Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

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

I. APPLICATION INFORMATION

This section of the Application for Air Permit form provides general information on the scope of this application, the purpose for which this application is being submitted, and the nature of any construction or modification activities proposed as a part of this application. This section also includes information on the owner of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department on diskette, this section of the Application for Air Permit must also be submitted in hard-copy form.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility name, if any; and a brief reference to the facility's physical location. If known, also enter the ARMS or AIRS facility identification number. This information is intended to give a quick reference, on the first page of the application form, to the facility addressed in this application. Elsewhere in the form, numbered data fields are provided for entry of the facility data in computer-input format.

Stone Container Corporation, Jacksonville 31-JAX-16-0067

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	6-15-95
2. Permit Number:	AC 16-272668
3. PSD Number (if applicable):	PSD-FL-198A
4. Siting Number (if applicable):	

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

John L. West, General Manager

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: **Stone Container Corporation**
Street Address: **9469 East Port Road**
City: **Jacksonville** State: **FL** Zip Code: **32229**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: **(904) 751-6400** Fax: **(904) 751-5172**

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative of the facility (non-Title V source) addressed in this Application for Air Permit or the responsible official, as defined in Chapter 62-213, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application 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. If the purpose of this application is to obtain an air operation permit or operation permit revision for one or more emissions units which have undergone construction or modification, I 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 understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted source.*

Signature Date

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility (or Title V source). An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emissions Unit ID / Description of Emissions Unit

022 Package Boiler No.1
023 Package Boiler No.2
026 Package Boiler No.3

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit to be renewed: _____

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: _____

_____

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

Operation permit to be revised: _____

Reason for revision: _____

_____

Category II: All Air Construction Permit Applications Subject to Processing Under Rule 62-210.300(2)(b),F.A.C.

This Application for Air Permit is submitted to obtain:

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): _____

_____

[ ] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: _____

[ ] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g.; to address one or more newly constructed or modified emissions units.

Operation permit to be revised: _____

Reason for revision: _____

_____

Category III: All Air Construction Permit Applications for All Facilities and Emissions Units.

This Application for Air Permit is submitted to obtain:

[X] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: _____

AO16-262702

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

Current operation permit number(s): _____

_____

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

Application Processing Fee

Check one:

[X] Attached - Amount: $ $ 5,000.00 [ ] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

See Attachment A

2. Projected or Actual Date of Commencement of Construction (DD-MON-YYYY):

1 Aug 1995

3. Projected Date of Completion of Construction (DD-MON-YYYY):

1 Nov 1998

Professional Engineer Certification

1. Professional Engineer Name: David A. Buff
   Registration Number: 19011

2. Professional Engineer Mailing Address:
   Organization/Firm: KBN Engineering and Applied Sciences, Inc.
   Street Address: 6241 NW 23rd Street, Suite 500
   City: Gainesville State: FL Zip Code: 32653-1500

3. Professional Engineer Telephone Numbers:
   Telephone: (904) 336-5600 Fax: (904) 336-6603

4. Professional Engineer's Statement:

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

(1) To the best of my knowledge, there is reasonable assurance (a) 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; or (b) for any application for a Title V source air operation permit, that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application;

(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; and

(3) For any application for an air construction permit for one or more proposed new or modified emissions units, 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.

David A. Buff — Signature (seal)

6/5/95 — Date

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact:

   Joe Eskridge, Environmental Engineer

2. Application Contact Mailing Address:

   Organization/Firm: **Stone Container Corporation**
   Street Address: **9469 East Port Road**
   City: **Jacksonville** State: **FL** Zip Code: **32229**

3. Application Contact Telephone Numbers:

   Telephone: **(904) 751-6400** Fax: **(904) 751-5172**

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Name, Location, and Type

1. Facility Owner or Operator: **Stone Container Corporation**			
2. Facility Name: **Stone Container Corporation**			
3. Facility Identification Number: **31-JAX-16-0067** [ ] Unknown			
4. Facility Location Information: Facility Street Address: **9469 East Port Road** City: **Jacksonville** County: **Duval** Zip Code: **32229**			
5. Facility UTM Coordinates: Zone: **17** East (km): **442.4** North (km): **3365.4**			
6. Facility Latitude/Longitude: Latitude (DD/MM/SS): **30/25/15** Longitude: (DD/MM/SS): **81/36/0**			
7. Governmental Facility Code: **O**	8. Facility Status Code: **A**	9. Relocatable Facility? [ ] Yes [x] No	10. Facility Major Group SIC Code: **26**
11. Facility Comment:			

Facility Contact

1. Name and Title of Facility Contact: **Joe Eskridge, Environmental Engineer**
2. Facility Contact Mailing Address: Organization/Firm: **Stone Container Corporation** Street Address: **9469 East Port Road** City: **Jacksonville** State: **FL** Zip Code: **32229**
3. Facility Contact Telephone Numbers: Telephone: **(904) 751-6400** Fax: **(904) 751-5822**

Facility Regulatory Classifications

1. Small Business Stationary Source?		
[ ] Yes	[x] No	[ ] Unknown
2. Title V Source?		
[x] Yes	[ ] No	
3. Synthetic Non-Title V Source?		
[ ] Yes,	[x] No	
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?		
[x] Yes	[ ] No	
5. Synthetic Minor Source of Pollutants Other than HAPs?		
[ ] Yes	[x] No	
6. Major Source of HAPs?		
[ ] Yes	[ ] No	[x] Possible
7. Synthetic Minor Source of HAPs?		
[ ] Yes	[x] No	
8. One or More Emissions Units Subject to NSPS?		
[x] Yes	[ ] No	
9. One or More Emissions Units Subject to NESHAP?		
[ ] Yes	[x] No	
10. Title V Source by EPA Designation?		
[ ] Yes	[x] No	
11. Facility Regulatory Classifications Comment:		

B. FACILITY REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of federal, state, and local regulations applicable to the facility as a whole. (Regulations applicable to individual emissions units within the facility are addressed in Subsection III-B of the form.)

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

C. FACILITY POLLUTANT INFORMATION

This subsection of the Application for Air Permit form allows for the reporting of potential and estimated emissions of selected pollutants on a facility-wide basis. It must be completed for each pollutant for which the applicant proposes to establish a facility-wide emissions cap and for each pollutant for which emissions are not reported at the emissions-unit level.

Facility Pollutant Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

Facility Pollutant Information Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

Facility Pollutant Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

Facility Pollutant Information: Pollutant _____ of _____

1. Pollutant Emitted:		
2. Estimated Emissions:		(tons/yr)
3. Requested Emissions Cap:	(lb/hr)	(tons/yr)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment:		

D. FACILITY SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the facility as a whole. (Supplemental information related to individual eissions units within the facility is provided in Subsection III-I of the form.) Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location:
   [X] Attached, Document ID: Attachment A
   [ ] Not Applicable [ ] Waiver Requested

2. Facility Plot Plan:
   [X] Attached, Document ID: Attachment A
   [ ] Not Applicable [ ] Waiver Requested

3. Process Flow Diagram(s):
   [X] Attached, Document ID(s): Attachment A
   [ ] Not Applicable [ ] Waiver Requested

4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

5. Fugitive Emissions Identification:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

6. Supplemental Information for Construction Permit Application:
   [X] Attached, Document ID: Attachment A
   [ ] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

7. List of Insignificant Activities:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

8. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID: _____
   [ ] Equipment/Activities Onsite but Not Required to be Individually Listed
   [X] Not Applicable

9. Alternative Methods of Operation. [ ] Attached, Document ID: _____ [x] Not Applicable
10. Alternative Modes of Operation (Emissions Trading): [ ] Attached, Document ID: _____ [x] Not Applicable
11. Enhanced Monitoring Plan: [ ] Attached, Document ID: _____ [x] Not Applicable
12. Risk Management Plan Verification: [ ] Plan Submitted to Implementing Agency - Verification Attached Attached, Document ID: _____ [ ] Plan to be Submitted to Implementing Agency by Required Date [x] Not Applicable
13. Compliance Report and Plan [ ] Attached, Document ID: _____ [x] Not Applicable
14. Compliance Statement (Hard-copy Required) [ ] Attached, Document ID: _____ [x] Not Applicable

Emissions Unit Information Section 1 of 3

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit..

Type of Emissions Unit Addressed in This Section

Check one:

[X] 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, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated 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.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section:

No.1 Package Boiler

2. ARMS Identification Number: [ ] No Corresponding ID [ ] Unknown

22

3. Emissions Unit Status Code:	4. Acid Rain Unit?	5. Emissions Unit Major Group SIC Code:
A	[ ] Yes [X] No	26

6. Initial Startup Date (DD-MON-YYYY):

7. Long-term Reserve Shutdown Date (DD-MON-YYYY):

8. Package Unit:

Manufacturer:	Model Number:
ABB-Combustion Engineering	93104-20

9. Generator Nameplate Rating: MW

10. Incinerator Information:

Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

11. Emissions Unit Comment:

This boiler vents with two other boiler units to one common stack.

Emissions Unit Control Equipment Information

A.

1. Description:

Low NOx Burners Burner Design

2. Control Device or Method Code: 024

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:
   174.7 mmBtu/hr

2. Maximum Incineration Rate:
   lbs/hr tons/day

3. Maximum Process or Throughput Rate:

4. Maximum Production Rate:
   125,000 lb/hr steam

5. Operating Capacity Comment:
   164.5 MMBtu/hr maximum when firing No. 2 fuel oil

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

   24 hours/day, 7 days/week,

   52 weeks/yr 8760 hours/yr

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

40 CFR 60, Subpart Db
62-210.300(1)
62-210.700
62-296.800(2)(a)3.
62-297.330
62-297.570

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:

   PSGO-5010

2. Emission Point Type Code:

   [ ] 1 [x] 2 [ ] 3 [ ] 4

3. Descriptions of Emissions Points Comprising this Emissions Unit:

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

   23,26

5. Discharge Type Code:

   [ ] D [ ] F [ ] H [ ] P
   [ ] R [x] V [ ] W

6. Stack Height:	200	ft
7. Exit Diameter:	8	ft
8. Exit Temperature:	345	°F
9. Actual Volumetric Flow Rate:	53,366	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		ft

13. Emission Point UTM Coordinates:

Zone: 17 East (km): 441.8 North (km): 3365.6

14. Emission Point Comment:

Stack parameters above are for No. 2 fuel oil. Parameters for natural gas are: 330 °F; 53,541 acfm.

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate Information: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Package Boiler**	
2. Source Classification Code (SCC): **1-02-006-01**	
3. SCC Units: **million cubic feet burned**	
4. Maximum Hourly Rate: **0.1747**	5. Maximum Annual Rate: **1,530.37**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.001**	8. Maximum Percent Ash: **0**
9. Million Btu per SCC Unit: **1,000**	
10. Segment Comment:	

Segment Description and Rate Information: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Package Boiler**	
2. Source Classification Code (SCC): **1-02-005-01**	
3. SCC Units: **thousand gallons burned**	
4. Maximum Hourly Rate: **1.192**	5. Maximum Annual Rate: **10,441.92**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.05**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **138**	
10. Segment Comment: **Maximum combined yearly rate for Boiler No. 1, No. 2 and No. 3 is 11,624,000 gal/year**	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 7

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **2.38** lbs/hr **10.44** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **2 lb/1000 gal** Reference: **AP-42, Table 1.3-7**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 1 of 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 2 of 7

1. Pollutant Emitted: **PM10**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **1.19** lbs/hr **5.22** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **50 % of PM** Reference: **See AP-42, Table 1.3-7**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 1 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 3 of 7

1. Pollutant Emitted: SO2
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 8.23 lbs/hr 3 tons/yr
6. Synthetically Limited? [x] Yes [ ] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 0.05 lb/MMBtu Reference: Based on Sulfur content of No2 distillate fuel oil
9. Emissions Method Code (check one): [ ] 1 [x] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: See Attachment A, Tables 2-3 and 2-4
11. Pollutant Potential/Estimated Emissions Comment: For all three boilers the maximum SO2 emissions are 41 TPY.

Emissions Unit Information Section 1 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: **Other**		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: **0.05 lb/MMBtu**		
4. Equivalent Allowable Emissions:	**8.23** lbs/hr	**3** tons/yr
5. Method of Compliance: **Fuel oil analysis**		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): **F.A.C. Rule 62-296.406 BACT Review and 40 CFR Part 60 New Source Performance Standards. The BACT requires natural gas to be the primary fuel and the No. 2 fuel oil to be a maximum of 0.05% Sulfur by weight. Under the primary fuel the emissions limit is 25 tons/year. If by factors beyond SCC the limit is exceeded based on the availability of natural gas then the limit shall be 41 tons per year.**		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 4 of 7

1. Pollutant Emitted: **NOx**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code: **024**
4. Secondary Control Device Code:
5. Potential Emissions: **34.94** lbs/hr **153.04** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **0.2 lb/MMBtu** Reference: **Federal NSPS**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [x] 5
10. Calculation of Emissions: **See Attachment A, Table 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 1 of 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:	**Rule**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**0.2 lb/MMBtu**
4. Equivalent Allowable Emissions:	**34.64** lbs/hr **153.04** tons/yr
5. Method of Compliance:	**CEM for NOx**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):	**40 CFR Part 60 Subpart Db New Source Performance Standards; 40 CFR 60.46b(e)(3)**

B.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	lbs/hr tons/yr
5. Method of Compliance:	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 5 of 7

1. Pollutant Emitted: CO
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 15.6 lbs/hr 68.33 tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 100 ppmvd Reference: Source test August 1994
9. Emissions Method Code (check one): [x] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: 53,541 acfm x 2116.8 lb_f/ft^2 x [(28/1545) lb_m - °R/ft - lb_f)] x 100 ppmvd/10^6 x 60 min/hr / [330 + 460] °R = 15.60 lb/hr
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 1 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 6 of 7

1. Pollutant Emitted: VOC
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **0.24** lbs/hr **1.07** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **0.2 lb/1000 gal** Reference: **AP-42 EPA(1991)**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment: **1.4 lb/MMscf for natural gas**

Emissions Unit Information Section 1 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 7 of 7

1. Pollutant Emitted: **HAPS**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **0.26** lbs/hr **1.17** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: Reference: **See Attachment A, Tables 2-4 and 2-5**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [x] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-4 and 2-5**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 1 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitations: Visible Emissions Limitation 1 of 2

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: EPA Method 9
5.	Visible Emissions Comment: Natural gas firing; based on BACT

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: EPA Method 9
5.	Visible Emissions Comment: No. 2 fuel oil firing; based on BACT

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

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

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System Continuous Monitor 1 of 1

1.	Parameter Code: NOx
2.	CMS Requirement: [X] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Servomex Model Number: 1491 Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment: CEMS for nitrogen oxides shall be operated and maintained in accordance with requirements of 40 CFR 60.48b.

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review persuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissons Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [x] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[x] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[ ] C	[ ] E	[ ] Unknown
	SO_2	[x] C	[ ] E	[ ] Unknown
	NO_2	[x] C	[ ] E	[ ] Unknown
4.	Baseline Emissions:			
	PM	lbs/hr		tons/yr
	SO_2	lbs/hr		tons/yr
	NO_2			tons/yr
5.	PSD Comment:			

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: SCC-EU1-I1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: Attachment A	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[X] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[ ] Attached, Document ID: _____	[X] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[X] Attached, Document ID: Attachment A	[ ] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

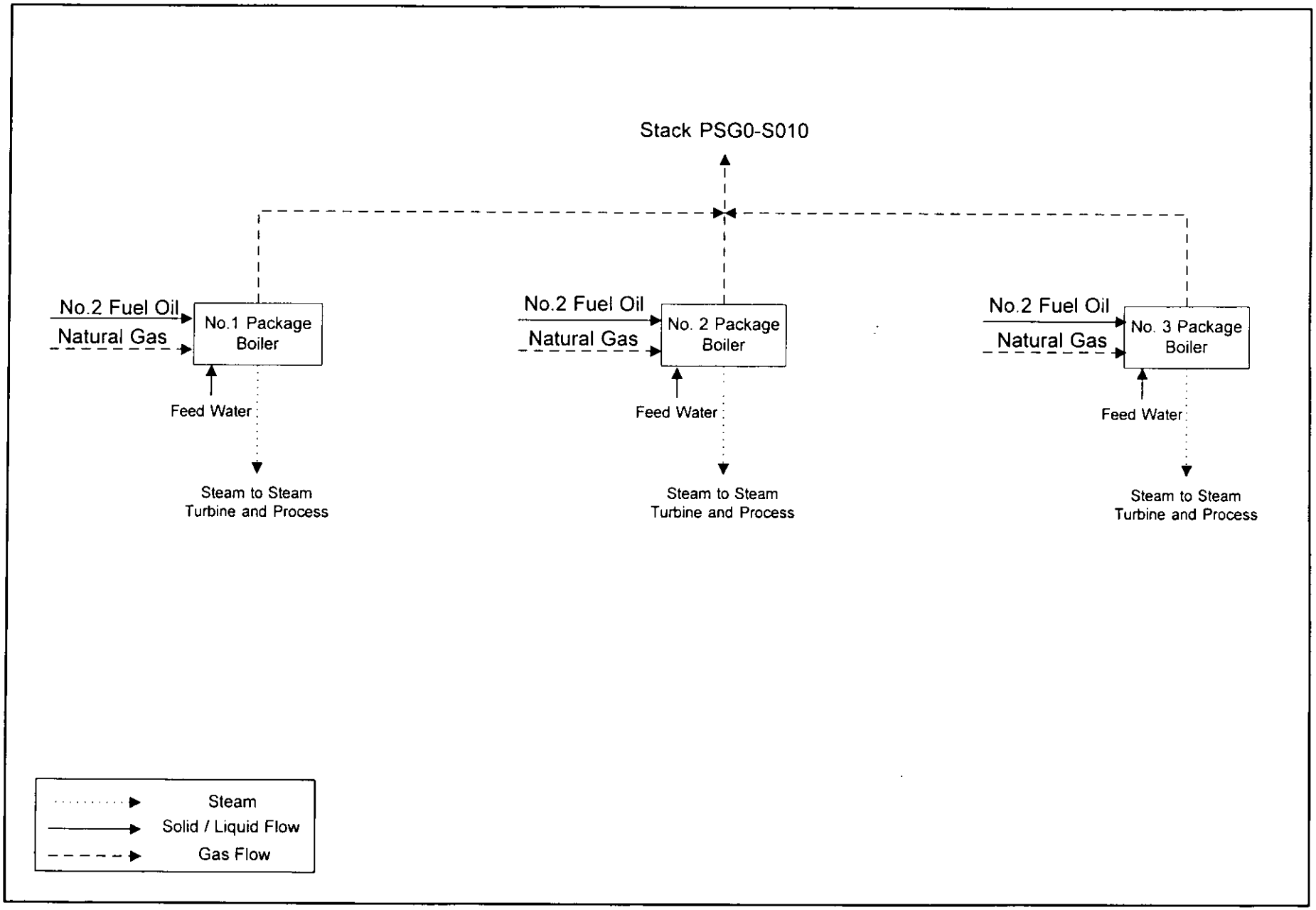


Figure SCC-EU1-I1		*Emission Unit:* Package Boilers *Process Area:* Utilities	KBN Engineering and Applied Sciences, Inc.
Stone Container Corporation	Jacksonville	*Filename:* PB.VSD *Latest Revision Date:* 5/17/95 06:15 PM	

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation

[ ] Attached, Document ID: _____ [x] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)

[ ] Attached, Document ID: _____ [x] Not Applicable

12. Enhanced Monitoring Plan

[ ] Attached, Document ID: _____ [x] Not Applicable

13. Identification of Additional Applicable Requirements

[ ] Attached, Document ID: _____ [x] Not Applicable

14. Acid Rain Permit Application

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: _____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: _____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: _____

[x] Not Applicable

Emissions Unit Information Section 2 of 3

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit..

