emission limits for Nos. 3 and 4 Combination Boilers, based on ambient air quality modeling, as provided for in Permit No. 0050009-028-AC/PSD-FL-388.

**APPLICATION INFORMATION**

**Scope of Application**

| <b>Emissions Unit ID Number</b> | <b>Description of Emissions Unit</b> | <b>Air Permit Type</b> | <b>Air Permit Proc. Fee</b> |
|---------------------------------|--------------------------------------|------------------------|-----------------------------|
| 015                             | No. 3 Combination Boiler             | AC1A                   |                             |
| 016                             | No. 4 Combination Boiler             | AC1A                   |                             |
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**Application Processing Fee**

Check one:  Attached - Amount: \$ \_\_\_\_\_  Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

|   |
|---|
| 1. Owner/Authorized Representative Name :<br><b>B. G. Sammons, General Manager</b>  |
| 2. Owner/Authorized Representative Mailing Address...<br>Organization/Firm: <b>Smurfit-Stone Container Enterprises, Inc.</b><br>Street Address: <b>One Everitt Avenue</b><br>City: <b>Panama City</b> State: <b>FL</b> Zip Code: <b>32402</b>   |
| 3. Owner/Authorized Representative Telephone Numbers...<br>Telephone: <b>(850) 785-4311</b> ext. Fax: <b>(850) 763-6290</b>   |
| 4. Owner/Authorized Representative Email Address: <b>bsammons@smurfit.com</b>   |
| 5. Owner/Authorized Representative Statement:<br><i>I, the undersigned, am the owner or authorized representative of the facility 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 requirements identified in this application to which the facility 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.</i><br><br><i>Bobby Sammons</i><br>Signature _____ Date <u>12/18/07</u> |

# APPLICATION INFORMATION

## Application Responsible Official Certification

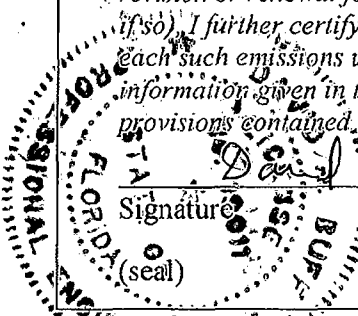
Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

|  |
|--|
| 1. Application Responsible Official Name:  |
| 2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):<br><input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.<br><input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively.<br><input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.<br><input type="checkbox"/> The designated representative at an Acid Rain source.  |
| 3. Application Responsible Official Mailing Address...<br>Organization/Firm:<br>Street Address:<br>City: State: Zip Code:  |
| 4. Application Responsible Official Telephone Numbers...<br>Telephone: ( ) - ext. Fax: ( ) -   |
| 5. Application Responsible Official Email Address:   |
| 6. Application Responsible Official Certification:<br><i>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.</i><br><br>Signature _____ Date _____ |

**APPLICATION INFORMATION**

**Professional Engineer Certification**

|   |
|---|
| 1. Professional Engineer Name: <b>David A. Buff</b><br>Registration Number: <b>19011</b>  |
| 2. Professional Engineer Mailing Address...<br>Organization/Firm: <b>Golder Associates Inc.**</b><br>Street Address: <b>6241 N.W. 23rd Street, Suite 500</b><br>City: <b>Gainesville</b> State: <b>Florida</b> Zip Code: <b>32653</b>   |
| 3. Professional Engineer Telephone Numbers...<br>Telephone: <b>(352) 336-5600</b> ext. <b>545</b> Fax: <b>(352) 336-6603</b>  |
| 4. Professional Engineer Email Address: <b>dbuff@golder.com</b>   |
| 5. Professional Engineer Statement:<br><i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i><br><br>(1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i><br><br>(2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i><br><br>(3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i><br><br>(4) <i>If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i><br><br>(5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i><br><br>Signature: <u>David A. Buff</u> Date: <u>12/17/07</u><br><br>(seal) |



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



**FACILITY INFORMATION**

**II. FACILITY INFORMATION**

**A. GENERAL FACILITY INFORMATION**

**Facility Location and Type**

|  |                                      |                                   |                                   |
|--|--------------------------------------|-----------------------------------|-----------------------------------|
| 1. Facility UTM Coordinates...   |                                      | 2. Facility Latitude/Longitude... |                                   |
| Zone 16  | East (km) 632.8<br>North (km) 3335.1 | Latitude (DD/MM/SS) 30 / 08 / 30  | Longitude (DD/MM/SS) 85 / 37 / 25 |
| 3. Governmental Facility Code:   | 4. Facility Status Code:             | 5. Facility Major Group SIC Code: | 6. Facility SIC(s):               |
| 0  | A                                    | 26                                | 2611<br>2621                      |
| 7. Facility Comment :  |                                      |                                   |                                   |
| This facility is in the Kraft Paper and Bleached Paper Grade subcategories of the pulp and paper industry. |                                      |                                   |                                   |