Type of Emissions Unit Addressed in This Section

Check one:

[X] 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, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated 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.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section:

   No.2 Package Boiler

2. ARMS Identification Number: [ ] No Corresponding ID [ ] Unknown

   23

3. Emissions Unit Status Code:	4. Acid Rain Unit?	5. Emissions Unit Major Group SIC Code:
A	[ ] Yes [X] No	**26**

6. Initial Startup Date (DD-MON-YYYY):

7. Long-term Reserve Shutdown Date (DD-MON-YYYY):

8. Package Unit:
   Manufacturer: **ABB-Combustion Engineering**
   Model Number: **93104-20**

9. Generator Nameplate Rating: MW

10. Incinerator Information:

    Dwell Temperature: °F
    Dwell Time: seconds
    Incinerator Afterburner Temperature: °F

11. Emissions Unit Comment:

    This boiler vents with two other boiler units to one common stack.

Emissions Unit Control Equipment Information

A.

1. Description:

Low Nox Burners Burner Design

2. Control Device or Method Code: 024

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: **174.7** mmBtu/hr
2. Maximum Incineration Rate: lbs/hr tons/day
3. Maximum Process or Throughput Rate:
4. Maximum Production Rate: **125,000** **lb/hr steam**
5. Operating Capacity Comment: **164.5 MMBtu/hr maximum when firing No. 2 fuel oil**

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:			
24	hours/day,	**7**	days/week,
52	weeks/yr	**8760**	hours/yr

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

40 CFR 60, Subpart Db
62-210.300(1)
62-210.700
62-296.800(2)(a)3.
62-297.330
62-297.570

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram:

   PSGO-5010

2. Emission Point Type Code:

   [ ] 1 [x] 2 [ ] 3 [ ] 4

3. Descriptions of Emissions Points Comprising this Emissions Unit:

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

   22,26

5. Discharge Type Code:

   [ ] D [ ] F [ ] H [ ] P
   [ ] R [x] V [ ] W

6. Stack Height:	200	ft
7. Exit Diameter:	8	ft
8. Exit Temperature:	345	°F
9. Actual Volumetric Flow Rate:	53,366	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		ft

13. Emission Point UTM Coordinates:

Zone: 17 East (km): 441.8 North (km): 3365.6

14. Emission Point Comment:

Stack parameters above are for No. 2 fuel oil. Parameters for natural gas are: 330 °F; 53,541 acfm.

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate Information: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Package Boiler**	
2. Source Classification Code (SCC): **1-02-006-01**	
3. SCC Units: **million cubic feet burned**	
4. Maximum Hourly Rate: **0.174**	5. Maximum Annual Rate: **1,530.37**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.001**	8. Maximum Percent Ash: **0**
9. Million Btu per SCC Unit: **1,000**	
10. Segment Comment:	

Segment Description and Rate Information: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Package Boiler**	
2. Source Classification Code (SCC): **1-02-005-01**	
3. SCC Units: **thousand gallons burned**	
4. Maximum Hourly Rate: **1.192**	5. Maximum Annual Rate: **10,441.92**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.05**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **138**	
10. Segment Comment: **Maximum combined yearly rate for Boiler No. 1, No. 2 and No. 3 is 11,624,000 gal/year**	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 7

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **2.38** lbs/hr **10.44** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **2 lb/1000 gal** Reference: **AP-42 Table 1.3-7**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 2 of 3
Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 2 of 7

1. Pollutant Emitted: **PM10**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **1.19** lbs/hr **5.22** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **50 % of PM** Reference: **AP-42 Table 1.3-7**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 2 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 3 of 7

1. Pollutant Emitted: SO2
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 8.23 lbs/hr 3 tons/yr
6. Synthetically Limited? [x] Yes [ ] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 0.05 lb/MMBtu Reference: Based on Sulfur content of No2 distillate fuel oil
9. Emissions Method Code (check one): [ ] 1 [x] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: See Attachment A, Tables 2-3 and 2-4
11. Pollutant Potential/Estimated Emissions Comment: For all three boilers the maximum SO2 emissions are 41 TPY.

Emissions Unit Information Section 2 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: **Other**			
2. Future Effective Date of Allowable Emissions:			
3. Requested Allowable Emissions and Units: **0.05 lb/MMBtu**			
4. Equivalent Allowable Emissions:	**8.23** lbs/hr	**3**	tons/yr
5. Method of Compliance: **Fuel oil testing**			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): **F.A.C. Rule 62-296.406 BACT Review and 40 CFR Part 60 New Source Performance Standards. The BACT requires natural gas to be the primary fuel and the No. 2 fuel oil to be a maximum of 0.05% Sulfur by weight. Under the primary fuel the emissions limit is 25 tons/year. If by factors beyond SCC the limit is exceeded based on the availability of natural gas then the limit shall be 41 tons per year.**			

B.

1. Basis for Allowable Emissions Code:			
2. Future Effective Date of Allowable Emissions:			
3. Requested Allowable Emissions and Units:			
4. Equivalent Allowable Emissions:	lbs/hr		tons/yr
5. Method of Compliance:			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):			

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 4 of 7

1. Pollutant Emitted: NOx
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code: 024
4. Secondary Control Device Code:
5. Potential Emissions: 34.94 lbs/hr 153.04 tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 0.2 lb/MMBtu Reference: Federal NSPS
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [x] 5
10. Calculation of Emissions: See Attachment A, Tables 2-3 and 2-4
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 2 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: **Rule**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.2 lb/MMBtu**	
4. Equivalent Allowable Emissions:	**34.94** lbs/hr **153.04** tons/yr
5. Method of Compliance: **CEM for NOx**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): **40 CFR Part 60 Subpart Db New Source Performance Standards; 40 CFR 60.46b(e)(3)**	

B.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	lbs/hr tons/yr
5. Method of Compliance:	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 5 of 7

1. Pollutant Emitted: CO
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 15.6 lbs/hr 68.33 tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 100 ppmvd Reference: Source test August 1994
9. Emissions Method Code (check one): [x] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: 53,541 acfm x 2116.8 lbf/ft^2 x [(28 ÷ 1545) lbm - °R/ft - lbf] x 100 ppmvd/10^6 x 60 min/hr ÷ [330 + 460] °R = 15.60 lb/hr
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 2 of 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 6 of 7

1. Pollutant Emitted: VOC
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 0.24 lbs/hr 1.07 tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 0.2 lb/1000 gal Reference: AP-42 EPA(1991)
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: See Attachment A, Tables 2-3 and 2-4
11. Pollutant Potential/Estimated Emissions Comment: 1.4 lb/MMscf for natural gas

Emissions Unit Information Section 2 of 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 7 of 7

1. Pollutant Emitted: **HAPS**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **0.26** lbs/hr **1.17** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: Reference: **See Attachment A, Tables 2-4 and 2-5**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [x] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-4 and 2-5**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 2 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitations: Visible Emissions Limitation 1 of 2

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: EPA Method 9
5.	Visible Emissions Comment: Natural gas firing; based on BACT

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

1.	Visible Emissions Subtype: **VE**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: **EPA Method 9**
5.	Visible Emissions Comment: **No. 2 fuel oil firing; based on BACT**

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

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

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System Continuous Monitor 1 of 1

1.	Parameter Code: NOx
2.	CMS Requirement: [X] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Servomex Model Number: 1491 Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment: **CEMS for nitrogen oxides shall be operated and maintained in accordance with requirements of 40 CFR 60.48b.**

Continuous Monitoring System Continuous Monitor ____ of ____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

Continuous Monitoring System Continuous Monitor ____ of ____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review persuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissons Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [x] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[x] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[ ] C	[ ] E	[ ] Unknown
	SO_2	[x] C	[ ] E	[ ] Unknown
	NO_2	[x] C	[ ] E	[ ] Unknown
4.	Baseline Emissions:			
	PM	lbs/hr		tons/yr
	SO_2	lbs/hr		tons/yr
	NO_2			tons/yr
5.	PSD Comment:			

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: SCC-EU1-I1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: Attachment A	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[X] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[ ] Attached, Document ID: _____	[X] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[X] Attached, Document ID: Attachment A	[ ] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

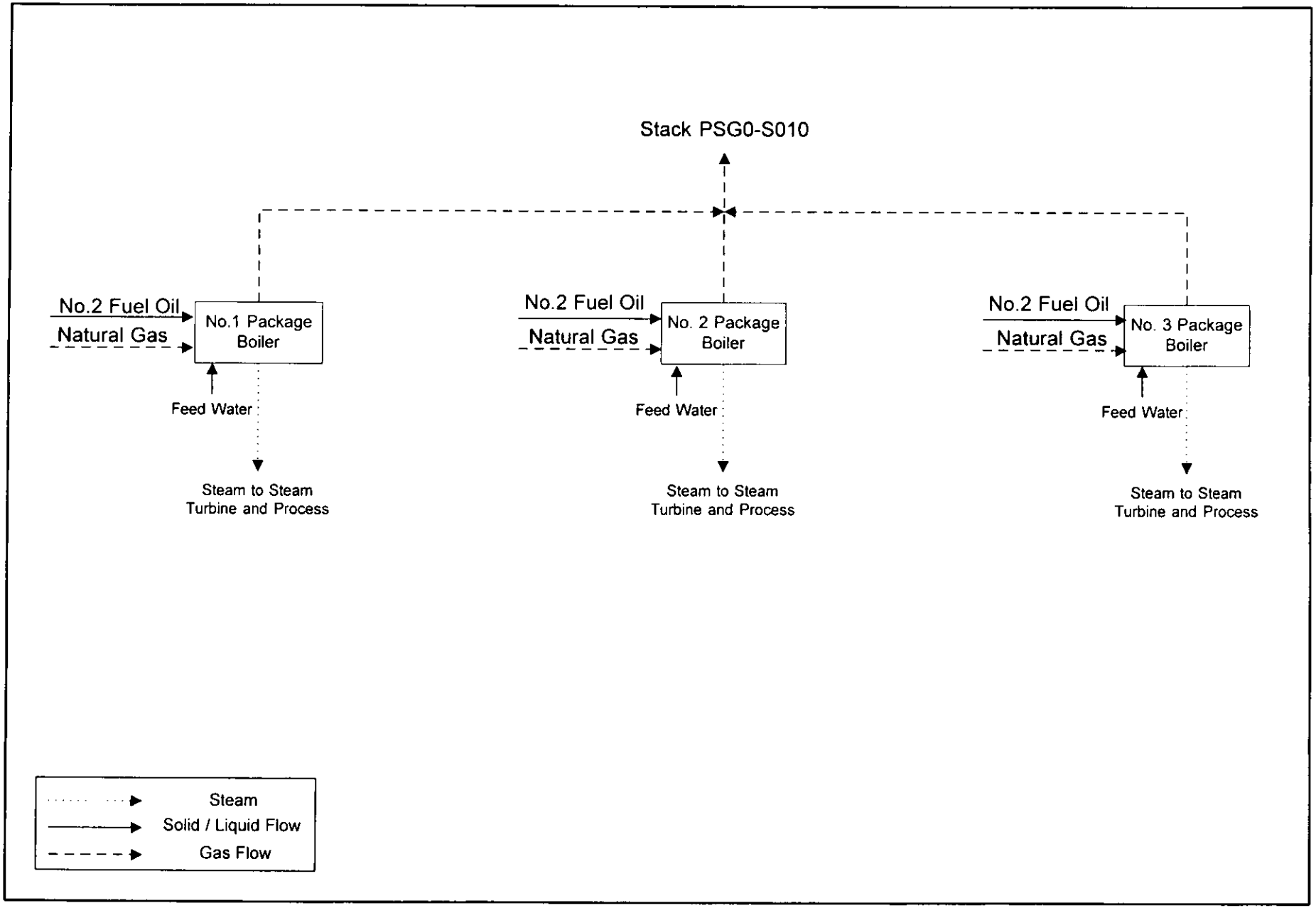


Figure SCC-EU1-I1		*Emission Unit:* Package Boilers	KBN Engineering and Applied Sciences, Inc.
		Process Area: Utilities	
Stone Container Corporation	Jacksonville	*Filename:* PB.VSD	
		Latest Revision Date: 5/17/95 06:15 PM	

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation [ ] Attached, Document ID: _____ [x] Not Applicable
11.	Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID: _____ [x] Not Applicable
12.	Enhanced Monitoring Plan [ ] Attached, Document ID: _____ [x] Not Applicable
13.	Identification of Additional Applicable Requirements [ ] Attached, Document ID: _____ [x] Not Applicable
14.	Acid Rain Permit Application [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [x] Not Applicable

Emissions Unit Information Section 3 of 3

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit..

Type of Emissions Unit Addressed in This Section

Check one:

[X] 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, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated 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.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section:

   No.3 Package Boiler

2. ARMS Identification Number: [ ] No Corresponding ID [ ] Unknown

   26

3. Emissions Unit Status Code:	4. Acid Rain Unit?	5. Emissions Unit Major Group SIC Code:
A	[ ] Yes [X] No	26

6. Initial Startup Date (DD-MON-YYYY):

7. Long-term Reserve Shutdown Date (DD-MON-YYYY):

8. Package Unit:
   Manufacturer: ABB-Combustion Engineering
   Model Number: 93104-20

9. Generator Nameplate Rating: MW

10. Incinerator Information:

    Dwell Temperature: °F
    Dwell Time: seconds
    Incinerator Afterburner Temperature: °F

11. Emissions Unit Comment:

    This boiler vents with two other boiler units to one common stack.

Emissions Unit Control Equipment Information

A.

1. Description:

Low NOx Burners Burner Design

2. Control Device or Method Code: 024

B.

1. Description:

2. Control Device or Method Code:

C.

1. Description:

2. Control Device or Method Code:

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: 174.7 mmBtu/hr
2. Maximum Incineration Rate: lbs/hr tons/day
3. Maximum Process or Throughput Rate:
4. Maximum Production Rate: 125,000 lb/hr steam
5. Operating Capacity Comment: 164.5 MMBtu/hr maximum when firing No. 2 fuel oil

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:			
24	hours/day,	7	days/week,
52	weeks/yr	8760	hours/yr

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

40 CFR 60, Subpart Db
62-210.300(1)
62-210.700
62-296.800(2)(a)3.
62-297.330
62-297.570

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate Information: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Package Boiler**	
2. Source Classification Code (SCC): **1-02-006-01**	
3. SCC Units: **million cubic feet burned**	
4. Maximum Hourly Rate: **0.1747**	5. Maximum Annual Rate: **1,530.37**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.001**	8. Maximum Percent Ash: **0**
9. Million Btu per SCC Unit: **1,000**	
10. Segment Comment:	

Segment Description and Rate Information: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): **Package Boiler**	
2. Source Classification Code (SCC): **1-02-005-01**	
3. SCC Units: **thousand gallons burned**	
4. Maximum Hourly Rate: **1.192**	5. Maximum Annual Rate: **10,441.92**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.05**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **138**	
10. Segment Comment: **Maximum combined yearly rate for Boiler No. 1, No. 2 and No. 3 is 11,624,000 gal/year**	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 7

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **2.38** lbs/hr **10.44** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **2 lb/1000 gal** Reference: **AP-42 Table 1.3-7**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 3 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 2 of 7

1. Pollutant Emitted: PM10
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 1.19 lbs/hr 5.22 tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 50 % of PM Reference: AP-42 Table 1.3-7
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 3 of 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

Emissions Unit Information Section 3 of 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 3 of 7

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **8.23** lbs/hr **3** tons/yr
6. Synthetically Limited? [x] Yes [ ] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **0.05 lb/MMBtu** Reference: **Based on Sulfur content of No2 distillate fuel oil**
9. Emissions Method Code (check one): [ ] 1 [x] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment: **For all three boilers the maximum SO2 emissions are 41 TPY.**

Emissions Unit Information Section 3 of 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: **Other**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.05 lb/MMBtu**	
4. Equivalent Allowable Emissions:	**8.23** lbs/hr **36** tons/yr
5. Method of Compliance: **Fuel oil testing**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): **F.A.C. Rule 62-296.406 BACT Review and 40 CFR Part 60 New Source Performance Standards. The BACT requires natural gas to be the primary fuel and the No. 2 fuel oil to be a maximum of 0.05% Sulfur by weight. Under the primary fuel the emissions limit is 25 tons/year. If by factors beyond SCC the limit is exceeded based on the availability of natural gas then the limit shall be 41 tons per year.**	

B.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	lbs/hr tons/yr
5. Method of Compliance:	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 4 of 7

1. Pollutant Emitted: **NOx**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code: **024**
4. Secondary Control Device Code:
5. Potential Emissions: **34.94** lbs/hr **153.04** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: **0.2 lb/MMBtu** Reference: **Federal NSPS**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [x] 5
10. Calculation of Emissions: **See Attachment A, Tables 2-3 and 2-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 3 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code: **Rule**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.2 lb/MMBtu**	
4. Equivalent Allowable Emissions:	**34.94** lbs/hr **153.04** tons/yr
5. Method of Compliance: **CEM for NOx**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): **40 CFR Part 60 Subpart Db New Source Performance Standards; 40 CFR 60.46b(e)(3)**	

B.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	lbs/hr tons/yr
5. Method of Compliance:	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):	

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 5 of 7

1. Pollutant Emitted: CO
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 15.6 lbs/hr 68.33 tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 100 ppmvd Reference: Source test August 1994
9. Emissions Method Code (check one): [x] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: 53,541 acfm x 2,116.8 lbf/ft^2 x [(28 ÷ 1545)lbm - °R/ft - lbf] x 100 ppmvd/10^6 x 60 min/hr ÷ [330 + 460] °R = 15.60 lb/hr
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 3 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

Emissions Unit Information Section 3 of 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 6 of 7

1. Pollutant Emitted: VOC
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: 0.24 lbs/hr 1.07 tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: 0.2 lb/1000 gal Reference: AP-42 EPA(1991)
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [x] 3 [ ] 4 [ ] 5
10. Calculation of Emissions: See Attachment A, Tables 2-3 and 2-4
11. Pollutant Potential/Estimated Emissions Comment: 1.4 lb/MMscf for natural gas

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 7 of 7

1. Pollutant Emitted: **HAPS**
2. Total Percent Efficiency of Control: %
3. Primary Control Device Code:
4. Secondary Control Device Code:
5. Potential Emissions: **0.26** lbs/hr **1.17** tons/yr
6. Synthetically Limited? [ ] Yes [x] No
7. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
8. Emission Factor: Reference: **See Attachment A, Tables 2-4 and 2-5**
9. Emissions Method Code (check one): [ ] 1 [ ] 2 [ ] 3 [ ] 4 [x] 5
10. Calculation of Emissions: **See Tables A-3 and A-4**
11. Pollutant Potential/Estimated Emissions Comment:

Emissions Unit Information Section 3 of 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

Emissions Unit Information Section 3 **of** 3

Allowable Emissions (Pollutant identification on front page)

A.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lbs/hr	tons/yr
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitations: Visible Emissions Limitation 1 of 2

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: EPA Method 9
5.	Visible Emissions Comment: Natural gas firing; based on BACT

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: EPA Method 9
5.	Visible Emissions Comment: No. 2 fuel oil firing; based on BACT

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

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

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (fields 1-6) must be completed for each monitoring system required.

Continuous Monitoring System Continuous Monitor 1 of 1

1.	Parameter Code: NOx
2.	CMS Requirement: [X] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Servomex Model Number: 1491 Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment: (CEMS) for nitrogen shall be operated and maintained in accordance with requirements of 40 CFR 60.48(b).

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

Continuous Monitoring System Continuous Monitor _____ of _____

1.	Parameter Code:
2.	CMS Requirement: [ ] Rule [ ] Other
3.	Monitor Information: Monitor Manufacturer: Model Number: Serial Number:
4.	Installation Date (DD-MON-YYYY):
5.	Performance Specification Test Date (DD-MON-YYYY):
6.	Continuous Monitor Comment:

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review persuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissons Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

   If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

   [x] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[ ] C	[ ] E	[ ] Unknown
	SO_2	[X] C	[ ] E	[ ] Unknown
	NO_2	[X] C	[ ] E	[ ] Unknown
4.	Baseline Emissions:			
	PM	lbs/hr		tons/yr
	SO_2	lbs/hr		tons/yr
	NO_2			tons/yr
5.	PSD Comment:			

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: SCC-EU1-I1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: Attachment A	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[X] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[ ] Attached, Document ID: _____	[X] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[X] Attached, Document ID: Attachment A	[ ] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

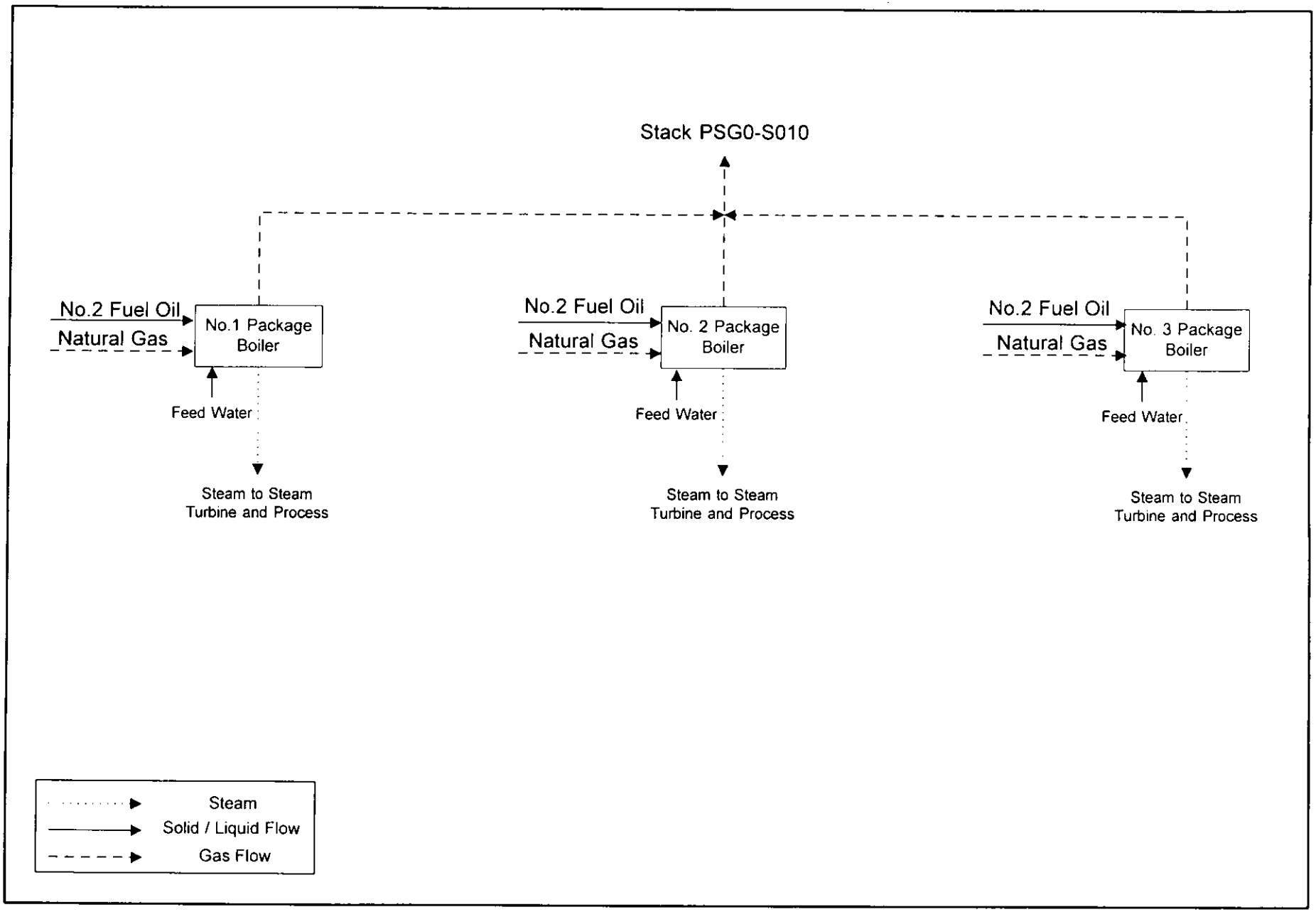


Figure SCC-EU1-I1		*Emission Unit:* Package Boilers	KBN Engineering and Applied Sciences, Inc.
		Process Area: Utilities	
Stone Container Corporation	Jacksonville	*Filename:* PB.VSD	
		Latest Revision Date: 5/17/95 06:15 PM	

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation

[ ] Attached, Document ID: _____ [x] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)

[ ] Attached, Document ID: _____ [x] Not Applicable

12. Enhanced Monitoring Plan

[ ] Attached, Document ID: _____ [x] Not Applicable

13. Identification of Additional Applicable Requirements

[ ] Attached, Document ID: _____ [x] Not Applicable

14. Acid Rain Permit Application

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: _____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: _____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: _____

[x] Not Applicable

ATTACHMENT A

ATTACHMENT A

1.0 INTRODUCTION

Stone Container Corporation (SCC), formerly Seminole Kraft Corporation, currently operates a 100-percent recycled fiber paper mill facility in Jacksonville, Florida. For several years, SCC planned for the shutdown of its kraft pulping facilities and for the conversion to a 100-percent recycled fiber facility. This conversion was completed in September 1992 with the shutdown of all kraft pulping facilities which produced kraft paper from virgin wood pulp. Sources of air emissions associated with the kraft pulping operation included three recovery boilers and associated smelt dissolving tanks, three lime kilns, a lime slaker, and the pulp digesters and multiple-effect evaporators. Two bark boilers and three power boilers also operated in support of the kraft pulping facility by supplying steam for the process. These five boilers were shutdown in March, 1994, when the U.S. Generating Company Cedar Bay facility began commercial operation.

The Cedar Bay cogeneration facility, licensed under the Florida Power Plant Site Certification Act (FPPSCA), is located adjacent to the existing SCC facility. This coal-fired power plant, now operating, provides part of the steam required for the recycle fiber facility. Under the provisions of the site certification for the power plant, the former two bark boilers and three power boilers at SCC were to be taken out of service and the permits surrendered once the Cedar Bay facility began commercial operation. These shutdowns provided creditable emission reductions to the Cedar Bay facility under the federal prevention of significant deterioration (PSD) new source review regulations. The shutdown of the SCC recovery boilers, smelt tanks, lime kilns and lime slaker provided SCC with creditable emission reductions under the PSD regulations.

The recycle fiber facility requires additional steam beyond that provided by the Cedar Bay facility. As a result, three new package boilers were installed by SCC to provide this necessary steam. These package boilers are fueled with natural gas and very low sulfur fuel oil. A federal and state PSD construction permit for the three package boilers was issued in July, 1993 (AC16-222359; PSD-FL-198) (draft and final permits are attached in Appendix A).

An operating permit (AO16-262702) was issued for the package boilers on February 24, 1995. However, this permit is currently being held in abeyance pending resolution of several issues.

Based on discussions with FDEP, an air construction permit is being submitted to request certain revisions to operating permit as well as the previously issued PSD permit. The requested revisions to the maximum emissions for the new package boilers will constitute a minor modification at a major stationary facility under current federal and Florida PSD regulations. This report addresses the requirements of the PSD review procedures, pursuant to rules and regulations implementing the Clean Air Act (CAA) Amendments of 1977.

This application contains two additional sections. A complete description of the project, including air emission rates, is presented in Section 2.0. The air quality requirements for the project and new source review applicability are discussed in Section 3.0. Proposed revisions to the previously issued construction permit are described in Section 4.0.

2.0 PROJECT DESCRIPTION

2.1 GENERAL

SCC currently operates a 100 percent recycled fiber paper mill located in Jacksonville, Florida (see Figure 2-1). SCC has shut down the kraft pulping operation and former boilers and converted to a 100-percent recycle fiber paper mill facility. Sources of air emissions associated with the kraft pulping operation included three recovery boilers and associated smelt dissolving tanks, three lime kilns, a lime slaker, and the batch pulp digesters and multiple-effect evaporators. Two bark boilers and three power boilers were also operated to provide steam for the process. These five boilers were all shutdown when the Cedar Bay facility began commercial operation in March, 1994.

Cedar Bay holds a site certification and PSD permit for a coal-fired cogeneration facility to be located adjacent to the SCC site. This facility, which was licensed under FPPSCA, and is now operating, and provides part of the steam required for the SCC recycle fiber facility. Under the provisions of the site certification for the power plant, the shutdowns of the former two bark boilers and three power boilers at SCC provided creditable emission reductions to Cedar Bay under the federal PSD new source review regulations.

The batch digesters, evaporators, recovery boilers, smelt tanks, lime kilns, and lime slaker at SCC were all shut down in September, 1992. The creditable emission reductions due to these shutdowns documented in SCC's letter dated January 28, 1993 (refer to Appendix A). The creditable emission decreases are presented in Section 3.0, Source Applicability.

The recycle fiber facility requires additional steam beyond that provided by the Cedar Bay facility. In order to provide this steam, SCC installed three package boilers. These package boilers are fueled with natural gas and very low sulfur No. 2 fuel oil.

SCC is proposing certain revisions to the recently issued operating permit as well as the previously issued PSD construction permit. These include allowing maximum steam generation from the three boilers at all times, and increasing the maximum hourly and annual nitrogen oxides (NO_x) emission rate for each boiler to reflect the maximum allowable emission rate of 0.2 lb/MMBtu and the maximum allowable heat input rate. Flexibility in steam production is desired by SCC in the case of a shutdown by Cedar Bay. If such shutdown is for an extended period,

Figure 2-1
Site Location of Stone Container Corporation

SCC would need to makeup the reduction in steam through operation of the three package boilers. Proposed revisions to the specific conditions of these permits are presented in Section 4.0.

Each of the three package boilers are rated at 125,000 lb/hr steam at 650 psig and 750°F. Maximum heat input to each boiler is 174.7 MMBtu/hr when firing natural gas, and 164.5 MMBtu/hr when firing No. 2 fuel oil. Design parameters for each package boiler are presented in Table 2-1.

2.2 EMISSIONS OF REGULATED POLLUTANTS

The package boilers are subject to the federal New Source Performance Standards (NSPS) for industrial boilers since the maximum heat input to each boiler is greater than 100 MMBtu/hr. The NSPS are contained in the Code of Federal Regulations (CFR), Title 40, Part 60, Subpart Db, and are summarized in Table 2-2. The NSPS limit emissions of NO_x to 0.2 lb/MMBtu for both natural gas firing and distillate fuel oil firing in high heat release rate boilers. The NSPS defines a high heat release rate boiler as a boiler heat release rate of greater than 70,000 Btu/hr-ft^3. SO_2 emissions are limited to 0.50 lb/MMBtu for sources which do not use an add-on SO_2 control device, such as a flue gas desulfurization system. However, the No. 2 fuel oil burned in the package boilers contains 0.05 percent sulfur (0.05 lb/MMBtu) or less. There is no PM limit under NSPS for natural gas or distillate fuel oil firing.

The maximum estimated hourly emissions of regulated pollutants from the package boilers are presented in Table 2-3. Maximum estimated annual emissions are presented in Table 2-4. The maximum annual emissions for certain pollutants are limited based on total annual fuel oil firing equivalent to 1.604×10^{12} Btu/yr (equivalent to 11,624,000 gal/yr). This limitation ensures that the maximum annual SO_2 emission due to all three boilers does not exceed 41 tons per year (TPY). There is no restriction on annual natural gas firing in the boilers.

For No. 2 fuel oil firing, total suspended particulate matter [PM(TSP)] emissions and emissions of particulate matter with an aerodynamic particle size diameter of 10 micrometers (μm) or less (PM10) are based on EPA Publication AP-42 factors for uncontrolled oil-fired boilers. The AP-42 data show that 50 percent of the PM(TSP) emissions are of PM10 size.

Table 2-1. Design Parameters for New Package Boilers

Parameter	Units	No. 2 Fuel Oil (per boiler)	Natural Gas (per boiler)
Steam Flow	lb/hr	125,000	125,000
Steam Pressure	psi	650	650
Steam Temperature	°F	709	750
Heat Input	MMBtu/hr	164.5	174.7
Furnace Volume	ft^3	1,674	1,674
Heat Release Rate	Btu/hr-ft^3	98,268	104,361
Fuel Heating Value	Btu/gal	138,960	--
	Btu/lb	19,300 [a]	--
	Btu/scf	--	1,000
Fuel Flow	lb/hr	8,523	--
	gal/hr	1,184	
	scf/hr	--	174,700
Exhaust Gas:			
Temperature	°F	345	330
Moisture	%	10	10
Flow Rate	lb/hr	158,040	161,570
	acfm	53,366	53,541
	scfm	31,502	31,606
Common Stack [b]			
Diameter	ft	8.00	8.00
Velocity	ft/s	53.08	53.26
Height	ft	200	200

[a] Density of No. 2 fuel oil is approximately 7.2 lb/gal.
[b] All three boilers will exhaust into a common stack. Velocity shown is total all three boilers.

Table 2-2. NSPS for Natural Gas/Oil-Fired Steam-Generating Units With Heat Input Between 100 x 10^6 and 250 x 10^6 Btu/hr

Pollutant	Fuel	Annual Capacity Factor (%)	Standard
SO_2	Fuel oil	31-100 on oil	0.80 lb/10^6 Btu; 90% reduction[a]
	Fuel oil	0-30 on oil	0.50 lb/10^6 Btu
	Natural gas	0-100 on gas	No SO_2 limit
PM	Fuel oil	0-100	a. 0.10 lb/10^6 Btu if a conventional or emerging SO_2 control technology is used b. no PM limit if an SO_2 control technology is not used
	Natural gas	0-100	No PM limit
Opacity	Fuel oil or natural gas	0-100	20% opacity, except 27% for one 6-minute period per hour
NO_x	Distillate oil or natural gas	11-100 on oil or gas	Distillate oil or natural gas a. Low heat release rate-- 0.10 lb/10^6 Btu b. High heat release rate-- 0.20 lb/10^6 Btu
	Distillate oil	0-10 on oil	No NO_x standard

Note: lb/10^6 Btu = pounds per million British thermal units.
NO_x = nitrogen oxides.
SO_2 = sulfur dioxide.

[a] Percentage reduction requirement does not apply if burning very-low-sulfur oil (<0.50 lb/10^6 Btu).

Source: 40 CFR 60, Subpart Db.

Table 2-3. Maximum Emissions per Package Boiler at Stone Container Corporation, Jacksonville

Pollutant	No 2 Fuel Oil (0.05%)					Natural Gas					Maximum Annual Emissions per Boiler (TPY)
	Emission Factor	Ref	Activity Factor	Maximum Hourly Emissions (lb/hr)	Equivalent Emission Rate (lb/MMBtu)	Emission Factor	Ref	Activity Factor	Maximum Hourly Emissions (lb/hr)	Equivalent Emission Rate (lb/MMBtu)	
Particulate (PM)	2 lb/1000 gal	1	1.192 1000 gal/hr	2.38	0.014	5 lb/MM scf	1	0.1747 MM scf/hr	0.87	0.0050	10.44
Particulate (PM10)	50% of PM	1	-- --	1.19	0.0072	5 lb/MM scf	1	0.1747 MM scf/hr	0.87	0.0050	5.22
Sulfur dioxide	0.05 lb/MMBtu	2	164.5 MMBtu/hr	8.23	0.05	0.6 lb/MM scf	1	0.1747 MM scf/hr	0.10	6.0E-04	36.03
Nitrogen oxides	0.2 lb/MMBtu	4	164 5 MMBtu/hr	32.90	0.20	0.2 lb/MMBtu	4	174.7 MMBtu/hr	34.94	0.20	153 04
Carbon monoxide	100 ppmvd	7	53,366 acfm	15.55	0.095	100 ppmvd	7	53,541 acfm	15.60	0.089	68.33
VOC	0.2 lb/1000 gal	1	1.192 1000 gal/hr	0.24	1.45E-03	1.4 lb/MM scf	1	0.1747 MM scf/hr	0.24	1.40E-03	1.07
Total reduced sulfur	-- --		-- --	--	--	-- --		-- --	--	--	--
Sulfuric acid mist	0.1225 lb/1000 gal	8	1.192 1000 gal/hr	0.15	8.9E-04	3.4E-02 lb/MM scf	3	0.1747 MM scf/hr	0.0059	3.4E-05	0.64
Hydrogen Sulfide	-- --		-- --	--	--	-- --		-- --	--	--	--
Lead-Total	8.9E-06 lb/MMBtu	1	164 5 MMBtu/hr	0.0015	8.9E-06	4.0E-07 lb/MMBtu	5	174.7 MMBtu/hr	7.0E-05	4.0E-07	0.0064
Beryllium	2 5E-06 lb/MMBtu	1	164.5 MMBtu/hr	4.1E-04	2.5E-06	1.0E-08 lb/MMBtu	5	174.7 MMBtu/hr	1.7E-06	1.0E-08	0.0018
Mercury	3.0E-06 lb/MMBtu	1	164.5 MMBtu/hr	4.9E-04	3 0E-06	8.0E-10 lb/MMBtu	5	174.7 MMBtu/hr	1.4E-07	8 0E-10	0.0022
Fluorides	3 2E-05 lb/MMBtu	6	164.5 MMBtu/hr	0.0053	3.2E-05	-- --		-- --	--		0.023
Asbestos	-- --		-- --	--		-- --		-- --	--		--
Vinyl Chloride	-- --		-- --	--		-- --		-- --	--		--

1. Compilation of Air Pollutant Emission Factors, AP-42 (EPA, 1991) Tables 1 3-2, 1 3-4 1.3-7, 1.3-11, 1.4-1, 1.4-2, 1 4-3.
2. Based on sulfur content of No 2 distillate fuel oil and NSPS.
3. Based on similar derivation of sulfuric acid mist from AP-42 for fuel oil. 5% of SO2 becomes SO3 then take into account the ratio of sulfuric acid mist and sulfate molecular weights (98/80).
4 Equivalent to NSPS for Industrial Boilers, 40 CFR 60, Subpart Db.
5 Based On EPRI "Electric Utility Trace Substances Synthesis Report" for gas fired boilers, pg 3-19
6 Emissions Assessment of Conventional Stationary Combustion Sources: Volume V. Industrial Combustion Sources -Uncontrolled Fuel Oil Combustion. (EPA-600/7-81-003c, Table 18, 1981).
7. Test Data August 1994 for Seminole Kraft Package Boilers indicated 48 ppm or less; 100 ppm used to be conservative.
8. Sulfuric acid mist emission factor derived from SO3 factor in AP-42 taking into account the of ratio of sulfuric acid mist and sulfate molecular weights (98/80).