**Facility Contact**

|   |
|---|
| 1. Facility Contact Name:<br>Tom Clements   |
| 2. Facility Contact Mailing Address...<br>Organization/Firm: Smurfit-Stone Container Enterprises, Inc.<br>Street Address: One Everitt Avenue<br>City: Panama City State: FL Zip Code: 32402 |
| 3. Facility Contact Telephone Numbers:<br>Telephone: (850) 785-4311 ext.470 Fax: (850) 763-8530   |
| 4. Facility Contact Email Address: tmclemen@smurfit.com   |

**Facility Primary Responsible Official**

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

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

## FACILITY INFORMATION

### 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:  |                                  |

**FACILITY INFORMATION**

**List of Pollutants Emitted by Facility**

| 1. Pollutant Emitted                  | 2. Pollutant Classification | 3. Emissions Cap [Y or N]? |
|---------------------------------------|-----------------------------|----------------------------|
| Particulate Matter Total – PM         | A                           | N                          |
| Particulate Matter – PM <sub>10</sub> | A                           | N                          |
| Sulfur Dioxide – SO <sub>2</sub>      | A                           | N                          |
| Nitrogen Oxides – NO <sub>x</sub>     | A                           | N                          |
| Carbon Monoxide – CO                  | A                           | N                          |
| Volatile Organic Compounds - VOC      | A                           | N                          |
| Total Reduced Sulfur – TRS            | A                           | N                          |
| Sulfuric Acid Mist – SAM              | A                           | N                          |
| Total Hazardous Air Pollutants – HAPs | A                           | N                          |
| Mercury – H114                        | B                           | N                          |
| Acetaldehyde – H001                   | A                           | N                          |
| Chlorine – H038                       | B                           | N                          |
| Chloroform – H043                     | B                           | N                          |
| Formaldehyde – H095                   | A                           | N                          |
| Hydrochloric Acid – H106              | A                           | N                          |
| Methanol – H115                       | A                           | N                          |
| 1, 2, 4 – Trichlorodenzene – H174     | A                           | N                          |
| Xylenes – H186                        | A                           | N                          |
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FACILITY INFORMATION

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

| 1. Pollutant Subject to Emissions Cap | 2. Facility Wide Cap [Y or N]? (all units) | 3. Emissions Unit ID No.s Under Cap (if not all units) | 4. Hourly Cap (lb/hr) | 5. Annual Cap (ton/yr) | 6. Basis for Emissions Cap |
|---------------------------------------|--|--|-----------------------|------------------------|----------------------------|
|                                       |  |  |                       |                        |                            |
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7. Facility-Wide or Multi-Unit Emissions Cap Comment:

## FACILITY INFORMATION

### 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)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <b>Feb. 2007</b>  |
| 2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <b>Feb. 2007</b>   |
| 3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <b>Feb. 2007</b> |

#### Additional Requirements for Air Construction Permit Applications

|   |
|---|
| 1. Area Map Showing Facility Location:<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)                          |
| 2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):<br><input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment A</b>                          |
| 3. Rule Applicability Analysis:<br><input type="checkbox"/> Attached, Document ID: _____  |
| 4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility) |
| 5. Fugitive Emissions Identification:<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable   |
| 6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable   |
| 7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):<br><input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment A</b> <input type="checkbox"/> Not Applicable                         |
| 8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable                             |
| 9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):<br><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.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable                         |

**FACILITY INFORMATION**

**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 [3]

No. 3 Combination Boiler

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for 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 [3]

No. 3 Combination Boiler

## A. GENERAL EMISSIONS UNIT INFORMATION

### Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

### Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

No. 3 Combination Boiler

3. Emissions Unit Identification Number: 015

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

9. Package Unit:

Manufacturer:

Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

The Condensate Stripper System vents stripper off-gases (SOG) to the No. 3 Combination Boiler or the No. 4 Combination Boiler as a TRS/HAP control device.



**EMISSIONS UNIT INFORMATION**

Section [3]

No. 3 Combination Boiler

**E. EMISSIONS UNIT POLLUTANTS**

**List of Pollutants Emitted by Emissions Unit**

| 1. Pollutant Emitted     | 2. Primary Control Device Code | 3. Secondary Control Device Code | 4. Pollutant Regulatory Code |
|--------------------------|--------------------------------|----------------------------------|------------------------------|
| PM                       | 053                            |                                  | EL                           |
| PM <sub>10</sub>         | 053                            |                                  | NS                           |
| SO <sub>2</sub>          | 053                            |                                  | EL                           |
| NO <sub>x</sub>          |                                |                                  | NS                           |
| CO                       |                                |                                  | NS                           |
| VOC                      |                                |                                  | NS                           |
| TRS                      | 021                            |                                  | EL                           |
| Pb - Lead                |                                |                                  | NS                           |
| HAPs                     | 021                            |                                  | NS                           |
| H095 - Formaldehyde      |                                |                                  | NS                           |
| H106 - Hydrochloric Acid |                                |                                  | NS                           |
| H114 - Mercury           |                                |                                  | NS                           |
|                          |                                |                                  |                              |
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**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:<br>SO <sub>2</sub>   |  | 2. Total Percent Efficiency of Control:   |  |
| 3. Potential Emissions:<br>1,592.4.0 lb/hour      3,972.7 tons/year  |  | 4. Synthetically Limited?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No        |  |
| 5. Range of Estimated Fugitive Emissions (as applicable):<br>to                      tons/year   |  |   |  |
| 6. Emission Factor: 907.0 lb/hr, 24-hr average<br><br>Reference: Proposed limit based on modeling.                                       |  | 7. Emissions Method Code:<br>0  |  |
| 8.a. Baseline Actual Emissions (if required):<br>tons/year   |  | 8.b. Baseline 24-month Period:<br>From:              To:  |  |
| 9.a. Projected Actual Emissions (if required):<br>tons/year  |  | 9.b. Projected Monitoring Period:<br><input type="checkbox"/> 5 years <input type="checkbox"/> 10 years |  |
| 10. Calculation of Emissions:<br>907 lb/hr x 8760 hrs/yr / 2000 lb/ton = 3,972.7 tons/year   |  |   |  |
| 11. Potential Fugitive and Actual Emissions Comment:<br>Maximum hourly emission rate based on application for Permit No. 0050009-016-AC. |  |   |  |

**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [3]  
No. 3 Combination Boiler

Page [2] of [2]  
Sulfur Dioxide - SO<sub>2</sub>

**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 3

|   |   |
|---|---|
| 1. Basis for Allowable Emissions Code:<br><b>OTHER</b>  | 2. Future Effective Date of Allowable Emissions:                                |
| 3. Allowable Emissions and Units:<br><b>907.0 lb/hr, 24-hr average</b>  | 4. Equivalent Allowable Emissions:<br><b>907 lb/hour      3,972.7 tons/year</b> |
| 5. Method of Compliance:<br><b>SO<sub>2</sub> CEMS</b>  |   |
| 6. Allowable Emissions Comment (Description of Operating Method):<br><b>Based on a 24-hr average when only the No. 3 combination boiler is operating.</b> |   |

**Allowable Emissions** Allowable Emissions 2 of 3

|   |   |
|---|---|
| 1. Basis for Allowable Emissions Code:<br><b>OTHER</b>  | 2. Future Effective Date of Allowable Emissions:                        |
| 3. Allowable Emissions and Units:<br><b>329 lb/hr, 24-hr average</b>  | 4. Equivalent Allowable Emissions:<br><b>329 lb/hour      tons/year</b> |
| 5. Method of Compliance:<br><b>SO<sub>2</sub> CEMS</b>  |   |
| 6. Allowable Emissions Comment (Description of Operating Method):<br><b>Based on a 24-hr average when Nos. 3 and 4 combination boilers are operating.</b> |   |

**Allowable Emissions** Allowable Emissions 3 of 3

|  |   |
|--|---|
| 1. Basis for Allowable Emissions Code:<br><b>OTHER</b>   | 2. Future Effective Date of Allowable Emissions:                          |
| 3. Allowable Emissions and Units:<br><b>1,366 lb/hr, 3-hr average</b>  | 4. Equivalent Allowable Emissions:<br><b>1,366 lb/hour      tons/year</b> |
| 5. Method of Compliance:<br><b>SO<sub>2</sub> CEMS</b>   |   |
| 6. Allowable Emissions Comment (Description of Operating Method):<br><b>Based on a 3-hr average when only the No. 3 combination boiler is operating.</b> |   |