Table 2-4. Maximum Emissions from all Package Boilers at Stone Container Corporation, Jacksonville

Pollutant	No.2 Fuel Oil (0.05%)		Natural Gas		Total Annual Emissions (TPY)
	Emission Factor	Activity Factor ^a	Emission Factor	Activity Factor^b	
Particulate (PM)	0.014 lb/MMBtu	1,604,166 MMBtu/yr	0.0050 lb/MMBtu	2,986,074 MMBtu/yr	19.09
Particulate (PM10)	0.0072 lb/MMBtu	1,604,166 MMBtu/yr	0.0050 lb/MMBtu	2,986,074 MMBtu/yr	9.54
Sulfur dioxide	0.05 lb/MMBtu	1,604,166 MMBtu/yr	6.0E-04 lb/MMBtu	2,986,074 MMBtu/yr	41.00
Nitrogen oxides	0.20 lb/MMBtu	0 MMBtu/yr	0.20 lb/MMBtu	4,591,116 MMBtu/yr	459.11
Carbon monoxide	0.095 lb/MMBtu	1,604,166 MMBtu/yr	0.089 lb/MMBtu	2,986,074 MMBtu/yr	209.14
VOC	1.45E-03 lb/MMBtu	1,604,166 MMBtu/yr	1.40E-03 lb/MMBtu	2,986,074 MMBtu/yr	3.25
Total reduced sulfur	-- --	-- --	-- --	-- --	--
Sulfuric acid mist	8.9E-04 lb/MMBtu	1,604,166 MMBtu/yr	3.4E-05 lb/MMBtu	2,986,074 MMBtu/yr	0.76
Hydrogen Sulfide	-- --	-- --	-- --	-- --	--
Lead-Total	8.9E-06 lb/MMBtu	1,604,166 MMBtu/yr	4E-07 lb/MMBtu	2,986,074 MMBtu/yr	0.0077
Beryllium	2.5E-06 lb/MMBtu	1,604,166 MMBtu/yr	1E-08 lb/MMBtu	2,986,074 MMBtu/yr	0.0020
Mercury	3.0E-06 lb/MMBtu	1,604,166 MMBtu/yr	8E-10 lb/MMBtu	2,986,074 MMBtu/yr	0.0024
Fluorides	3.2E-05 lb/MMBtu	1,604,166 MMBtu/yr	-- --	-- --	0.026
Asbestos	-- --	-- --	-- --	-- --	--
Vinyl Chloride	-- --	-- --	-- --	-- --	--

^a Where fuel oil firing results in highest emissions, represents maximum total annual oil firing, with remainder of heat input due to natural gas firing. Otherwise highest emissions due to 100% natural gas firing.

^b Where natural gas results in highest emissions, represents maximum total annual natural gas firing. Otherwise highest emissions due to maximum fuel oil firing with remainder of heat input value due to natural gas.

The fuel oil burned in the package boilers will be a No. 2 fuel oil with a maximum sulfur content of 0.05 percent, equivalent to 0.05 lb/MMBtu, to meet the NSPS. In addition, as described above, total annual fuel oil consumption will be limited to 11,624,000 gal/yr.

Emissions of NO_x for fuel oil burning are based on a factor of 0.2 lb/MMBtu, which is equivalent to federal NSPS for new oil-fired boilers with a high heat release rate and firing distillate oil or natural gas. The design heat release rate of the boilers is 98,268 Btu/hr-ft^3 for No. 2 fuel oil and 104,361 Btu/hr-ft^3 for natural gas, which classifies the boilers as high heat release rate boilers.

Emissions of VOC due to fuel oil firing are based on the AP-42 factors for distillate-oil-fired boilers (see Appendix B). Carbon monoxide (CO) emissions for No. 2 distillate oil firing are based upon a maximum CO concentration of 100 ppm in the exhaust gases, based upon source testing of the boilers. The equivalent CO emission rate is 0.093 lb/MMBtu.

Emissions due to natural gas-firing are based on AP-42 factors, except in the case of NO_x and CO. For NO_x, maximum gas-firing emissions are based on a limit of 0.2 lb/MMBtu, which is equivalent to the federal NSPS for high heat release rate boilers. CO emissions due to natural gas burning are based on a maximum of 100 ppm CO in the exhaust gases, equivalent to 0.089 lb/MMBtu.

Emissions of other PSD regulated pollutants are based on published emission factors, as indicated in the footnotes to Table 2-3. As shown in the table, fuel oil burning in the package boilers results in the maximum emissions for PM, PM10, and SO_2, whereas natural gas burning results in maximum emissions of NO_x, CO, and VOC.

2.3 HAZARDOUS AIR POLLUTANTS

Estimates of maximum hourly and annual emissions of hazardous air pollutants (HAPs) are presented in Table 2-5 and Table 2-6, respectively. For distillate fuel oil firing, emission factors were found in EPA's compilation of toxic air pollutant emission factors (EPA, 1990), the emissions assessment document for industrial combustion sources (EPA, 1981), and other sources. The emission factors and resulting emission rates are very low. Only a few emission factors for HAPs due to natural gas firing were found in the literature.

Table 2-5. Maximum HAP Emissions from Package Boilers at Stone Container Corporation, Jacksonville

Pollutant	Emission Factor (lb/MMBtu) Gas	Ref.	No. 2 Oil	Ref.	Activity Factor ** (MMBTU/hr) per Boiler Gas	No. 2 Oil	Maximum Gas Hourly Emissions per Boiler (lb/hr)	Maximum No. 2 Oil Hourly Emissions per Boiler (lb/hr)	Maximum Annual Emissions per Boiler (TPY)
Acetaldehyde	ND		ND		174.7	164.5	ND	ND	ND
Acetophenone	ND		ND		174.7	164.5	ND	ND	ND
Acrolien	ND		ND		174.7	164.5	ND	ND	ND
Antimony	ND		4.6E-05	3*	174.7	164.5	0	0.0076	0.033
Arsenic	2.3E-07	6	4.2E-06	3	174.7	164.5	4.0E-05	6.9E-04	0.0030
Benzene	8.0E-07	6	ND		174.7	164.5	1.4E-04	ND	6.1E-04
Beryllium	1.0E-08	6	2.5E-06	3	174.7	164.5	1.7E-06	4.1E-04	0.0018
Cadmium	4.0E-08	6	1.1E-05	3	174.7	164.5	7.0E-06	0.0018	0.0079
Carbon Disulfide	ND		ND		174.7	164.5	ND	ND	ND
Carbon Tetrachloride	ND		ND		174.7	164.5	ND	ND	ND
Chlorine	ND		3.2E-04	2*	174.7	164.5	ND	0.052	0.23
Chloroform	ND		ND		174.7	164.5	ND	ND	ND
Chromium	1.1E-06	6	6.7E-05	3	174.7	164.5	1.9E-04	0.011	0.048
Chromium+6	ND		4.0E-06	4	174.7	164.5	ND	6.6E-04	0.0029
Cobalt	8.0E-08	6	1.2E-04	3*	174.7	164.5	1.4E-05	0.020	0.087
cumene	ND		ND		174.7	164.5	ND	ND	ND
Dibutylphthalate	ND		ND		174.7	164.5	ND	ND	ND
Ethyl Benzene	ND		ND		174.7	164.5	ND	ND	ND
Formaldehyde	3.4E-05	6	4.1E-04	1	174.7	164.5	0.0059	0.067	0.29
n-Hexane	ND		ND		174.7	164.5	ND	ND	ND
Hydrochloric Acid	ND		3.2E-04	2*	174.7	164.5	ND	0.052	0.23
Lead-Total	4.0E-07	6	8.9E-06	3	174.7	164.5	7.0E-05	0.0015	0.0064
Manganese	4.0E-07	6	1.4E-05	3	174.7	164.5	7.0E-05	0.0023	0.010
Mercury	8.0E-10	6	3.0E-06	3	174.7	164.5	1.4E-07	4.9E-04	0.0022
Methanol	ND		ND		174.7	164.5	ND	ND	ND
Methyl Ethyl Ketone	ND		ND		174.7	164.5	ND	ND	ND
Methyl Isobutyl Ketone	ND		ND		174.7	164.5	ND	ND	ND
Methylene Chloride	ND		ND		174.7	164.5	ND	ND	ND
Naphthalene	ND		ND		174.7	164.5	ND	ND	ND
Nickel	2.4E-06	6	1.7E-04	3	174.7	164.5	4.2E-04	0.028	0.12
Phenols	ND		ND		174.7	164.5	ND	ND	ND
Phosphorus	ND		5.8E-05	2*	174.7	164.5	ND	0.0096	0.042
Polycyclic Organic Matter	ND		2.2E-05	1	174.7	164.5	ND	0.0036	0.016
Selenium	ND		3.8E-05	3*	174.7	164.5	ND	0.0063	0.027
Styrene	ND		ND		174.7	164.5	ND	ND	ND
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	1.2E-10	6	UD	5*	174.7	164.5	2.1E-08	ND	9.2E-08
Toluene	1.0E-05	6	ND		174.7	164.5	0.0017	ND	0.0077
1,1,1 Trichlorethane (Methyl Chloroform)	ND		ND		174.7	164.5	ND	ND	ND
Trichlorethene	ND		ND		174.7	164.5	ND	ND	ND
Xylenes	ND		ND		174.7	164.5	ND	ND	ND
Total HAPs							0.0086	0.26	1.17

References

1 Based on average "Emission factors for Nitrous Oxide, Polycyclic Organic Matter, and Formaldehyde from No 2 Fuel Oil Combustion" - uncontrolled combustion (AP-42, Table 1.3-9, July 1993)

2. Emissions Assessment of Conventional Stationary Combustion Sources: Volume V. Industrial Combustion Sources- uncontrolled combustion (Assuming that chlorine exists as half HCl and half as Cl) (EPA-600/7-81-003c, Table 18, 1981).

3. Based on average emission factor "Emission factors for trace elements from fuel oil combustion sources" - uncontrolled combustion. (AP-42, Table 1.3-11, July 1993).

4. Based on "Emission data for utility boilers firing residual fuel oil" - stack test data from the California Utility Boiler Study. (NCASI Technical Bulletin No 650, Table 4b, June 1993).

5 Toxic Air Pollutant Emission Factors, Second Edition, 1990. - Oil combustion emissions sampled before emission control units. (EPA-450/2-90-011)

6. Based On EPRI "Electric Utility Trace Substances Synthesis Report" for gas fired boilers, pg 3-19

Footnotes:

* note: value is conservative estimate - using No 6 Fuel Oil emission factor.

** Activity factor is based on maximum allowable heat input in MMBtu permitted for the Package Boiler.

ND = No Data

Table 2-6. Maximum HAP Emissions from Package Boilers at Stone Container Corporation, Jacksonville

Pollutant	Emission Factor (lb/MMBtu) Gas	Ref.	No. 2 Oil	Ref.	Activity Factor ** (MMBTU/yr) Total for Facility Gas	No. 2 Oil	Total Annual Emissions (TPY)
Acetaldehyde	ND		ND		2,986,074	1,604,166	ND
Acetophenone	ND		ND		2,986,074	1,604,166	ND
Acrolien	ND		ND		2,986,074	1,604,166	ND
Antimony	ND		4.6E-05	3*	2,986,074	1,604,166	0.037
Arsenic	2.3E-07	6	4.2E-06	3	2,986,074	1,604,166	0.0037
Benzene	8.0E-07	6	ND		2,986,074	1,604,166	0.0012
Beryllium	1.0E-08	6	2.5E-06	3	2,986,074	1,604,166	0.002
Cadmium	4.0E-08	6	1.1E-05	3	2,986,074	1,604,166	0.0089
Carbon Disulfide	ND		ND		2,986,074	1,604,166	ND
Carbon Tetrachloride	ND		ND		2,986,074	1,604,166	ND
Chlorine	ND		3.2E-04	2*	2,986,074	1,604,166	0.26
Chloroform	ND		ND		2,986,074	1,604,166	ND
Chromium	1.1E-06	6	6.7E-05	3	2,986,074	1,604,166	0.055
Chromium+6	ND		4.0E-06	4	2,986,074	1,604,166	0.0032
Cobalt	8.0E-08	6	1.2E-04	3*	2,986,074	1,604,166	0.097
cumene	ND		ND		2,986,074	1,604,166	ND
Dibutylphthalate	ND		ND		2,986,074	1,604,166	ND
Ethyl Benzene	ND		ND		2,986,074	1,604,166	ND
Formaldehyde	3.4E-05	6	4.1E-04	1	2,986,074	1,604,166	0.38
n-Hexane	ND		ND		2,986,074	1,604,166	ND
Hydrochloric Acid	ND		3.2E-04	2*	2,986,074	1,604,166	0.26
Lead-Total	4.0E-07	6	8.9E-06	3	2,986,074	1,604,166	0.0077
Manganese	4.0E-07	6	1.4E-05	3	2,986,074	1,604,166	0.012
Mercury	8.0E-10	6	3.0E-06	3	2,986,074	1,604,166	0.0024
Methanol	ND		ND		2,986,074	1,604,166	ND
Methyl Ethyl Ketone	ND		ND		2,986,074	1,604,166	ND
Methyl Isobutyl Ketone	ND		ND		2,986,074	1,604,166	ND
Methylene Chloride	ND		ND		2,986,074	1,604,166	ND
Naphthalene	ND		ND		2,986,074	1,604,166	ND
Nickel	2.4E-06	6	1.7E-04	3	2,986,074	1,604,166	0.14
Phenols	ND		ND		2,986,074	1,604,166	ND
Phosphorus	ND		5.8E-05	2*	2,986,074	1,604,166	0.047
Polycyclic Organic Matter	ND		2.2E-05	1	2,986,074	1,604,166	0.018
Selenium	ND		3.8E-05	3*	2,986,074	1,604,166	0.030
Styrene	ND		ND		2,986,074	1,604,166	ND
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	1.2E-10	6	UD	5*	2,986,074 2,986,074	1,604,166 1,604,166	1.8E-07
Toluene	1.0E-05	6	ND		2,986,074	1,604,166	0.015
1,1,1 Trichlorethane (Methyl Chloroform)	ND		ND		2,986,074 2,986,074	1,604,166 1,604,166	ND
Trichlorethene	ND		ND		2,986,074	1,604,166	ND
Xylenes	ND		ND		2,986,074	1,604,166	ND
Total HAPs							1.37

Footnotes:

* note: value is conservative estimate - using No.6 Fuel Oil emission factor.

** Activity factor is based on maximum allowable heat inputon MMBtu permitted for the Package Boiler.

ND = No Data

2.4 STACK PARAMETERS

Stack parameters for the package boilers are presented in Table 2-1. All three boilers are served by a single common stack 200 feet (ft) tall with an 8.0 ft diameter. The exhaust gases from each are ducted to this common stack. The location of the common stack in relation to the structures at SCC is shown in Figure 2-2.

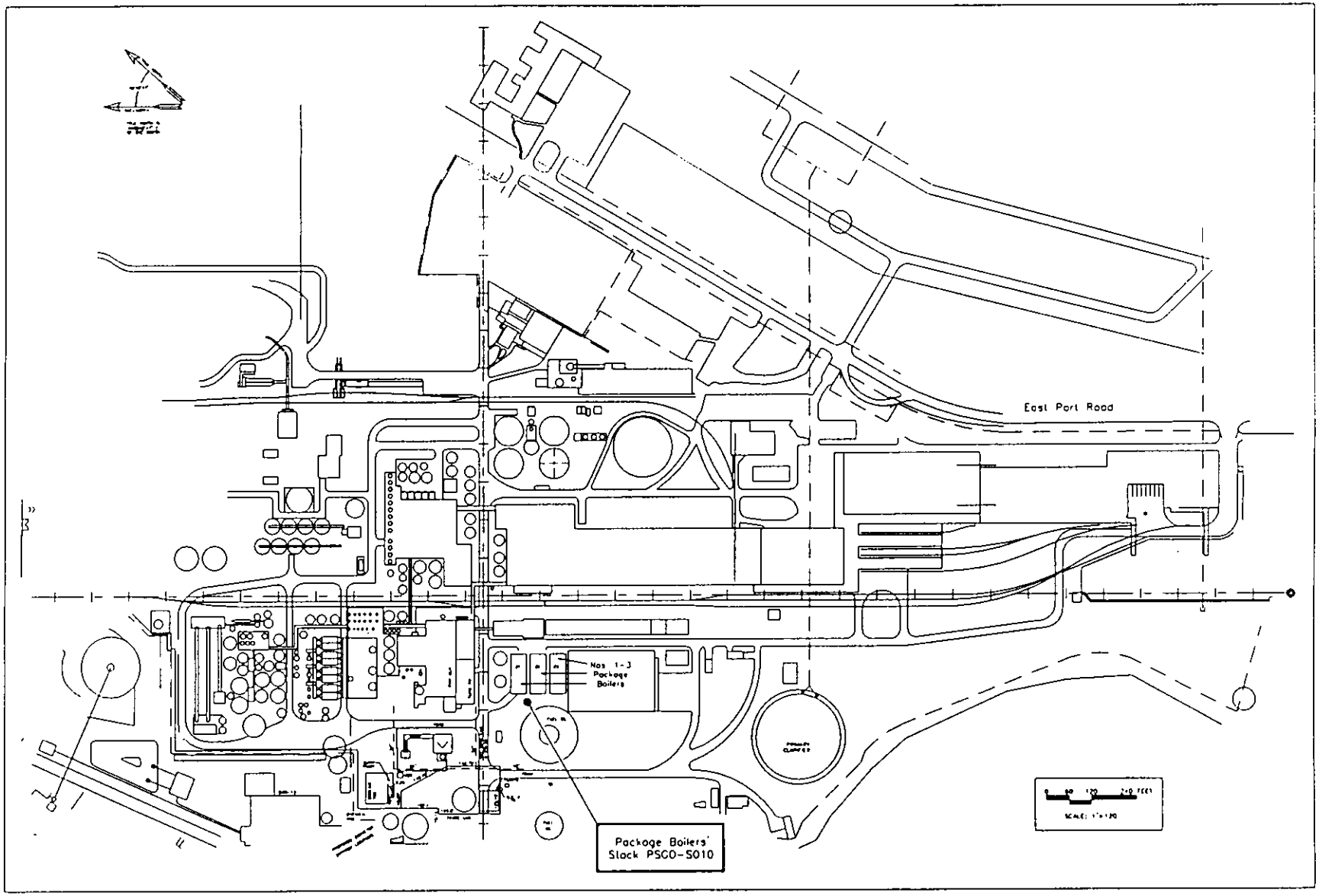


Figure 2-2 Plot Plan of Stone Container Corporation Facility

KBN

3.0 PSD SOURCE APPLICABILITY ANALYSIS

Federal PSD requirements are contained in Title 40, Code of Federal Regulations (CFR), Part 52.21, Prevention of Significant Deterioration of Air Quality. The State of Florida has adopted PSD regulations (Chapter 62-212.400, F.A.C.) that essentially are identical to the federal regulations. PSD regulations require that all new major stationary sources or major modifications to existing major sources of air pollutants regulated under CAA be reviewed and a construction permit issued. Florida's State Implementation Plan (SIP), which contains PSD regulations, has been approved by EPA and PSD approval authority in Florida has been granted to FDEP.

A "major facility" is defined under Florida PSD regulations as any one of 28 named source categories that has the potential to emit 100 tons per year (TPY) or more of any pollutant regulated under the CAA, or any other stationary facility that has the potential to emit 250 TPY or more of any pollutant regulated under CAA. A "source" is defined as an identifiable piece of process equipment or emissions unit. "Potential to emit" means the capability, at maximum design capacity, to emit a pollutant, considering the application of control equipment and any other federally enforceable limitations on the source's capacity. A "major modification" is defined under PSD regulations as a change at an existing major stationary facility that increases emissions by greater than significant amounts. PSD significant emission rates are shown in Table 3-1.

The SCC facility is located in Duval County, which has been designated by EPA and FDEP as an attainment area for SO_2 and NO_x. Duval County and surrounding counties are designated as PSD Class II areas for SO_2 and NO_x. The site is located about 61 km from a PSD Class I area (Okefenokee National Wilderness Area).