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

## EMISSIONS UNIT INFORMATION

Section [4]

No. 4 Combination Boiler

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for 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 [4]

No. 4 Combination Boiler

## A. GENERAL EMISSIONS UNIT INFORMATION

### Title V Air Operation Permit Emissions Unit Classification

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

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

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

### Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section:

**No. 4 Combination Boiler**

3. Emissions Unit Identification Number: **016**

4. Emissions Unit Status Code:  
**A**

5. Commence Construction Date:

6. Initial Startup Date:

7. Emissions Unit Major Group SIC Code:  
**26**

8. Acid Rain Unit?  
 Yes  
 No

9. Package Unit:

Manufacturer:

Model Number:

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:

**The Condensate Stripper System vents stripper off-gases (SOG) to the No. 3 Combination Boiler or the No. 4 Combination Boiler as a TRS/HAP control device. The EU ID No. for the Condensate Stripper is also EU 015.**

**EMISSIONS UNIT INFORMATION**

Section [4]

No. 4 Combination Boiler

**E. EMISSIONS UNIT POLLUTANTS**

**List of Pollutants Emitted by Emissions Unit**

| 1. Pollutant Emitted     | 2. Primary Control Device Code | 3. Secondary Control Device Code | 4. Pollutant Regulatory Code |
|--------------------------|--------------------------------|----------------------------------|------------------------------|
| PM                       | 053                            |                                  | EL                           |
| PM <sub>10</sub>         | 053                            |                                  | NS                           |
| SO <sub>2</sub>          | 053                            |                                  | EL                           |
| NO <sub>x</sub>          |                                |                                  | NS                           |
| CO                       |                                |                                  | NS                           |
| VOC                      |                                |                                  | NS                           |
| TRS                      | 021                            |                                  | EL                           |
| Pb – Lead                |                                |                                  | NS                           |
| HAPs                     | 021                            |                                  | NS                           |
| H095 – Formaldehyde      |                                |                                  | NS                           |
| H106 – Hydrochloric Acid |                                |                                  | NS                           |
| H114 – Mercury           |                                |                                  | NS                           |
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**EMISSIONS UNIT INFORMATION**

**POLLUTANT DETAIL INFORMATION**

Section [4]  
No. 4 Combination Boiler

Page [] of [2]  
Sulfur Dioxide - SO<sub>2</sub>

**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:<br><b>SO<sub>2</sub></b>  |  | 2. Total Percent Efficiency of Control:   |  |
| 3. Potential Emissions:<br><b>1,183.0 lb/hour      3,022.2 tons/year</b>  |  | 4. Synthetically Limited?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No        |  |
| 5. Range of Estimated Fugitive Emissions (as applicable):<br>to      tons/year  |  |   |  |
| 6. Emission Factor: <b>690 lb/hr, 24-hour average</b><br><br>Reference: <b>Draft permit No. 0050009-027-AC</b>                  |  | 7. Emissions Method Code:<br><b>0</b>   |  |
| 8.a. Baseline Actual Emissions (if required):<br>tons/year  |  | 8.b. Baseline 24-month Period:<br>From:      To:  |  |
| 9.a. Projected Actual Emissions (if required):<br>tons/year   |  | 9.b. Projected Monitoring Period:<br><input type="checkbox"/> 5 years <input type="checkbox"/> 10 years |  |
| 10. Calculation of Emissions:<br><br><b>690 lb/hr x 8760 hrs/yr / 2000 lb/ton = 3,022.2 tons/year</b>                           |  |   |  |
| 11. Potential Fugitive and Actual Emissions Comment:<br><b>Maximum hourly emission rate based on Permit No. 0050009-024-AC.</b> |  |   |  |

**EMISSIONS UNIT INFORMATION**

Section [4]  
No. 4 Combination Boiler

**POLLUTANT DETAIL INFORMATION**

Page [2] of [2]  
Sulfur Dioxide – SO<sub>2</sub>

**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:<br><b>OTHER</b>  | 2. Future Effective Date of Allowable Emissions:                                |
| 3. Allowable Emissions and Units:<br><b>690 lb/hr, 24-hr average</b>  | 4. Equivalent Allowable Emissions:<br><b>690 lb/hour      3,022.2 tons/year</b> |
| 5. Method of Compliance:<br><b>SO<sub>2</sub> CEMS</b>  |   |
| 6. Allowable Emissions Comment (Description of Operating Method):<br><br><b>Based on a 24-hr average for Nos. 3 and 4 Combination Boilers when No. 3 Combination Boiler is operating at 329 lb/hr and No. 4 Combination Boiler is operating at 643 lb/hr.</b> |   |

Allowable Emissions Allowable Emissions 2 of 2

|   |   |
|---|---|
| 1. Basis for Allowable Emissions Code:<br><b>OTHER</b>  | 2. Future Effective Date of Allowable Emissions:                            |
| 3. Allowable Emissions and Units:<br><b>1,183.0 lb/hr, 3-hr average</b>   | 4. Equivalent Allowable Emissions:<br><b>1,183.0 lb/hour      tons/year</b> |
| 5. Method of Compliance:<br><b>SO<sub>2</sub> CEMS</b>  |   |
| 6. Allowable Emissions Comment (Description of Operating Method):<br><br><b>Based on a 3-hr average for No. 4 combination boiler.</b> |   |



**ATTACHMENT A**

1.0 INTRODUCTION

Smurfit-Stone Container Enterprises, Inc. (SSCE) operates a kraft pulp and paper mill located in Panama City, Bay County, Florida (Mill). The Mill consists of the following major plant areas: chipyard, digester system, brown stock washing system, bleaching system, chemical recovery area, paper drying/convertng/warehousing, and power/utilities area. The Mill is currently operating under Title V Permit No. 0050009-026-AV, issued May 30, 2007.

An air construction permit was issued to SSCE on September 26, 2007 (Permit No. 0050009-028-AC/PSD-FL-388) for the addition of petcoke as a primary fuel in the Lime Kiln, along with the installation of new burners to accommodate the new fuel. This permit included emission limitations on sulfur dioxide (SO<sub>2</sub>) emissions from the Nos. 3 and 4 Combination Boilers (EU 015 and EU 016, respectively). These limitations were imposed based on an atmospheric dispersion modeling analysis and meeting ambient air quality standards (AAQS) and prevention of significant deterioration (PSD) allowable Class II increments for SO<sub>2</sub>. The limitations are as follows, as taken from the specific conditions in the permit:

- 1. SO<sub>2</sub> emissions shall not exceed <sup>1366</sup>1,219 pounds per hour (lb/hr) when only the No. 3 Combination Boiler is operating based on a 3-hour rolling CEMS average. ✓
- 2. The combined SO<sub>2</sub> emissions from No. 3 and No. 4 Combination Boilers shall not exceed <sup>1658</sup>1,219 lb/hr when both Nos. 3 and 4 are operating, and the SO<sub>2</sub> emissions from No. 4 shall not exceed 1,183 lb/hr based on 3-hour rolling CEMS averages. ✓
- 3. SO<sub>2</sub> emissions shall not exceed <sup>907</sup>845 lb/hr when only the No. 3 Combination Boiler is operating based on a 24-hour rolling CEMS average. ✓
- 4. SO<sub>2</sub> emissions shall not exceed <sup>690</sup>965 lb/hr when only the No. 4 Combination Boiler is operating based on a 24-hour rolling CEMS average. ✓
- 5. When both Nos. 3 and 4 Combination Boilers are operating SO<sub>2</sub> emissions from No. 3 shall not exceed 300 lb/hr and the SO<sub>2</sub> emissions from No. 4 shall not exceed 643 lb/hr based on 24-hour rolling CEMS averages.

No. 3 has W/C em. therefore max E.R < No. 4

The permit also provides that the permittee may submit an application to revise the above SO<sub>2</sub> emission standards based on a revised modeling analysis.

The purpose of this application is to revise the maximum allowable SO<sub>2</sub> emission limits for Nos. 3 and 4 Combination Boilers based on revised modeling for compliance with AAQS and PSD Class II

7

increments. The modeling analysis was used to predict the maximum SO<sub>2</sub> emission rates from the Nos. 3 and 4 Combination Boilers which could occur without predicting exceedances of the AAQS or Class II PSD increments.

The modeling analysis was conducted as described in the air construction permit application for the Lime Kiln Petcoke project, and in the Technical Evaluation and Preliminary Determination issued for permit number 0050009-028-AC/PSD-FL-388. All model input data remained the same as used for the permit application, except that the SO<sub>2</sub> emission rates for the Nos. 3 and 4 Combination Boilers were varied to determine the maximum emission rate without exceeding the air quality standards.