The SCC facility is an existing major stationary facility because potential emissions of certain regulated pollutants exceed 100 TPY (for example, potential NO_x emissions currently exceeds 100 TPY). SCC has previously been issued a PSD permit for the package boilers, and is now requesting a relaxation in certain permit conditions (i.e., a higher NO_x emission rate than allowed by AC16-222359). For pollutants for which a relaxation in the emission limit is requested, the PSD regulations require that the source applicability be determined as if construction had not yet begun [F.A.C. Rule 62-212.400(2)(g)]. In essence, this requires that the net increase in emissions be determined by comparing the original PSD baseline emissions to the proposed

Table 3-1. PSD Source Applicability Analysis, SCC Package Boiler Modification

Regulated Pollutant	Contemporaneous Emission Reductions (TPY)	Future Maximum Emissions (TPY)	Net Change (TPY)	Significant Emission Rate (TPY)	PSD Applies ?
Particulate (TSP)	522.7	19.1	-503.6	25	No
Particulate (PM10)	413.7	9.5	-404.2	15	No
Sulfur dioxide	31.6	41.0	9.4	40	No
Nitrogen oxides	496.5	459.1	-37.4	40	No
Carbon monoxide	2,778.2	209.1	-2569.1	100	No
Vol. org. compds.	375.7	3.3	-372.4	40	No
Lead	0.0	0.0077	0.008	0.6	No
Mercury	0.0	0.0024	0.0024	0.1	No
Beryllium	0.0	0.0020	0.0020	0.0004	No[a]
Fluorides	0.0	0.026	0.026	3	No
Sulfuric acid mist	43.3	0.76	-42.5	7	No
Total reduced sulfur	41.8	0	-41.8	10	No
Asbestos	--	--	0	0.007	No
Vinyl Chloride	--	--	0	0	No

[a] Boilers previously underwent PSD review for beryllium; no increase in emissions is being requested.

maximum emissions. PSD review is then required for the proposed modification for each pollutant for which the net increase in emissions exceeds the PSD significant emission rates presented in Table 3-1 (i.e., a major modification).

Future maximum annual emissions for the new package boilers were presented previously in Table 2-4. The creditable emission reductions due to the previous shutdown of the recovery boilers, smelt tanks, lime kilns and lime slaker at SCC are presented in Table 3-1. The PSD source applicability analysis, based on the contemporaneous reductions and the future annual emissions, is presented in Table 3-1. SO_2 and beryllium are included in this table even though no increase in the allowable SO_2 emissions (41 TPY) or maximum beryllium emissions is being requested. As shown in Table 3-1, the increase in emissions for all other pollutants will not exceed the PSD significant emission rates. Therefore, the proposed modification is not subject to PSD review.

4.0 PROPOSED REVISIONS TO PSD CONSTRUCTION PERMIT AC16-222359; PSD-FL-198

Proposed revisions to the original construction permit are provided below. It is noted that all of these changes, with the exception of Specific Conditions 3 and 7, have already been agreed to by the FDEP Northeast District.

General - The term "packaged" boilers is used throughout the permit; the correct spelling should be "package" boilers.

S.C. 1- The construction and operation of these sources shall be in accordance with the capacities stated in the application dated June 1995.

S.C. 3- This condition should be revised to reflect the maximum heat input rate for each boiler of 174.7 MMBtu/hr and the allowable NO_x emission limit of 0.2 lb/MMBtu, i.e., 34.94 lb/hr and 153.1 tons/year.

S.C. 6- The citation to 40 CFR 60.48(b) is incorrect. The correct citation is 40 CFR 60.48b(b).

S.C. 7- The correct citation for NO_x should be 40 CFR 60.46b(e)(4). Section 60.46b(e)(3) applies only to units with a heat input capacity greater than 250 MMBtu/hr. Section (e)(4) applies to units with a heat input capacity of 250 MMBtu/hr or less.

S.C. 12- The last sentence of this condition should read "quantified SO_2 emissions <u>for</u> the year".

APPENDIX A

AC16-222359 AND PSD-FL-198 CONSTRUCTION PERMIT, TECHNICAL EVALUATION, AND PRELIMINARY DETERMINATION

DOCUMENTATION ON CONTEMPORANEOUS EMISSIONS REDUCTIONS

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Lawton Chiles, Governor Carol M. Browner, Secretary

January 28, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. L. A. Stanley
General Manager
Seminole Kraft Corporation
9469 Eastport Road
Jacksonville, Florida 32218-0998

Dear Mr. Stanley:

Re: Contemporaneous Emissions Credit Evaluation

The Department has reviewed documents regarding the issue of contemporaneous emissions credit for the Nos. 1-3 Lime Kilns (LK), the Nos. 1-3 Recovery Boilers (RB), the Nos. 1-3 Smelt Dissolving Tanks (SDT), and the No. 3 Slaker. Based on the review, the following credits are granted for a five year period beginning September 11, 1992, which is the date that the operation permits were surrendered to the Department's Northeast District office:

Table 1

Contemporaneous Emissions Credit (TPY)

Source	CO	PM	SO_2	NOx	VOC	TRS	H_2SO_4
RB #1	**1118.5**	**107.8**	3.7	**117.5**	**114.3**	7.2	**9.5**
RB #2	**1169.8**	**156.0**	2.8	**129.0**	**185.0**	12.3	19.9
RB #3	**468.5**	**129.7**	1.2	**139.5**	**36.6**	14.0	**13.9**
LK #1	**1.4**	3.8	0.1	**9.0**	2.1	0.2	--
LK #2	**10.1**	21.6	8.5	**41.3**	19.1	1.7	--
LK #3	**9.9**	19.6	6.7	**60.2**	18.6	1.4	--
SDT #1	--	22.6	2.9	--	--	1.6	--
SDT #2	--	23.8	2.8	--	--	1.8	--
SDT #3	--	36.9	2.9	--	--	1.6	--
Slaker #3	--	**0.9**	--	--	--	--	--
Ttl:	**2778.2**	**522.7**	**31.6**	**496.5**	**375.7**	**41.8**	**43.3**

Note:
o Bold print denotes a different result between the Department's Bureau of Air Regulation and both tables designated Table I and Table 3-6 (attached);

The following table will display available contemporaneous emissions credit for other pollutants not contained in Table 1 and may differ from those values contained in Table II (attached), which was submitted for the evaluation. As was submitted, the values are the sum of the emission results from tests conducted on the Nos. 1-3 RBs. However, if a pollutant was not detected in at least 6 of the 9 test runs, then the test results were deemed inconclusive and not considered acceptable; and, therefore, no credit will be granted (i.e., a "0" will be used).

Table 2

Contemporaneous Emissions Credit

Pollutant	lbs/yr
Barium	0
Chromium	19.5
Copper	13.5
Manganese	64.3
Mercury	0
Nickel	0
Phosphorus	171.7
Silver	0
Zinc	291.4

Note:
- o For barium, 7 of 9 test results were "0".
- o For mercury, 7 of 9 test results were "0".
- o For nickel, 7 of 9 test results were "0".
- o For phosphorus, the No. 3 RB's 3rd test run was considerably out of tolerance (4-7 times the other values) and was rejected.
- o For silver, 8 of 9 test results were "0".

Attachments:

- o Mr. L. A. Stanley's letter with attachments received September 2, 1992.
- o Mr. L. A. Stanley's letter with enclosures received September 11, 1992, by the Department's Northeast District.
- o Me. W. Joe Eskridge's letter with attachments dated September 28, 1992.
- o Mr. W. Joe Eskridge's letter with attachment received October 2, 1992.
- o Mr. W. Joe Eskridge's letter with enclosures received January 1, 1993, via FAX.
- o Mr. W. Joe Eskridge's letter received January 22, 1993, via FAX.

Attachments

Seminole Kraft Corporation

Jacksonville Mill

9469 Eastport Road
P.O. Box 26998
Jacksonville, Florida 32218-0998

904 751-6400

September 10, 1992

Mr. Ernie Frey
Department of Environmental Regulation
3426 Bills Road
Jacksonville, FL 32207

Dear Mr. Frey:

In accordance with Consent Order 88-12385 9.A.1.b., 9.A.3.b, and 9.A.4.b., the permits are being surrendered to you. This equipment was shut down on September 10, 1992.

The Smelt Dissolving Tanks have been rendered inoperable as required by Section 9.A.2.b.

Should you have any questions, please call Mike Riddle at 751-6400, ext. 252.

Sincerely,

L.A. Stanley
General Manager

ah

enclosures

TABLE I - AVERAGE TONS/YEAR

	Carbon Monoxide (CO)	Particulate Matter (PM) (c)	Sulfur Dioxide (SO_2)	Nitrogen Oxides (NO_x) (e)	Volatile Organic Compounds (VOC)	Total Reduced Sulfur (TRS) (c)	Sulfuric Acid (H_2SO_4) (d)
Recovery Boiler 1	1141 (a)	108	4 (a)	120	114 (a)	7	10
Recovery Boiler 2	1173 (a)	156	3 (a)	129	193 (a)	12	20
Recovery Boiler 3	481 (a)	130	1 (a)	143	38 (a)	14	14
Lime Kiln 1	1 (b)	4	-	7	2 (f)	-	-
Lime Kiln 2	11 (b)	22	9 (d)	41	19 (f)	2	-
Lime Kiln 3	10 (b)	20	7 (d)	60	19 (f)	1	-
Smelt Dissolving Tank 1	-	23	2 (b)	-	-	1	-
Smelt Dissolving Tank 2	-	24	3 (b)	-	-	2	-
Smelt Dissolving Tank 3	-	37	3 (b)	-	-	2	-
Slaker 3	-	1	-	-	-	-	-
TOTAL	2817	525	34	500	385	41	44

(a) = Emission test report by IEA Inc. (Attachment 3)
(b) = AP-42 factors used due to lack of actual data
(c) = Annual Operating Reports for 1990 and 1991 (Attachments 1 & 2)
(d) = SO_2 Source Test Reports by TSI and ACE (Attachments 4, 5, 6)
(e) = NOx Test Report by TSI (Attachment 7)
(f) = NCASI information (Attachment 8)

Table 3-6. PSD Source Applicability Analysis, SKC Package Boiler Project

Regulated Pollutant	Baseline Emissions (TPY) RB1	RB2	RB3	SDT1	SDT2	SDT3	LK1	LK2	LK3	Totals	Future Emissions (TPY) PB1	PB2	PB3	Totals	Net Change (TPY)	Significant Emission Rate (TPY)	PSD Applies ?
Particulate (TSP)	107.8	156.6	129.7	22.6	23.8	38.9	3.6	21.6	18.6	521.8	36.05	36.05	36.05	108.1 ✓	-413.7	25	No
Particulate (PM10)	80.8	117.0	97.2	20.2	21.3	33.0	3.7	21.2	18.3	433.7	18.00	18.00	18.00	54.0	-358.7	15	No
Sulfur dioxide	3.7	2.8	0.8	2.9	2.8	2.9	0.1	8.5	6.7	31.2	216.15	216.15	216.15	648.5 ✓	617.3	40	Yes
Nitrogen oxides	119.8	129.4	143.2	--	--	--	6.4	41.8	60.2	500.8	153.04	153.04	153.04	459.1 ✓	-41.5	40	No
Carbon monoxide	1,140.9	1,173.0	480.8	--	--	--	1.5	10.2	10.0	2,816.4	273.31	273.31	273.31	819.8 ✓	-1,996.5	100	No
Vol. org. compds.	124.0	193.3	37.6	--	--	--	2.1	18.1	18.6	386.7	1.05	1.05	1.05	3.2 ✓	-381.5	40	No
Lead	0	0	0	--	--	--	--	--	--	0.0	0.0084	0.0084	0.0084	0.025	0.019	0.6	No
Mercury	0	0.0045	0	--	--	--	--	--	--	0.0045	0.0024	0.0024	0.0024	0.0073	0.0028	0.1	No
Beryllium	0	0	0	--	--	--	--	--	--	0.0	0.0018	0.0018	0.0018	0.0054	0.0054	0.0004	Yes
Fluorides	--	--	--	--	--	--	--	--	--	0.0	0.023	0.023	0.023	0.069	0.069	3	No
Sulfuric acid mist	9.7	19.8	14.3	--	--	--	--	--	--	43.9	10.8	10.8	10.8	32.4 ✓	-11.5	7	No
Total reduced sulfur	7.2	12.3	14.0	1.6	1.8	1.6	0.2	1.7	1.4	41.8	--	--	--	0 ✓	-41.8	10	No
Asbestos	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0	0.007	No
Vinyl Chloride	0	0	0	--	--	--	--	--	--	--	--	--	--	--	0	0	No

TABLE II
HEAVY METALS

JANUARY 6-13, 1992	LBS/YR
BARIUM	9
CHROMIUM	20
COPPER	14
MANGANESE	65
MERCURY	4
NICKEL	11
PHOSPHORUS	255
SILVER	5
ZINC	296

D. Buff

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

April 20, 1993

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. L. A. Stanley, General Manager
Seminole Kraft Corporation
9469 East Port Road
Jacksonville, Florida 32229

Dear Mr. Stanley:

Attached is one copy of the Revised Technical Evaluation and Preliminary Determination and proposed permit for Seminole Kraft Corporation to construct three gas-fired packaged boilers at their facility in Duval County.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Preston Lewis of the Bureau of Air Regulation.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/JR/kt

Attachments

cc: J. Cole, NED
R. Roberson, BESD
J. Harper, EPA
J. Bunyak, NPS
D. Buff, KBN
B. Collum, GEPD
C. Hurd, SKC
R. Donelan, OGC

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

DER File No. AC16-222359
PSD-FL-198

Seminole Kraft Corporation
9469 East Port Road
Jacksonville, Florida 32229

_____/

INTENT TO ISSUE

The Department of Environmental Regulation gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated in the attached Revised Technical Evaluation and Preliminary Determination.

The applicant, Seminole Kraft Corporation, applied on November 24, 1992, to the Department of Environmental Regulation for a permit to construct three packaged boilers at their facility in Jacksonville, Duval County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-212 and 17-4. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

Pursuant to Section 403.815, Florida Statutes and Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this

proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 4-21-93 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

4-21-93
Date

Copies furnished to:

J. Cole, NED
R. Roberson, BESD
J. Bunyak, NPS
D. Buff, KBN
B. Collum, GEPD
C. Hurd, SKC
R. Donelan, OGC

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT TO ISSUE PERMIT

The Department of Environmental Regulation gives notice of its intent to issue a permit to Seminole Kraft Corporation, 9469 East Port Road, Jacksonville, Florida 32229 to construct three packaged boilers at their facility in Jacksonville, Duval County, Florida. The maximum predicted all sources PSD Class II sulfur dioxide increments which would be consumed after this project is completed are the following: 5.0 ug/m^3, annual average, or 25% of the available annual increment of 20 ug/m^3, 133 ug/m^3, 24-hour average or 146% of the available 24-hour increment of 91 ug/m^3; and 447 ug/m^3, 3-hour average or 87% of the available 3-hour increment of 512 ug/m^3. Seminole Kraft and Cedar Bay combined do not contribute significantly to any predicted violations of the PSD Class II 24-hour increment. The maximum predicted PSD Class I sulfur dioxide increments which would be consumed are the following: 0.0 ug/m^3, annual average, or 0% of the available annual increment of 2.0 ug/m^3; 4.1 ug/m^3, 24-hour average or 82% of the available 24-hour increment of 5.0 ug/m^3, and 19 ug/m^3, 3-hour average or 76% of the available 3-hour increment of 25 ug/m^3. A determination of Best Available Control Technology (BACT) was required. The Department is issuing this Intent to Issue for the reasons stated in the Revised Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or

statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
111 South Magnolia Drive
Tallahassee, Florida

Department of Environmental Regulation
Northeast District
7825 Baymeadows Way
Jacksonville, Florida 32256-3767

Duval County Air Quality Division
421 West Church Street, Suite 412
Jacksonsville, Florida 32202-4111

Any person may send written comments on the proposed action to Mr. Preston Lewis at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any persons. Such requests must be submitted within 30 days of this notice.

Revised
Technical Evaluation
and
Preliminary Determination

Seminole Kraft Corporation
Duval County
Jacksonville, Florida

Three Gas-Fired Packaged Boilers
Permit Number: AC 16-222359
PSD-FL-198

Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

April 16, 1993

I. Application

A. Applicant

Seminole Kraft Corporation
9469 East Port Road
Jacksonville, Florida 32229

B. Project/Location/Classification

The Department received a complete application on February 10, 1993, for a permit to construct three packaged boilers at the Seminole Kraft Corporation (SKC) existing facility in Jacksonville, Duval County, Florida. The applicant's recycled fiber paper mill facility (SIC Code 2621) is located at 9469 East Port Road. UTM coordinates of the site are 441.8 km E and 3,365.6 km N.

On April 2, 1993, the Department issued its Intent to Issue package. Since that time, the Cedar Bay Cogeneration Plant project and its Certification process resulted in some negotiated changes, which affected some operational conditions to this project. Consequently, a revised Intent to Issue package has been made.

II. Project Description

Seminole Kraft (SKC) proposes to install three 125,000 lbs/hr packaged steam boilers at their recycled fiber paper mill facility in Jacksonville, Florida, while contemporaneously shutting down several boilers and pulping facilities. SKC's project is tied in with the coal-fired Cedar Bay Cogeneration Project (CBCP), formerly known as AES Cedar Bay, by way of an agreement for SKC to receive a major portion of their process steam from the adjacent CBCP facility. Plans call for the CBCP facility to begin operation in early 1994. SKC requires that the three new packaged boilers be sized to provide enough steam to operate their largest paper machine independently of the CBCP facility during periods when CBCP does not operate.

SKC's conversion to a 100% recycled fiber paper mill was completed in 1992 by shutting down all kraft mill facilities processing virgin wood pulp. The equipment involved in the contemporaneous shutdowns is listed below:

Equipment	Date Shutdown	Date to be Shutdown
Recovery Boiler 1	September '92	-
Recovery Boiler 2	"	-
Recovery Boiler 3	"	-
Smelt Dissolving Tank 1	"	-
Smelt Dissolving Tank 2	"	-
Smelt Dissolving Tank 3	"	-

Lime Kiln 1	"	-
Lime Kiln 2	"	-
Lime Kiln 3	"	-
Slaker No. 3	"	-
Bark Boiler 1	-	Early 1994*
Bark Boiler 2	-	"
Power Boiler 1	-	"
Power Boiler 2	-	"
Power Boiler 3	-	"

*These boilers are required to be taken out of service under provisions of the site certification for CBCP, with creditable emission reduction going to CBCP.

III. Emissions

SKC submitted their application in November 1992, proposing to fire No. 2 fuel oil, with natural gas backup, as they had not been able to obtain a firm natural gas contract. Since then, SKC has obtained a contract for natural gas. Firing of fuel oil, as originally proposed, would result in emissions exceeding PSD significant rates for sulfur dioxide and beryllium, after applying contemporaneous emission reductions from the shutdowns listed above. Filing an application for oil firing triggered application of the Prevention of Significant Deterioration (PSD) rule, thus requiring a determination of Best Available Control Technology (BACT). This is discussed in the rule applicability section. Tabulated below are the emission credits and the actual emissions after application of BACT:

Contemporaneous Emissions Credit (TPY)

Source	CO	PM/PM_{10}	SO_2	NOx	VOC	TRS	H_2SO_4
RB #1	1118.5	107.8	3.7	117.5	114.3	7.2	9.5
RB #2	1169.8	156.0	2.8	129.0	185.0	12.3	19.9
RB #3	468.5	129.7	1.2	139.5	36.6	14.0	13.9
LK #1	1.4	3.8	0.1	9.0	2.1	0.2	--
LK #2	10.1	21.6	8.5	41.3	19.1	1.7	--
LK #3	9.9	19.6	6.7	60.2	18.6	1.4	--
SDT #1	--	22.6	2.9	--	--	1.6	--
SDT #2	--	23.8	2.8	--	--	1.8	--
SDT #3	--	36.9	2.9	--	--	1.6	--
Slaker #3	--	0.9	--	--	--	--	--
Totals:	2778.2	522.7	31.6	496.5	375.7	41.8	43.3

Future Emissions (TPY)*

Source	CO	PM/PM_{10}	SO_2	NOx	VOC	TRS	H_2SO_4
PB #1	184.2	3.6	-	103.4	0.7	--	negl.
PB #2	184.2	3.6	-	103.4	0.7	--	negl.
PB #3	184.2	3.6	-	103.4	0.7	--	negl.
Totals:	552.6	10.8	25**	310.2	2.1	--	negl.
Net Change:	-2225.6	-511.9	-24.1	-186.3	-373.6	-41.8	-43.3
PSD Level:	100	25/15	40	40	40	10	7

* See the revised BACT Determination for details on calculation of future emissions.