The following emission scenarios were modeled:

- 3-hour averaging time:
  - No. 3 Combination Boiler operating, with No. 4 Combination Boiler shut down; and
  - No. 4 Combination Boiler emitting at its maximum SO<sub>2</sub> emission rate of 1,183 lb/hr, with No. 3 Combination Boiler limiting its emissions to meet the AAQS/PSD Class II increment.
- 24-hour averaging time:
  - No. 3 Combination Boiler operating with No. 4 Combination Boiler shut down; and
  - No. 4 Combination Boiler emitting at its maximum SO<sub>2</sub> emission rate, which is 690 lb/hr based on the recently issued best available retrofit control technology (BART) limit, with the No. 3 Combination Boiler limiting its emissions to meet the AAQS/PSD Class II increment.

Revised modeling results tables, based on the revised Combination Boiler SO<sub>2</sub> emission rates, are shown in revised Tables 6-16 and 6-18 attached. As shown in the tables, these emission scenarios all meet the respective AAQS and PSD Class II increments for SO<sub>2</sub>. Based on these results, the current permit condition wording is proposed to be revised as follows:

1. SO<sub>2</sub> emissions shall not exceed 1,366 lb/hr when only the No. 3 Combination Boiler is operating based on a 3-hour rolling CEMS average. ✓
2. The combined SO<sub>2</sub> emissions from No. 3 and No. 4 Combination Boilers shall not exceed 1,658 lb/hr when both Nos. 3 and 4 are operating and the SO<sub>2</sub> emissions from No. 4 shall not exceed 1,183 lb/hr based on 3-hour rolling CEMS averages. ✓

3. SO<sub>2</sub> emissions shall not exceed 907 lb/hr when only the No. 3 Combination Boiler is operating based on a 24-hour rolling CEMS average.
4. SO<sub>2</sub> emissions shall not exceed 690 lb/hour when only the No. 4 Combination Boiler is operating based on a 24-hour rolling CEMS average. <sup>OK</sup>
5. When both Nos. 3 and 4 Combination Boilers are operating, SO<sub>2</sub> emissions from No. 3 shall not exceed ~~329~~ 643 lb/hr and the SO<sub>2</sub> emissions from No. 4 shall not exceed 643 lb/hr, based on 24-hour rolling CEMS averages.

**TABLE 6-16  
MAXIMUM PREDICTED SO2 IMPACTS FOR COMPARISON TO AAQS (Rev 12/12/07)**

| Rank and<br>Averaging Time                              | SO <sub>2</sub> Concentration (µg/m <sup>3</sup> ) <sup>a</sup> |                    |            | Receptor Location <sup>b</sup> |                 | Time Period<br>(YYMMDDHH) | Florida<br>AAQS<br>(µg/m <sup>3</sup> ) |
|---|---|--------------------|------------|--------------------------------|-----------------|---------------------------|---|
|   | Total   | Modeled<br>Sources | Background | Easting<br>(m)                 | Northing<br>(m) |                           |   |
| <b>BB3 at 907 lb/hr and BB4 at 0 lb/hr</b>              |   |                    |            |                                |                 |                           |   |
| Highest Annual  | 49.9  | 26.273             | ✓ 23.6     | 632,470                        | 3,335,610       | 01123124                  | 60                                      |
|   | 55.1  | 31.511             | ✓ 23.6     | 632,370                        | 3,335,310       | 02123124                  |   |
|   | 53.1  | 29.541             | ✓ 23.6     | 632,570                        | 3,335,710       | 03123124                  |   |
|   | 51.1  | 27.479             | ✓ 23.6     | 632,670                        | 3,335,610       | 04123124                  |   |
|   | 52.6  | 28.972             | ✓ 23.6     | 630,120                        | 3,338,360       | 05123124                  |   |
| HSH 24-Hour   | 240.3   | 216.7              | ✓ 23.6     | 632,570                        | 3,335,810       | 01112524                  | 260                                     |
|   | 235.1   | 211.5              | ✓ 23.6     | 632,470                        | 3,335,710       | 02040824                  |   |
|   | 257.5   | 233.9              | ✓ 23.6     | 632,470                        | 3,335,810       | 03063024                  |   |
|   | 238.4   | 214.8              | ✓ 23.6     | 632,570                        | 3,335,710       | 04012524                  |   |
|   | 251.6   | 228.0              | ✓ 23.6     | 632,470                        | 3,335,710       | 05092524                  |   |
| <b>BB3 at 329 lb/hr and BB4 at 643 lb/hr</b> <i>690</i> |   |                    |            |                                |                 |                           |   |
| Highest Annual  | 50.8  | 27.2               | ✓ 23.6     | 632,470                        | 3,335,610       | 01123124                  | 60                                      |
|   | 56.2  | 32.6               | ✓ 23.6     | 632,370                        | 3,335,310       | 02123124                  |   |
|   | 53.0  | 29.4               | ✓ 23.6     | 632,570                        | 3,335,710       | 03123124                  |   |
|   | 51.4  | 27.8               | ✓ 23.6     | 632,470                        | 3,335,610       | 04123124                  |   |
|   | 52.7  | 29.1               | ✓ 23.6     | 630,120                        | 3,338,360       | 05123124                  |   |
| HSH 24-Hour   | 228.6   | 205.0              | ✓ 23.6     | 632,470                        | 3,335,710       | 01112924                  | 260                                     |
|   | 231.9   | 208.3              | ✓ 23.6     | 632,470                        | 3,335,710       | 02040824                  |   |
|   | 245.8   | 222.2              | ✓ 23.6     | 632,470                        | 3,335,810       | 03111624                  |   |
|   | 229.4   | 205.8              | ✓ 23.6     | 632,470                        | 3,335,610       | 04110124                  |   |
|   | 256.6   | 233.0              | ✓ 23.6     | 632,170                        | 3,335,310       | 05092224                  |   |
| <b>BB3 at 1366 lb/hr and BB4 at 0 lb/hr</b>             |   |                    |            |                                |                 |                           |   |
| HSH 3-Hour  | 751   | 602                | ✓ 150      | 632,370                        | 3,335,910       | 01041206                  | 1,300                                   |
|   | 744   | 594                | ✓ 150      | 632,570                        | 3,335,610       | 02092606                  |   |
|   | 850   | 700                | ✓ 150      | 632,470                        | 3,335,810       | 03111809                  |   |
|   | 710   | 561                | ✓ 150      | 633,570                        | 3,335,910       | 04112324                  |   |
|   | 732   | 583                | ✓ 150      | 632,470                        | 3,335,810       | 05122718                  |   |
| <b>BB3 at 475 lb/hr and BB4 at 1183 lb/hr</b>           |   |                    |            |                                |                 |                           |   |
| HSH 3-Hour  | 781   | 631                | ✓ 150      | 632,470                        | 3,335,710       | 01101209                  | 1,300                                   |
|   | 727   | 577                | ✓ 150      | 632,570                        | 3,335,710       | 02040912                  |   |
|   | 869   | 720                | ✓ 150      | 632,470                        | 3,335,810       | 03111809                  |   |
|   | 779   | 630                | ✓ 150      | 633,570                        | 3,334,910       | 04021821                  |   |
|   | 788   | 638                | ✓ 150      | 632,370                        | 3,335,710       | 05111506                  |   |

Note: YYMMDDHH = Year, Month, Day, Hour Ending  
HSH = Highest, Second-Highest

Note: Maximum 3-hour SO<sub>2</sub> emission rate for No. 3 Combination Boiler is 1,366 lb/hr.  
Maximum 3-hour SO<sub>2</sub> emission rate for No. 4 Combination Boiler is 1,183 lb/hr  
Maximum 24-hour SO<sub>2</sub> emission rate for No. 3 Combination Boiler is 907 lb/hr  
Maximum 24-hour SO<sub>2</sub> emission rate for No. 4 Combination Boiler is 690 lb/hr

<sup>a</sup> Concentrations are predicted with AERMOD model and five years of surface meteorological data from the National Weather Service (NWS) station at Apalachicola Regional Airport and upper air soundings from the NWS station at Tallahassee, 2001 to 2005.