** In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed a ceiling of 41 tons per year.

Future emission were determined on the basis of fuel consumption levels contemplated during CBCP's site certification proceedings; namely, that the SKC packaged boilers would be permitted to operate such that when the SKC facility is importing 380 M lbs/hr of steam (heat equivalent of 456 MMBtu/hr) from CBCP, the SKC packaged boilers would produce 260 M lbs/hr for a total SKC steam production of 640 M lbs/hr. This steam production level is the basis of the modeling that was done for the CBCP facility and therefore is the basis for the allowable emission levels in the Department's proposed permit for the SKC packaged boilers. The 640 M lbs steam/hr is equivalent to a peak fuel consumption level of 354 MMBtu/hr when SKC is receiving 380 M lbs/hr of steam from the CBCP.

IV. Rule Applicability

The proposed project is subject to preconstruction review in accordance with Chapter 403 of the Florida Statutes and Florida Administrative Code (F.A.C.) Chapters 17-210 through 297 and 17-4. The proposed facility will be located in an area classified as attainment for all regulated pollutants except ozone for which the area is designated as a transitional nonattainment area. The federal new source performance standards under 40 CFR Subpart Db (standards of performance for Industrial Steam Generating Units) apply for NOx control. Also, F.A.C. Rule 17-296.406, Fossil Fuel Steam Generators, applies to these boilers requiring a BACT analysis for particulate matter and sulfur dioxide.

As originally filed, the application is subject to the provisions of F.A.C. Rule 17-212.400, Prevention of Significant Deterioration (PSD), because the proposed oil-firing emissions, after applying offsets, would exceed PSD-significant levels for sulfur dioxide and beryllium. Upon applying Best Available Control Technology (BACT) required under the PSD rule, the firing of natural gas as the primary fuel resulted in emissions that are well below PSD-significant levels. This is somewhat unusual in that the application of BACT has resulted in the project netting out of PSD significance. Yet, the proposed facility remains a PSD project since, without application of BACT, the PSD-significant levels would be exceeded.

V. AIR QUALITY IMPACT ANALYSIS

The applicant proposed emissions of sulfur dioxide and beryllium in PSD-significant amounts. The applicant submitted the air quality analysis required by the PSD regulations for these two pollutants. The applicant's SO_2 analysis was based on the proposed full time use of fuel oil with a maximum sulfur content of 0.5 percent (average 0.3 percent). The Department's revised BACT determination requires the use of natural gas instead of fuel oil as a primary fuel. This substantially restricts the emissions of both pollutants. Re-calculation of the emissions from the proposed project after the application of BACT shows that projected emissions of all pollutants are below PSD-significant amount.

Modeling results for full time fuel oil firing show predicted violations of the annual and 24-hour SO_2 ambient air quality standards (AAQS) of 60 ug/m^3 and 260 ug/m^3 and also of the 24-hour PSD Class II increment of 91 ug/m^3. All of these predicted violations occur at a distance of 4.0 to 11.0 km southwest and west of Seminole Kraft. With the applicant's proposed use of 0.5 percent (maximum) sulfur fuel oil, there is one predicted violation of the 24-hour AAQS where Seminole Kraft and Cedar Bay combined contribute significantly to the violation. However, the Department's revised BACT determination restricts Seminole Kraft to the use of fuel oil containing a maximum sulfur content of only 0.05 percent as an emergency fuel when natural gas is unavailable. Modeling results based on the use of 0.05 percent fuel oil show that Seminole Kraft and Cedar Bay do not contribute significantly to this violation of the AAQS. Therefore, the Department has reasonable assurance that the proposed project, as described in the report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any AAQS or PSD increment.

VI. Conclusion

Based on the information provided by Seminole Kraft, the Department has reasonable assurance that the proposed installation, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapters 17-210 thru 297 of the Florida Administrative Code.

4-20-93

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

PERMITTEE:
Seminole Kraft Corp.
9469 East Port Road
Jacksonville, Florida 32229

Permit Number: AC16-222359
PSD-FL-198
Expiration Date: April 30, 1995
County: Duval
Latitude/Longitude: 30°25'15"N
81°36'00"W
Project: Three Gas-Fired Packaged Boilers

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210 through 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of three 125,000 lbs/hr packaged process steam boilers. The facility is located at 9469 East Port Road, Jacksonville, Duval County, Florida. UTM coordinates of the site are: Zone 17, 441.8 km E and 3,365.6 km N.

Emissions shall be controlled by using clean fuels and good combustion practices.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Letter (with proposed gas contract) from Oertel to Pennington (12/3/92).
2. Letter from KBN to DER (12/9/92).
3. Letter from Georgia DNR to DER (12/10/92).
4. Letter from KBN to DER (12/22/92).
5. Incompleteness letter from DER to SKC (12/23/92).
6. Letter from KBN to DER (12/23/92).
7. Second Incompleteness letter from DER to SKC (1/5/93).
8. Letter from KBN to DER (1/8/93).
9. Letter from EPA to DER (1/15/93).
10. Letter from Oertel to DER (1/19/93).
11. Third Incompleteness letter from DER to SKC (1/25/93).
12. Letter from Oertel to DER (1/29/93).
13. Letter from Oertel to DER (1/29/93).
14. Completeness letter from DER to SKC (2/10/93).

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance,

GENERAL CONDITIONS:

provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT)
(x) Determination of Prevention of Significant Deterioration
(x) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;

GENERAL CONDITIONS:

- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. The construction and operation of these sources shall be in accordance with the capacities stated in the Revised Technical Evaluation and Preliminary Determination.

2. The packaged boilers may be operated continuously (8760 hrs/yr).

3. The maximum allowable NOx emissions shall not exceed 0.2 lb/MMBtu, 23.6 lbs/hr, and 103.4 tons/yr per boiler.

4. Sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent by weight. Annual SO_2 emissions, total for all three boilers, shall not exceed 25 tons per year. In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed a ceiling of 41 tons per year.

5. Visible emissions (VE) shall not exceed 5% opacity during natural gas firing and 10% opacity during fuel oil firing.

6. In accordance with requirements of 40 CFR 60.48(b),a monitoring system (CEMS) for nitrogen oxides shall be installed, operated, and maintained. Also, the natural gas, fuel oil and steam flows (both from the packaged boilers and from the CBCP facility) shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to DER upon request.

7. Before this construction permit expires, the common packaged boiler stack shall be tested and monitored for compliance with the emission limits in Specific Conditions No. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR

SPECIFIC CONDITIONS:

60.46b(e)(3). Compliance with SO_2 limits shall be in accordance with 40 CFR 60.49b(r). Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

8. The DER Northeast District office and the RESD (Regulatory and Environmental Services Department) shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the DER Northeast District office and the Bureau of Air Regulation office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.

9. The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The Regulatory and Environmental Services Division of Jacksonville shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.

10. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

11. An application for an operation permit must be submitted to the Northeast District office and the RESD at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Issued this_____day

of_____,1993

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

_____
Virginia B. Wetherell, Secretary

Revised Best Available Control Technology (BACT) Determination
Seminole Kraft Corporation
Duval County
PSD-FL-198
AC16-222359

The applicant proposes to install three packaged boilers at their recycled fiber paper mill facility in Jacksonville, Duval County, Florida. Each of the three boilers will be sized to provide up to 125,000 lbs/hr of process steam for Seminole Kraft Corporation's (SKC) paper machines. SKC will also receive process steam from the adjacent Cedar Bay Cogeneration Project (CBCP). According to terms of the CBCP Site Certification proceedings, SKC is to be limited to a total steam production of 640,000 lbs/hr which includes 380,000 lbs/hr imported from the CBCP facility. This leaves 260,000 lbs/hr to be produced by the three packaged boilers under normal operating conditions. During periods when CBCP is not operating or operating at reduced rates, SKC will be allowed to make up the difference between the 380,000 lbs/hr and the steam production level that CBCP provides. This is equivalent to a maximum firing rate of 524 MMBTU/hr for all three SKC packaged boilers when the CBCP facility is down.

Date of Receipt of a Complete Application

February 10, 1993

BACT Determination Requested by Applicant

SKC's application called for the firing of fuel oil on a full time or as needed basis since a firm natural gas contract had not been obtained at the time of filing. Consequently, the application required a BACT determiniation for SO2 and beryllium since these pollutants would be emitted in amounts exceeding PSD-significant levels. BACT was proposed by the applicant as firing fuel oil with a 0.5 percent maximum sulfur content (0.3 average). Since there are no specific control technologies for beryllium, an uncontrolled beryllium emission level was proposed.

BACT Determination by the Department

During initial permitting discussions with SKC, the Department indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract. Therefore, the Department's determination of BACT is the use of natural gas as the primary fuel and No. 2 fuel oil (0.05% sulfur max.) as backup when natural gas is not available. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

Pollutant	Emission Limits	Basis
NO_x	23.6 lbs/hr and 103.4 tons/yr	Subpart D_b (0.2 lb/mm BTU)
SO_2	25 tons/yr total-3 boilers*	BACT (0.05%S)
VE	Natural Gas - 5% opacity	BACT
VE	No. 2 Fuel Oil - 10% opacity	BACT

* In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed a ceiling of 41 tons per year.

BACT Determination Procedure

In accordance with F.A.C. Rules 17-210 through 297, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available control methods, systems and techniques. In addition, the regulations require that in making the BACT determination the Department shall give consideration to:

(a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

(b) All scientific, engineering and technical material and other information available to the Department.

(c) The emission limiting standards or BACT determinations of any other State.

(d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to

determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

BACT Determination Rationale

BACT review for particulate emissions and sulfur-dioxide are required under F.A.C. Rule 17-296.406. Visible emissions may be regulated as a surrogate parameter for PM/PM_{10} and have been established at 5% opacity for natural gas fired boilers (10% opacity for No. 2 fuel oil).

For SO_2 emissions from oil firing, only two alternatives exist that would result in stringent SO_2 emissions; using low sulfur content fuel oil or flue gas desulfurization (FGD). EPA has recognized that FGD technology is inappropriate to apply to these combustion units. Sludge would be generated that would have to be disposed of properly, and there would be greatly increased costs associated with the construction and operation of a FGD system. Finally, there is no information in the literature to indicate that FGD has ever been applied to burning distillate oil. This leaves the use of natural gas and low sulfur fuel oil as backup as the best option for this project. Due to the anticipated availability of very low sulfur oil by October 1993, the Department will required the use of No. 2 fuel oil with 0.05% sulfur by weight as BACT.

Details of the Analysis May be Obtained by Contacting:

Preston Lewis, P.E., BACT Coordinator
Department of Environmental Regulation
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

_____1993
Date

Approved by:

Virginia B. Wetherell, Secretary
Dept. of Environmental Regulation

_____1993
Date

Final Determination

Seminole Kraft Corporation
Duval County, Florida

Construction Permit No.
AC 16-222359
(PSD-FL-198)

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

July 7, 1993

Final Determination

Seminole Kraft Corporation

AC 16-222359 (PSD-FL-198)

The construction permit application package and supplementary material have been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in The Florida Times-Union on April 25 and May 11, 1993. The original Technical Evaluation and Preliminary Determination (TE&PD) and Revised TE&PD were distributed on April 2 and April 21, respectively, were made available for public inspection at the Department's Northeast District and Bureau of Air Regulation offices and the City of Jacksonville's Regulatory & Environmental Services Department (RESD).

Comments were received from the applicant during the public notice period. The Department's response to the comments are as follows (note: each response is numbered to correspond to each comment) and the change or new language will be in "bold print":

I. Construction Permit No. AC 16-222359 (PSD-FL-198)

A. Mr. Ron L. Roberson's letter received April 20, 1993.

1. The Department agrees with the request and the change will be made. Also, a requirement for calculating actual SO_2 emissions will be established.

Specific Condition No. 7.:

FROM: Before this construction permit expires, the common packaged boiler stack shall be tested and monitored for compliance with the emission limits in Specific Conditions Nos. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with SO_2 limits shall be in accordance with 40 CFR 60.49b(r). Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

TO: Before this construction permit expires, **each packaged boiler** shall be tested and monitored for compliance with the emission limits in Specific Conditions Nos. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with SO_2 limits shall be in accordance with 40 CFR 60.49b(r); **and, a stoichiometric quantification for SO_2 emissions shall be utilized using the actual density and sulfur weight percent and the quantity of fuel oil fired monthly.** Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

2. Based on a phone conversation with Mr. Roberson (RESD) and Mr. Bruce Mitchell, edits to Specific Conditions Nos. 8, 9 and 11 were pointed out for clarification purposes and the following will be changed:

Specific Condition No. 8.:

FROM: The DER Northeast District office and the RESD (Regulatory and Environmental Services Department) shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the DER Northeast District office and the Bureau of Air Regulation office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.

TO: The **Department's** Northeast District office and the RESD (**City of Jacksonville's** Regulatory and Environmental Services Department) **office** shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the **Department's** Northeast District and Bureau of Air Regulation offices **and the RESD office** within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.

Specific Condition No. 9.:

FROM: The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the Division of Air Resources Management's Bureau of Air Regulation, within 30 days of written confirmation by DER of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The Regulatory and Environmental Services Division of Jacksonville shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.

TO: The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the

No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the **Department**'s Bureau of Air Regulation, within 30 days of written confirmation by the **Department** of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The **RESD office** shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.

Specific Condition No. 11.:

FROM: An application for an operation permit must be submitted to the Northeast District office and the RESD at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

TO: An application for an operation permit must be submitted to the **Department's** Northeast District office and the RESD **office** at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

B. Mr. Brian L. Beals's letter received April 22, 1993.

1. No comments are required because of concurrence.

C. Mr. James W. Pulliam, Jr.'s letter received May 21, 1993.

1. The Department agrees with the request and the condition will be established. Also, an additional requirement for a lab analysis to accompany each fuel oil delivery will be established in order to calculate actual SO_2 emissions. In addition, SKC representatives requested that the Cedar Bay certification language be inserted for notice requirements. Further, the Department agreed during the Cedar Bay certification that the SKC boilers would be allowed to fire both natural gas and No. 2 fuel oil (limited to a maximum

0.05% sulfur, by weight) and having a total emission limitation of 25 tons/year of SO_2; however, circumstances would allow for further approval of an additional 16 tons/year. The following changes/ addition should reflect the above points:

Specific Condition No. 4.:

FROM: Sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent by weight. Annual SO_2 emissions, total for all three boilers, shall not exceed 25 tons per year. In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed a ceiling of 41 tons per year.

TO: **The three packaged boilers are permitted to fire both natural gas and No. 2 fuel oil, with the primary fuel being natural gas.** The sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. **Any delivery of No. 2 fuel oil shall be accompanied by a laboratory analysis quantifying the density and percent sulfur, by weight.** Annual SO_2 emissions from No. 2 fuel oil firing, total all three boilers, shall not exceed 25 tons/year. In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed 41 tons/year. **The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville, Florida, as defined in Section 403.5115(2), F.S. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.**

D. Ms. Jewell A. Harper's letter received June 11, 1993.

1. Based on discussions with Mr. Scott Davis (EPA Region IV) and Mr. Bruce Mitchell, it was deemed acceptable to use the lab analyses of the No. 2 fuel oil deliveries and the actual fuel oil fired per month to stoichiometrically calculate the actual SO_2 emissions in lieu of imposing additional emission limitations, which would require mass emissions stack testing or continuous emission monitoring for verification purposes. Therefore, see Specific Conditions Nos. 4 and 7. Also, for further clarification purposes, the following is established:

Specific Condition No. 12.: (new)

Pursuant to 40 CFR 49b(r), quarterly reports shall be submitted to the RESD office (i.e., Administrator) certifying that only very low sulfur oil (i.e., $\leq$0.05% sulfur, by weight) meeting this definition was combusted in the affected facility during the preceding quarter. The firing of any fuel oil and its associated SO_2 emissions shall be quantified on a monthly and per boiler basis and submitted to the RESD office by the end of the month following the end of each quarter. The quarters are defined as January- March, April-June, July-September, and October-December; also, and per boiler, the final quarterly report shall include the total amount of the fuel oil fired and the quantified associated SO_2 emissions from the year.

II. BACT Determination to Permit No. AC 16-222359 (PSD-FL-198)

Pursuant to C.1. above, the Revised BACT determination will reflect that the boilers are permitted to fire both natural gas and No. 2 fuel oil as contained in Specific Condition No. 4 of the construction permit No. AC 16-222359. The following changes will be made to the text:

A. "BACT Determination by the Department"

FROM: During initial permitting discussions with SKC, the Department of Environmental Protection (Department) indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract. Therefore, the Department's determination of BACT is the use of natural gas as the primary fuel and No. 2 fuel oil (0.05% sulfur max.) as backup when natural gas is not available. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

Pollutant	Emission Limits	Basis
NO_x	23.6 lbs/hr and 103.4 tons/yr	Subpart D_b (0.2 lb/mm BTU)
SO_2	25 tons/yr total-3 boilers*	BACT (0.05%S)
VE	Natural Gas - 5% opacity	BACT
VE	No. 2 Fuel Oil - 10% opacity	BACT

* In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed 41 tons per year.

TO: During initial permitting discussions with SKC, the Department of Environmental Protection (Department) indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract. Therefore, the Department's determination of BACT is **to allow three packaged steam boilers to fire both natural gas and No. 2 fuel oil (maximum 0.05% sulfur, by weight), with the primary fuel being natural gas.** Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

Pollutant	Emission Limits	Basis
NO_x	23.6 lbs/hr and 103.4 tons/yr	Subpart D_b (0.2 lb/mm BTU)
SO_2	25 tons/yr total-3 boilers*	BACT ($\leq$0.05% S, **by wt. #2 Fuel Oil**)
VE	Natural Gas - 5% opacity	BACT
VE	No. 2 Fuel Oil - 10% opacity	BACT

* In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative

proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed 41 tons/year. **The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville, Florida, as defined in Section 403.5115(2), Florida Statutes. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.**

III. Attachmants to be Incorporated:

15. Technical Evaluation and Preliminary Determination (TE&PD) mailed 4/2/93.
16. Mr. Ronald L. Roberson's letter received 4/20/93.
17. Mr. Brian L. Beals's letter received 4/22/93.
18. Revised TE&PD mailed 4/21/93.
19. Public Notice received 5/7/93 (incomplete).
20. Mr. James W. Pulliam, Jr.'s letter received 5/21/93.
21. Public Notice received 5/27/93.
22. Ms. Jewell A. Harper's letter received 6/11/93.
23. Final Determination dated 7/7/93.

Therefore, it is recommended that the construction permit, No. AC 16-222359 (PSD-FL-198), and associated BACT Determination, be issued as drafted, with the above referenced revisions incorporated.

Florida Department of
Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

PERMITTEE:
Seminole Kraft Corporation
9469 East Port Road
Jacksonville, Florida 32229

Permit Number: AC 16-222359
PSD-FL-198
Expiration Date: April 30, 1995
County: Duval
Latitude/Longitude: 30°25'15"N
81°36'00"W
Project: Three Packaged Steam Boilers

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210 through 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department of Environmental Protection (Department) and made a part hereof and specifically described as follows:

For the construction of three 125,000 lbs/hr packaged process steam boilers. The facility is located at 9469 East Port Road, Jacksonville, Duval County, Florida. UTM coordinates of the site are: Zone 17, 441.8 km E and 3,365.6 km N.

Emissions shall be controlled by using clean fuels and good combustion practices.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Letter (with proposed gas contract) from Oertel to Pennington (12/3/92).
2. Letter from KBN to the Department (12/9/92).
3. Letter from Georgia DNR to the Department (12/10/92).
4. Letter from KBN to the Department (12/22/92).
5. Incompleteness letter from the Department to SKC (12/23/92).
6. Letter from KBN to the Department (12/23/92).
7. Second Incompleteness letter from the Department to SKC (1/5/93).
8. Letter from KBN to the Department (1/8/93).
9. Letter from EPA to the Department (1/15/93).
10. Letter from Oertel to the Department (1/19/93).
11. Third Incompleteness letter from the Department to SKC (1/25/93).
12. Letter from Oertel to the Department (1/29/93).
13. Letter from Oertel to the Department (1/29/93).
14. Completeness letter from the Department to SKC (2/10/93).
15. Technical Evaluation and Preliminary Determination (TE&PD) mailed 4/2/93.

Attachments cont.:

16. Mr. Ronald L. Roberson's letter received 4/20/93.
17. Mr. Brian L. Beals's letter received 4/22/93.
18. Revised TE&PD mailed 4/21/93.
19. Public Notice received 5/7/93 (incomplete).
20. Mr. James W. Pulliam, Jr.'s letter received 5/21/93.
21. Public Notice received 5/27/93.
22. Ms. Jewell A. Harper's letter received 6/11/93.
23. Final Determination dated 7/7/93.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.). The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. a description of and cause of non-compliance; and,

b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source

GENERAL CONDITIONS:

which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code (F.A.C.) Rules 17-4.120 and 17-730.300, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT);
(x) Determination of Prevention of Significant Deterioration; and,
(x) Compliance with New Source Performance Standards (NSPS).

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and,
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. The construction and operation of these sources shall be in accordance with the capacities stated in the Revised Technical Evaluation and Preliminary Determination.

2. The packaged boilers may be operated continuously (8760 hrs/yr).

3. The maximum allowable NOx emissions shall not exceed 0.2 lb/MMBtu, 23.6 lbs/hr, and 103.4 tons/yr per boiler.

4. The three packaged boilers are permitted to fire both natural gas and No. 2 fuel oil, with the primary fuel being natural gas. The sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. Any delivery of No. 2 fuel oil shall be accompanied by a laboratory analysis quantifying the density and percent sulfur, by weight. Annual SO_2 emissions from No. 2 fuel oil firing, total all three boilers, shall not exceed 25 tons/year. In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed 41 tons/year. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville,

SPECIFIC CONDITIONS:

Florida, as defined in Section 403.5115(2), F.S. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.

5. Visible emissions (VE) shall not exceed 5% opacity during natural gas firing and 10% opacity during fuel oil firing.

6. In accordance with requirements of 40 CFR 60.48(b),a monitoring system (CEMS) for nitrogen oxides shall be installed, operated, and maintained. Also, the natural gas, fuel oil and steam flows (both from the packaged boilers and from the CBCP facility) shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to the Department upon request.

7. Before this construction permit expires, each packaged boiler shall be tested and monitored for compliance with the emission limits in Specific Conditions No. 4, 5, and 6. Compliance tests for NOx shall be conducted in accordance with 40 CFR 60.46b(e)(3). Compliance with SO_2 limits shall be in accordance with 40 CFR 60.49b(r); and, a stoichiometric quantification for SO_2 emissions shall be utilized using the actual density and sulfur weight percent and the quantity of fuel oil fired monthly. Compliance with visible emission limits shall be demonstrated initially and annually in accordance with EPA Method 9.

8. The Department's Northeast District office and the RESD (City of Jacksonville's Regulatory and Environmental Services Department) office shall be notified at least 15 days prior to the compliance tests. Compliance test results shall be submitted to the Department's Northeast District and Bureau of Air Regulation offices and the RESD office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with 40 CFR 60.49b, F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.

9. The following Seminole Kraft Corporation (SKC) sources shall be permanently shut down and made incapable of operation: the No. 1 PB (power boiler), the No. 2 PB, the No. 3 PB, the No. 1 BB (bark boiler), and the No. 2 BB; and, SKC shall turn in their operation permits to the Department's Bureau of Air Regulation, within 30 days of written confirmation by the Department of the successful completion of the initial compliance tests on the Cedar Bay Cogeneration Plant's boilers. The RESD office shall be specifically informed in writing within thirty days after each individual shut down of the above referenced equipment.

SPECIFIC CONDITIONS:

10. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

11. An application for an operation permit must be submitted to the Department's Northeast District office and the RESD office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

12. Pursuant to 40 CFR 49b(r), quarterly reports shall be submitted to the RESD office (i.e., Administrator) certifying that only very low sulfur oil (i.e., $\leq$0.05% sulfur, by weight) meeting this definition was combusted in the affected facility during the preceding quarter. The firing of any fuel oil and its associated SO_2 emissions shall be quantified on a monthly and per boiler basis and submitted to the RESD office by the end of the month following the end of each quarter. The quarters are defined as January-March, April-June, July-September, and October-December; also, and per boiler, the final quarterly report shall include the total amount of the fuel oil fired and the quantified associated SO_2 emissions from the year.

Issued this 7th day
of July, 1993

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

Revised Best Available Control Technology (BACT) Determination
Seminole Kraft Corporation
Duval County
PSD-FL-198
AC 16-222359

The applicant proposes to install three packaged boilers at their recycled fiber paper mill facility in Jacksonville, Duval County, Florida. Each of the three boilers will be sized to provide up to 125,000 lbs/hr of process steam for Seminole Kraft Corporation's (SKC) paper machines. SKC will also receive process steam from the adjacent Cedar Bay Cogeneration Project (CBCP). According to terms of the CBCP Site Certification proceedings, SKC is to be limited to a total steam production of 640,000 lbs/hr which includes 380,000 lbs/hr imported from the CBCP facility. This leaves 260,000 lbs/hr to be produced by the three packaged boilers under normal operating conditions. During periods when CBCP is not operating or operating at reduced rates, SKC will be allowed to make up the difference between the 380,000 lbs/hr and the steam production level that CBCP provides. This is equivalent to a maximum firing rate of 524 MMBTU/hr for all three SKC packaged boilers when the CBCP facility is down.

Date of Receipt of a Complete Application

February 10, 1993

BACT Determination Requested by Applicant

SKC's application called for the firing of fuel oil on a full time or as needed basis since a firm natural gas contract had not been obtained at the time of filing. Consequently, the application required a BACT determination for SO2 and beryllium since these pollutants would be emitted in amounts exceeding PSD-significant levels. BACT was proposed by the applicant as firing fuel oil with a 0.5 percent maximum sulfur content (0.3 average). Since there are no specific control technologies for beryllium, an uncontrolled beryllium emission level was proposed.

BACT Determination by the Department

During initial permitting discussions with SKC, the Department of Environmental Protection (Department) indicated to them that BACT would require the use of natural gas as the primary fuel, if available. Subsequently, SKC obtained a natural gas contract.

Therefore, the Department's determination of BACT is three packaged steam boilers being allowed to fire both natural gas and No. 2 fuel oil (maximum 0.05% sulfur, by weight), with the primary fuel being natural gas. Allowable emissions under normal operating conditions (i.e. 380,000 lbs/hr steam supplied by CBCP) are listed below for each boiler along with the limit basis:

Pollutant	Emission Limits	Basis
NO_x	23.6 lbs/hr and 103.4 tons/yr	Subpart D_b (0.2 lb/mm BTU)
SO_2	25 tons/yr total-3 boilers*	BACT ($\leq$0.05% S, by wt. #2 Fuel Oil)
VE	Natural Gas - 5% opacity	BACT
VE	No. 2 Fuel Oil - 10% opacity	BACT

* In the event that the ceiling for SO_2 is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SKC, SKC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO_2 during the period of such curtailment shall not be counted against the yearly emissions ceiling of 25 tons unless administrative proceedings result in a finding that the exceedance was within SKC's control. In no event shall the total annual emissions of SO_2 from the three steam boilers exceed 41 tons/year. The notice shall include a statement or reasons for the request and supporting documentation, and shall be published by SKC, without supporting documents, in a newspaper of general circulation in Jacksonville, Florida, as defined in Section 403.5115(2), Florida Statutes. The filing and publication of the notice no later than 7 days following the date of exceedance, shall preclude any finding of violation by the Department until final disposition of any administrative proceedings.

BACT Determination Procedure

In accordance with Florida Administrative Code (F.A.C.) Rules 17-210 through 297, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available control methods, systems and techniques. In addition, the regulations require that in making the BACT determination the Department shall give consideration to:

(a) Any Environmental Protection Agency determination of BACT pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

(b) All scientific, engineering and technical material and other information available to the Department.

(c) The emission limiting standards or BACT determinations of any other State.

(d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

BACT Determination Rationale

BACT review for particulate emissions and sulfur-dioxide are required under F.A.C. Rule 17-296.406. Visible emissions may be regulated as a surrogate parameter for PM/PM_{10} and have been established at 5% opacity for natural gas fired boilers (10% opacity for No. 2 fuel oil).

For SO_2 emissions from oil firing, only two alternatives exist that would result in stringent SO_2 emissions; using low sulfur content fuel oil or flue gas desulfurization (FGD). EPA has recognized that FGD technology is inappropriate to apply to these combustion units. Sludge would be generated that would have to be disposed of properly, and there would be greatly increased costs associated with the construction and operation of a FGD system. Finally, there is no information in the literature to indicate that FGD has ever been applied to burning distillate oil. This leaves the use of natural gas and low sulfur fuel oil as backup as the best option for this project. Due to the anticipated availability of very low sulfur oil by October 1993, the Department will require the use of No. 2 fuel oil with 0.05% sulfur by weight as BACT.

Details of the Analysis May be Obtained by Contacting:

Preston Lewis, P.E., BACT Coordinator
Department of Environmental Protection
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

July 7 1993
Date

Approved by:

Virginia B. Wetherell, Secretary
Dept. of Environmental Protection

7 July 1993
Date

APPENDIX B

SOURCES FOR EMISSION FACTORS

ERRATA

The following are changes since the publication of Supplement F

CHAPTER ONE

Reference: Table 1.1

The following SCC changes should occur.

Type	Line #	Correction
Pulverized coal fired, wet bottom	1	101002-01/21
Cyclone furnace	3	103002-23/03
Streader stoker, with multiple cyclones, and reinjection	1 2	101002-04/24 102002-04/24
Spreader stoker, with multiple cyclones, no reinjection	2	102002-04/24

Reference: Table 1.1-2

Reference: Table 1.1-3

For source category Overfeed stoker, withmultiple cyclones, the emission factor for filterable PM should be 9 lb/ton instead of 16 lb/ton.

Reference: 1.3-1

The NOx Emission Factor for both No. 6 and No. 5 oil fired should be 6.6 instead of 0.6

Reference: Table 1.3-9

The units in the heading should read (lb/10E12 Btu) instead of (lb/10E3 gal)

Reference 1.3-11

For the source category Distillate oil fired, the emission factors for Ni should be 73 pg/J and 170 lb/10E12 Btu

Reference: Table 1.4-2

The footnotes at the bottom of the page are arranged a thru h. They should be a thru g. C has been left out and should be in place of the existing d.

Reference: Table 1.4-3

The TOC emission factor for Commercial boilers (/3- <10) expressed in lb/10E6 ft3 now reads 5.8. It should be 8.0 lb/10E6 ft3. Also the metric number for TOC should be 128kg/10^6 m^3 instead of 92kg/10^6 m^3.

Reference: Table 1.6-2

TABLE 1.3-2 (ENGLISH UNITS). CRITERIA POLLUTANT EMISSION FACTORS FOR UNCONTROLLED FUEL OIL COMBUSTION
(Continued)

Firing Configuration (SCC)[a]	SO_2[b]		SO_3[c]		NO_x[d]		CO[e,f]		Filterable PM[g]	
	Emission Factor lb/10^3 gal	Rating	Emission Factor lb/10^3 gal	Rating	Emission Factor lb/10^3 gal	Rating	Emission Factor lb/10^3 gal	Rating	Emission Factor lb/10^3 gal	Rating
Distillate oil fired (102005-01/02/03)	142S	A	2S	A	20	A	5	A	h	A
No. 4 oil fired (10200504)	150S	A	2S	A	20	A	5	A	h	B
Commercial/institutional/residential combustors										
No. 6 oil fired (103004-01/02/03)	157S	A	2S	A	55	A	5	A	h	A
No. 5 oil fired (10300404)	157S	A	2S	A	55	A	5	A	h	B
Distillate oil fired (103005-01/02/03)	142S	A	2S	A	20	A	5	A	h	A
No. 4 oil fired (10300504)	150S	A	2S	A	20	A	5	A	h	B
Residential furnace (No SCC)	142S	A	2S	A	18	A	5	A	0.3	A

[a]SCC = Source Classification Code.
[b]References 1-6, 23, 42-46. S indicates that the weight % of sulfur in the oil should be multiplied by the value given.
[c]References 1-5, 45-46, 22.
[d]References 3-4, 10, 15, 24, 42-46, 48-49. Expressed as NO_2. Test results indicate that at lease 95 % by weight of NO_x is NO for all boiler types except residential furnaces, where about 75 % is NO. For utility vertical fired boilers use 105 lb/10^3 gal at full load and normal (>15%) excess air. Nitrogen oxides emissions from residual oil combustion in industrial and commercial boilers are related to fuel nitrogen content, estimated by the following empirical relationship: lb NO_2 /10^3 gal = 20.54 + 104.39(N) where N is the weight percent of nitrogen in the oil.

TABLE 1.3-4 (ENGLISH UNITS). EMISSION FACTORS FOR TOTAL ORGANIC COMPOUNDS (TOC), METHANE, AND NONMETHANE TOC (NMTOC) FROM UNCONTROLLED FUEL OIL COMBUSTION

Firing Configuration (SCC)[a]	TOC[b]		Methane[b]		NMTOC[b]	
	Emission Factor lb/10^3 gal	Rating	Emission Factor lb/10^3 gal	Rating	Emission Factor lb/10^3 gal	Rating
Utility boilers						
No. 6 oil fired, normal firing (10100401)	1.04	A	0.28	A	0.76	A
No. 6 oil fired, tangential firing (10100404)	1.04	A	0.28	A	0.76	A
No. 5 oil fired, normal firing (10100405)	1.04	A	0.28	A	0.76	A
No. 5 oil fired, tangential firing (10100406)	1.04	A	0.28	A	0.76	A
No. 4 oil fired, normal firing (10100504)	1.04	A	0.28	A	0.76	A
No. 4 oil fired, tangential firing (10100505)	1.04	A	0.28	A	0.76	A
Industrial boilers						
No. 6 oil fired (102004-01/02/03)	1.28	A	1	A	0.28	A
No. 5 oil fired (10200404)	1.28	A	1	A	0.28	A
Distillate oil fired (102005-01/02/03)	0.252	A	0.052	A	0.2	A
No. 4 oil fired (10200504)	0.252	A	0.052	A	0.2	A
Commercial/institutional/residential combustors						
No. 6 oil fired (103004-01/02/03)	1.605	A	0.475	A	1.13	A
No. 5 oil fired (10300404)	1.605	A	0.475	A	1.13	A

TABLE 1.3-7. CUMULATIVE PARTICLE SIZE DISTRIBUTION AND SIZE SPECIFIC EMISSION FACTORS FOR UNCONTROLLED INDUSTRIAL BOILERS FIRING DISTILLATE OIL[a]

EMISSION FACTOR RATING: E

Particle Size[b] (μm)	Cumulative Mass % ≤ stated size	Cumulative Emission Factor, [kg/10^3 ℓ (lb/10^3 gal)]
	Uncontrolled	Uncontrolled
15	68	0.16 (1.33)
10	50	0.12 (1.00)
6	30	0.07 (0.58)
2.5	12	0.03 (0.25)
1.25	9	0.02 (0.17)
1.00	8	0.02 (0.17)
0.625	2	0.005 (0.04)
TOTAL	100	0.24 (2.00)

[a]Reference 29. Source Classification Codes: 102005-01/02/03.
[b]Expressed as aerodynamic equivalent diameter.

TABLE1.3-9. EMISSION FACTORS FOR NITROUS OXIDE (N_2O), POLYCYCLIC ORGANIC MATTER (POM), AND FORMALDEHYDE (HCOH) FROM FUEL OIL COMBUSTION

EMISSION FACTOR RATING: E

Firing Configuration (SCC)[a]	Emission Factor, kg/10^3 ℓ (lb/10^3 gal)		
	N_2O[b]	POM[c]	HCOH[c]
Utility/industrial/commercial boilers			
No. 6 oil fired (101004-01 10200401 10300401)	0.013 (0.11)	3.2-3.6 (7.4-8.4)[d]	69-174 (161-405) lb/10^{12} Btu
Distillate oil fired (10100501 10200501 10300501)	0.013 (0.11)	9.7 (22)[e]	100-174 (233-405)
Residential furnaces (No SCC)	0.006 (0.05)	NA	NA

[a]SCC = Source Classification Code.
[b]References 28-29.
[c]References 16-19.
[d]Particulate and gaseous POM.
[e]Particulate POM only.
NA = Not available.

TABLE 1.3-11. EMISSION FACTORS FOR TRACE ELEMENTS FROM FUEL OIL COMBUSTION SOURCES

EMISSION FACTOR RATING: E

Firing Configuration (SCC)[a]	Emission Factor, pg/J (lb/10^{12} Btu)[b]										
	Sb	As	Be	Cd	Cr	Co	Pb	Mn	Hg	Ni	Se
No. 6 oil fired (101004-01/04 10200401 10300401)	10-20 (24-46)	8.2-49 (19-114)	1.8 (4.2)	6.8-91 (16-211)	9.0-55 (21-128)	33-50 (77-121)	12-80 (28-194)	10-30 (23-74)	0.6-14 (1.4-32)	360-964 (837-2330)	16 (38)
Distillate oil fired (10100501 10200501 10300501)	NA	1.8 (4.2)	1.1 (2.5)	4.5 (11)	21-29 (48-67)	NA	3.8 (8.9)	6.0 (14)	1.3 (3.0)	7.3 (18)	NA

[a]SCC = Source Classification Code.

[b]References 16-19, 36-40. The emission factors in this table represent the ranges of factors reported in the literature. If only one data point was found, it is still reported in this table.

NA = Not available.

Table 1.4-1. EMISSION FACTORS FOR PARTICULATE MATTER (PM) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr heat input) [SCC][b]	Filterable PM[c]			Condensible PM[d]		
	kg/10^6 m^3	lb/10^6 ft^3	Rating	kg/10^6 m^3	lb/10^6 ft^3	Rating
Utility/large industrial boilers (>100) [10106001, 10100604]	16-80	1-5	B	ND[e]	ND	
Small industrial boilers (10 - 100) [10200602]	99	6.2	B	120	7.5	D
Commercial boilers (0.3 -<10) [10300603]	72	4.5	C	120	7.5	C
Residential furnaces (<0.3) [no SCC]	2.8	0.18	C	180	11	D

[a]References 9-14. All factors represent uncontrolled emissions. Units are kg of pollutant/10^6 cubic meters and lbs. of pollutant/10^6 cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value.

[b]SCC = Source Classification Code.

[c]Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

[d]Condensible PM is that particulate matter collected in the impinger portion of an EPA Method 5 (or equivalent) sampling train. Total PM is the sum of the filterable PM and condensible PM. All PM emissions can be assumed to be less than 10 microns in aerodynamic equivalent diameter (PM-10).

[e]ND = No data.

Table 1.4-2. EMISSION FACTORS FOR SULFUR DIOXIDE (SO_2), NITROGEN OXIDES (NO_x), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (Size, 10^6 Btu/hr heat input) [SCC][b]	SO_2[c]			NO_x[d]			CO[e]		
	$kg/10^6m^3$	$lb/10^6ft^3$	Rating	$kg/10^6m^3$	$lb/10^6ft^3$	Rating	$kg/10^6m^3$	$lb/10^6ft^3$	Rating
Utility/Large Industrial Boilers (>100) [10100601, 10100604]									
Uncontrolled	9.6	0.6	A	8800	550[f]	A	640	40	A
Controlled - Low NO_x burners	9.6	0.6	A	1300	81[f]	D	ND[g]	ND	
Controlled - Flue gas recirculation	9.6	0.6	A	850	53[f]	D	ND	ND	
Small Industrial Boilers (10-100) [10200602]									
Uncontrolled	9.6	0.6	A	2240	140	A	560	35	A
Controlled - Low NO_x burners	9.6	0.6	A	1300	81[f]	D	980	61	D
Controlled - Flue gas recirculation	9.6	0.6	A	480	30	C	590	37	C
Commercial Boilers (0.3-<10) [10300603]									
Uncontrolled	9.6	0.6	A	1600	100	B	330	21	C
Controlled - Low NO_x burners	9.6	0.6	A	270	17	C	425	27	C
Controlled - Flue gas recirculation	9.6	0.6	A	580	36	D	ND	ND	
Residential Furnaces (<0.3) [no SCC]									
Uncontrolled	9.6	0.6	A	1500	94	B	640	40	B

[a]Units are kg of pollutant/10^6 cubic meters and lbs. of pollutant/10^6 cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m^3 (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value.