<sup>b</sup> UTM Coordinates in Zone 16, NAD27 Datum

**TABLE 6-18  
MAXIMUM PREDICTED SO<sub>2</sub> IMPACTS FOR  
COMPARISON TO PSD CLASS II INCREMENTS (Rev 12/12/07)**

| Rank and Averaging Time                         | Concentration (µg/m <sup>3</sup> ) <sup>a</sup> | Receptor Location <sup>b</sup> |              | Time Period (YYMMDDHH) | PSD Class II Increment (µg/m <sup>3</sup> ) |
|---|---|--------------------------------|--------------|------------------------|---|
|   |   | Easting (m)                    | Northing (m) |                        |   |
| <b>BB3 at 907 lb/hr and BB4 at 0 lb/hr</b> ✓    |   |                                |              |                        |   |
| Highest Annual                                  | 2.0 ✓   | 632,891                        | 3,335,283    | 01123124               | 20  |
|   | 2.3 ✓   | 632,891                        | 3,335,283    | 02123124               |   |
|   | 2.1 ✓   | 632,891                        | 3,335,283    | 03123124               |   |
|   | 2.0 ✓   | 632,891                        | 3,335,283    | 04123124               |   |
|   | 2.3 ✓   | 632,891                        | 3,335,283    | 05123124               |   |
| HSH 24-Hour                                     | 43.4 ✓  | 632,470                        | 3,335,810    | 01040224               | 91  |
|   | 59.0 ✓  | 632,470                        | 3,335,810    | 02041524               |   |
|   | 88.9 ✓  | 632,470                        | 3,335,810    | 03031924               |   |
|   | 58.6 ✓  | 632,470                        | 3,335,810    | 04110324               |   |
|   | 64.4 ✓  | 632,470                        | 3,335,910    | 05062724               |   |
| <b>BB3 at 329 lb/hr and BB4 at 643 lb/hr</b> ✓  |   |                                |              |                        |   |
| Highest Annual                                  | 2.0 ✓   | 632,891                        | 3,335,283    | 01123124               | 20  |
|   | 2.3 ✓   | 632,891                        | 3,335,283    | 02123124               |   |
|   | 2.1 ✓   | 632,891                        | 3,335,283    | 03123124               |   |
|   | 2.0 ✓   | 632,891                        | 3,335,283    | 04123124               |   |
|   | 2.3 ✓   | 632,891                        | 3,335,283    | 05123124               |   |
| HSH 24-Hour                                     | 47.7 ✓  | 632,070                        | 3,335,310    | 01121324               | 91  |
|   | 55.6 ✓  | 632,470                        | 3,335,810    | 02011324               |   |
|   | 82.3 ✓  | 632,470                        | 3,335,810    | 03031924               |   |
|   | 51.2 ✓  | 632,670                        | 3,335,810    | 04110324               |   |
|   | 52.3 ✓  | 632,470                        | 3,335,710    | 05111624               |   |
| <b>BB3 at 1366 lb/hr and BB4 at 0 lb/hr</b> ✓   |   |                                |              |                        |   |
| HSH 3-Hour                                      | 510 ✓   | 632,370                        | 3,335,910    | 01072621               | 512   |
|   | 447 ✓   | 632,470                        | 3,335,810    | 02011321               |   |
|   | 472 ✓   | 632,370                        | 3,335,910    | 03111606               |   |
|   | 443 ✓   | 632,470                        | 3,335,810    | 04042206               |   |
|   | 453 ✓   | 632,470                        | 3,335,710    | 05092521               |   |
| <b>BB3 at 475 lb/hr and BB4 at 1183 lb/hr</b> ✓ |   |                                |              |                        |   |
| HSH 3-Hour                                      | 510 ✓   | 632,370                        | 3,335,910    | 01041206               | 512   |
|   | 426 ✓   | 632,470                        | 3,335,810    | 02011321               |   |
|   | 489 ✓   | 632,470                        | 3,335,810    | 03111809               |   |
|   | 438 ✓   | 632,470                        | 3,335,810    | 04042206               |   |
|   | 459 ✓   | 632,470                        | 3,335,710    | 05021324               |   |

2.3

89

510

Note: YYMMDDHH = Year, Month, Day, Hour Ending  
HSH = Highest, Second-Highest

Note: Maximum 3-hour SO<sub>2</sub> emission rate for No. 3 Combination Boiler is 1,366 lb/hr. ✓  
 Maximum 3-hour SO<sub>2</sub> emission rate for No. 4 Combination Boiler is 1,183 lb/hr ✓  
 Maximum 24-hour SO<sub>2</sub> emission rate for No. 3 Combination Boiler is 907 lb/hr ✓  
 Maximum 24-hour SO<sub>2</sub> emission rate for No. 4 Combination Boiler is 690 lb/hr ✓

<sup>a</sup> Concentrations are predicted with AERMOD model and five years of surface meteorological data from the National Weather Service (NWS) station at Apalachicola Regional Airport and upper air soundings from the NWS station at Tallahassee, 2001 to 2005.

<sup>b</sup> UTM Coordinates in Zone 16, NAD27 Datum