[b]SCC = Source Classification Code.

[d]Reference 7. Based on average sulfur content of natural gas, 4600 g/10^6 Nm^3 (2000 gr/10^6 scf).

[c]References 10, 15-19. Expressed as NO_2. For tangentially fired units, use 4400 kg/10^6 m^3 (275 lb/10^6 ft^3). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1. Note that NO_x emissions from controlled boilers will be reduced at low load conditions.

[f]References 9-10, 16-18, 20-21.

[g]Emission factors apply to packaged boilers only.

[h]ND = No data.

United States Environmental Protection Agency

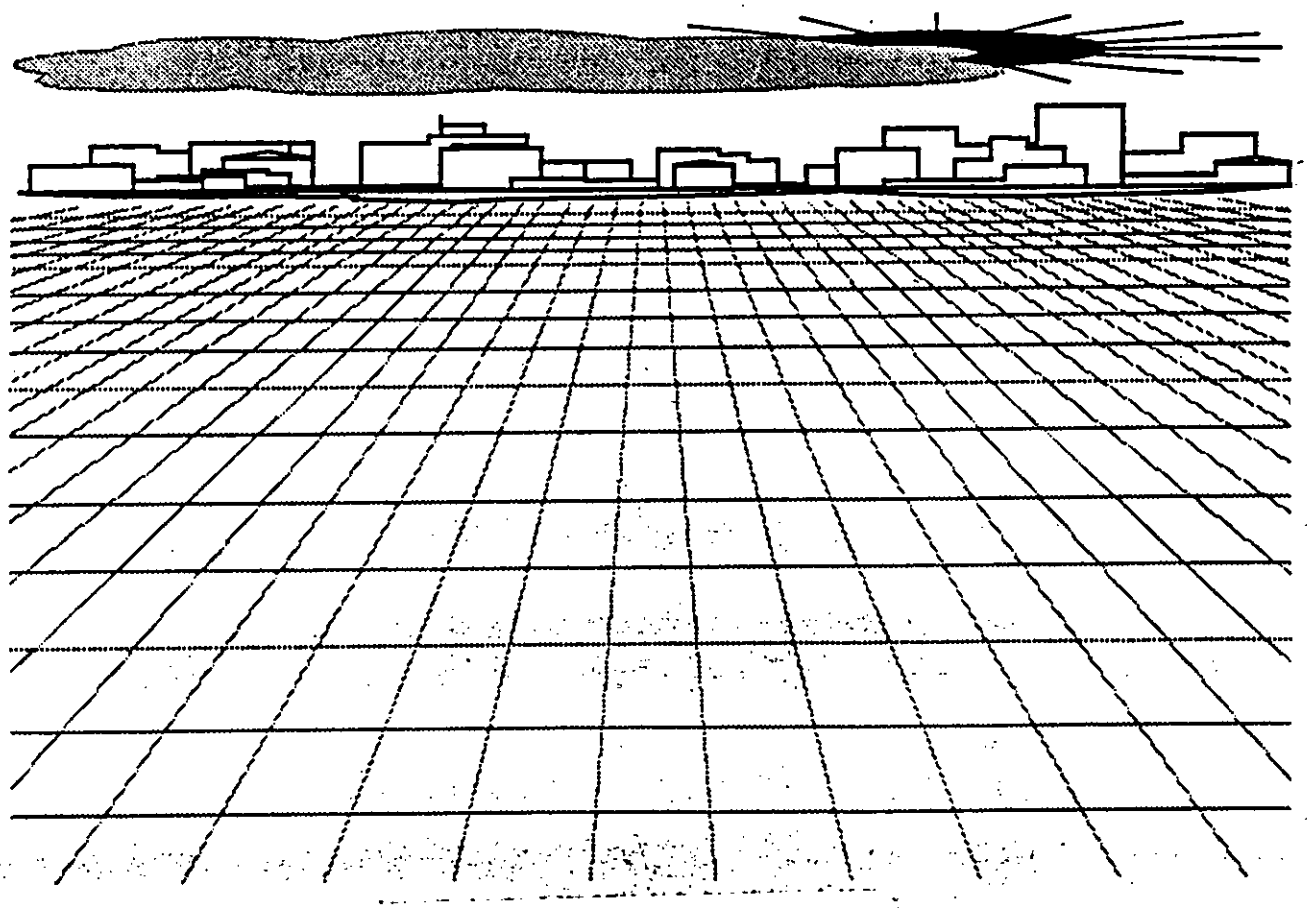
Office of Air Quality Planning And Standards Research Triangle Park, NC 27711

EPA-450/2-90-011
October 1990

AIR

EPA

TOXIC AIR POLLUTANT EMISSION FACTORS - A COMPILATION FOR SELECTED AIR TOXIC COMPOUNDS AND SOURCES, SECOND EDITION



INDUSTRIAL PROCESS	SIC CODE	EMISSION SOURCE	SCC CODE	POLLUTANT	CAS NUMBER	EMISSION FACTOR	NOTES	REFERENCE
Oil combustion		Distillate oil-fired boiler, util/commerc/industr/residential	1	Nickel	7440020	47.6 lb/10E12 Btu	Controlled by ESP, based on engineering judgement	34
Oil combustion		Distillate oil-fired boiler, util/commerc/industr/residential	1	Nickel	7440020	4.8 lb/10E12 Btu	Controlled by scrubber, based on engineering judgement	34
Oil combustion		Residual oil-fired boiler, util/commerc/industr/residential	1	Nickel	7440020	1260 lb/10E12 Btu	Uncontrolled, based on engineering judgement	34
Oil combustion		Residual oil-fired boiler, util/commerc/industr/residential	1	Nickel	7440020	442.6 lb/10E12 Btu	Controlled by multiclone, based on engineering judgement	34
Oil combustion		Residual oil-fired boiler, util/commerc/industr/residential	1	Nickel	7440020	352.8 lb/10E12 Btu	Controlled by ESP, based on engineering judgement	34
Oil combustion		Residual oil-fired boiler, util/commerc/industr/residential	1	Nickel	7440020	50.4 lb/10E12 Btu	Controlled by scrubber, based on engineering judgement	34
Oil combustion		Cast iron sectional boilers, distillate oil	10300501	Polycyclic organic matter		34.5 lb/10E12 Btu	Uncontrolled, home heating application	114
Oil combustion		Distillate watertube boilers	10300501	Polycyclic organic matter		0.278 lb/10E12 Btu heat input	Uncontrolled	114
Oil combustion		Hot air furnace, distillate oil	10300501	Polycyclic organic matter		0.324 lb/10E12 Btu	Uncontrolled, same reference also lists <15.4 for same boiler/fuel type	114
Oil combustion		Scotch marine boilers, distillate oil	10300501	Polycyclic organic matter		41.04 lb/10E12 Btu	Uncontrolled	114
Oil combustion	49	Flue gas	1	2,3,7,8-Tetrachlorodibenzofuran		Not detectable	Low ash, 2% sulfur oil, sampled after heat exch., before ESP, 2378-TCDD detec. limit=<0.67-<1.3ng/m3	119
Oil combustion	49	Boiler flue gas	1	2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016	Not detectable	Low ash, 2% sulfur oil, sampled after heat exch., before ESP, 2378-TCDD detec. limit=<4.2-<7.9 ng/m3	119
Oil combustion, commercial		Scotch marine boilers, residual oil	10300401	Polycyclic organic matter		2.203 lb/10E12 Btu heat input	Uncontrolled, represents benzo(a)pyrene only	114

Environmental Science & Engineering UNIT 2 RA 2
Source Emissions Testing Dept.
Continuous Emissions Monitoring Data
Seminole Kraft
Jacksonville,FL
Performed for:
Date Printed = 06-22-1994 Current Time = 08:48:59 Pobs= 100
File Name = c:\cemdata\062294.PRN Calibration File:c:\cemdata\SK0622B.CAL

06-22-1994 Time	O2 %V	CO PPMV	NOx PPMV	CO_H1 PPMV
08:49:42	7.9	46.3	68.8	45.0
08:50:42	7.9	42.2	69.9	41.7
08:51:42	8.0	48.9	66.1	48.2
08:52:42	7.8	41.1	69.0	40.8
08:53:42	7.9	45.1	66.8	44.8
08:54:42	7.7	43.7	71.3	42.3
08:55:42	7.9	40.3	68.7	39.6
08:56:42	7.9	60.6	65.6	59.7
08:57:42	7.7	39.4	72.3	38.8
08:58:42	8.0	62.0	64.7	61.7
08:59:42	8.0	47.8	66.7	47.2
09:00:42	7.8	42.4	70.7	42.3
09:01:42	8.0	58.9	65.4	58.8
09:02:42	8.0	52.2	65.0	51.0
09:03:42	7.9	54.5	68.9	53.2
09:04:42	7.7	42.4	72.1	42.2
09:05:42	8.0	41.5	66.7	41.8
09:06:42	7.7	76.0	72.4	75.5
09:07:42	7.9	38.4	70.7	38.1
09:08:42	7.9	42.5	69.5	41.7
09:09:42	7.8	42.7	71.7	42.1
Avg.=	7.9	48.0	68.7	47.4

NO_x #/10^6 BTU = 0.1149

@ 7% O_2 = 51.3 ppm

PB81-225559

EPA-600/7-81-003c

EMISSIONS ASSESSMENT OF CONVENTIONAL STATIONARY COMBUSTION SYSTEMS: VOLUME V: INDUSTRIAL COMBUSTION SOURCES

Prepared under the direction of the
Conventional Combustion Environmental Assessment Program

Prepared by

N. F. Surprenant, W. Battye, D. Roeck,
and S. M. Sandberg

GCA Corporation
GCA/Technology Division
213 Burlington Road
Bedford, Massachusetts 01730

TRW, Inc.
One Space Park
Redondo, Massachusetts 01730

Contract No. 68-02-2197
EPA Program Element No. EHE 624A

Project Officer: Michael C. Osborne

Industrial Environmental Research Laboratory
Office of Environmental Engineering and Technology
Research Triangle Park, North Carolina 27711

Prepared for:

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Research and Development
Washington, D.C. 20460

TABLE 4B EMISSION DATA FOR UTILITY BOILERS FIRING RESIDUAL FUEL OIL (5)

	lb/MMBtu (Range)	% of Samples Below Detection Limit
Benzene	$2.27 \times 10^{-6} - 3.00 \times 10^{-6}$	100
Formaldehyde	$1.10 \times 10^{-5} - 1.65 \times 10^{-4}$	47
Arsenic	$3.97 \times 10^{-6} - 2.00 \times 10^{-5}$	0
Beryllium	$4.21 \times 10^{-8} - 2.10 \times 10^{-7}$	39
Cadmium	$6.72 \times 10^{-7} - 3.04 \times 10^{-5}$	0
Chromium VI	$4.07 \times 10^{-7} - 4.04 \times 10^{-6}$	7
Copper	$9.76 \times 10^{-6} - 1.65 \times 10^{-5}$	0
Lead	$2.51 \times 10^{-6} - 2.20 \times 10^{-5}$	0
Manganese	$3.90 \times 10^{-6} - 2.60 \times 10^{-5}$	0
Mercury	$2.00 \times 10^{-6} - 6.15 \times 10^{-5}$	100
Nickel	$3.00 \times 10^{-4} - 1.06 \times 10^{-3}$	0
Selenium	$3.40 \times 10^{-6} - 1.14 \times 10^{-5}$	22
Zinc	$7.01 \times 10^{-5} - 4.50 \times 10^{-4}$	0
Total PAH*	$5.31 \times 10^{-7} - 5.29 \times 10^{-5}$	64
Acenapthene	$6.32 \times 10^{-9} - 1.02 \times 10^{-7}$	33
Acenaphthylene	$6.32 \times 10^{-9} - 9.22 \times 10^{-9}$	100
Anthracene	$6.32 \times 10^{-9} - 1.43 \times 10^{-8}$	39
Benz[a]anthracene	$6.40 \times 10^{-10} - 1.02 \times 10^{-7}$	83
Benzo[b]fluoranthene	$6.40 \times 10^{-9} - 3.65 \times 10^{-8}$	89
Benzo[k]fluoranthene	$6.40 \times 10^{-9} - 3.65 \times 10^{-8}$	89
Benzo[a]pyrene	$6.32 \times 10^{-9} - 9.22 \times 10^{-9}$	100
Benzo[g,h,i]perylene	$6.40 \times 10^{-9} - 6.95 \times 10^{-8}$	94
Chrysene	$6.40 \times 10^{-9} - 1.75 \times 10^{-8}$	83
Dibenzo[a,h]anthracene	$6.40 \times 10^{-9} - 2.47 \times 10^{-8}$	83
Fluroanthene	$6.40 \times 10^{-9} - 2.55 \times 10^{-8}$	39
Fluorene	$6.40 \times 10^{-9} - 3.15 \times 10^{-8}$	39
Indeno[1,2,3,c,d]pyrene	$6.40 \times 10^{-9} - 6.25 \times 10^{-8}$	83
Napthalene(1)	$4.23 \times 10^{-7} - 1.21 \times 10^{-5}$	0
Phenanthrene	$6.40 \times 10^{-9} - 1.08 \times 10^{-7}$	22
Pyrene	$6.40 \times 10^{-9} - 3.17 \times 10^{-8}$	50

*PAH - Polycyclic Aromatic Hydrocarbons

(1) It should be noted that napthalene is a decomposition product of XAD-2 resin. Although resin modules are stored in ice chests to minimize decomposition, it is still common to see measurable napthalene levels in both PAH samples and in blank samples. It is possible that much of the reported napthalene emissions (after correction for field blank values) are due to resin decomposition and not to unit emissions. CARB is currently evaluating this problem and may remove napthalene from the test method.

TABLE 18. TRACE ELEMENT EMISSION FACTORS AND MEAN AMBIENT SEVERITY FACTORS FOR RESIDUAL OIL-FIRED INDUSTRIAL BOILERS

Trace element	Concentration (ppm)	Emission factor (pg/J)	Ambient[a] severity factor
Aluminum (Al)	3.8	87	0.002
Arsenic (As)	0.8	18	1.1
Boron (B)	0.41	9.4	<0.001
Barium (Ba)	1.26	28.8	0.008
Beryllium (Be)	0.08	1.8	0.11
Bromine (Br)	0.13	3.0	<0.001
Calcium (Ca)	14	320	0.002
Cadmium (Cd)	2.27	51.9	0.64
Chlorine (Cl)	12	274	0.012
Cobalt (Co)	2.21	50.5	0.12
Chromium (Cr)	1.3	30	2.7
Copper (Cu)	2.8	64	0.638
Fluorine (F)	0.12	2.7	<0.001
Iron (Fe)	18	411	0.05
Mercury (Hg)	0.04	0.9	0.002
Potassium (K)	34	777	0.48
Lithium (Li)	0.06	1.4	0.006
Magnesium (Mg)	13	297	0.005
Manganese (Mn)	1.33	30.4	<0.001
Molybdenum (Mo)	0.9	21	<0.081
Sodium (Na)	31	708	0.034
Nickel (Ni)	42.2	964	7.8
Phosphorus (P)	1.1	25	0.004
Lead (Pb)	3.5	80	0.066
Antimony (Sb)	0.44	10	0.002
Selenium (Se)	0.7	16	0.010
Silicon (Si)	17.5	400	0.004
Tin (Sn)	6.2	142	0.004
Strontium (Sr)	0.15	3.4	<0.001
Thorium (Th)	<0.001	0.02	<0.001
Uranium (U)	0.7	16	0.22
Vanadium (V)	160	3656	0.90
Zinc (Zn)	1.26	28.8	<0.001

[a]Based on a firing rate of 50 x 10^9 J/hr.

3.7 Results From Gas-fired Units

Limited test data are available from the FCEM program on emissions from gas-fired units. Some eight sites have been tested. At six sites, only benzene and formaldehyde measurements were made. A complete sampling and analytical effort was performed at two sites. With these limited data, only arithmetic average values are presented, except for formaldehyde, in Table 3-8. Most of the metal values reported had significant background levels in the filters, making these values questionable. Note that for some substances, no current measurements exist, however, significant levels of those substances are not expected in gas-fired flue gas, based on the typical composition of natural gas.

Table 3-8.
Emission Factors for Gas-fired Units, lb/10^{12} Btu

Substances	Sites Tested	Sites Detected [a]	Sample Size [b]	Arithmetic Mean
Arsenic	2	2	2	0.23
Beryllium	2	0	0	<0.01
Cadmium	2	1	1	0.04
Chromium	2	2	2	1.1
Cobalt	2	1	1	0.08
HCl	0			NV [c]
Lead	2	2	2	0.4
Manganese	2	2	2	0.4
Mercury [d]	2	1	2	0.0008
Nickel	2	2	2	2.4
Selenium	2	0	0	<0.02
Benzene	8	2	5	0.8
Formaldehyde [e]	9	8	9	34(7-150)
Toluene	2	2	2	10
Radionuclides	0			NV
Benzo(a)pyrene equivalents	2	0	0	ND [f]
2,3,7,8-TCDD equivalents	1	1	1	0.0000012

[a] Number of times the substance was quantified.
[b] The number of site values used to calculate the mean and confidence interval. (Individual values with high detection limits [>2x the highest quantified value] were not included in the mean.)
[c] NV = No value.
[d] Based on natural gas analysis, not detected in stack gas at higher concentration.
[e] Geometric mean and confidence interval.
[f] ND = Not detected.

File Copy

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

April 25, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John L. West, General Manager
Seminole Kraft Corporation
9469 East Port Road
Jacksonville, Florida 32229

Dear Mr. West:

The Department received the request to extend the expiration date of the construction permit referenced below. The permit is amended as shown:

Permit No. AC16-222359, PSD-FL-198A, Seminole Kraft Corporation

Current Expiration Date: April 30, 1995

New Expiration Date: **August 31, 1995**

This letter shall become an Attachment to the Construction Permit No. AC16-222359.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the exemption request/application and the parties listed below must be filed within 14 days of receipt of this exemption. Petitions filed by other persons must be filed within 14 days of the exemption issuance or within 14 days of their receipt of this exemption whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
(g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this exemption denial. Persons whose substantial interests will be affected by any decision of the Department with regard to the exemption request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this exemption denial in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

A copy of this letter shall be filed with the referenced permits and will become a part of those permits.

Sincerely,

for Howard L. Rhodes, Director
Division of Air Resources Management

HLR/sa/t

Enclosure

cc: C. Kirts, NED
J. Woosley, RESD
J. Harper, EPA
J. Bunyak, NPS
S. Shirley, OHF&C picked-up 4-27-95 am
Read File

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 4-27-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk 4-27-95 Date

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes

I signed 4/27

FROM: Clair H. Fancy

DATE: April 25, 1995

SUBJ: Approval of Construction Permit Amendment
AC 16-222359, PSD-FL-198A
Seminole Kraft Corporation

Attached for your approval and signature is an amendment to a construction permit prepared by the Bureau of Air Regulation for Seminole Kraft Corporation. The purpose of this amendment is to extend the expiration date of the construction permit from April 30, 1995 to August 31, 1995.

This amendment is recommended for your approval and signature.

CHF/sa/t

Attachment

Logout to Howard.
cl
To-Clair 4/27
Howard

Kim - Done.
let Syd know. cl

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
John L West, Gen Mgr
Seminole Kraft Corp
9469 E Port Rd
Jacksonville, Fl
32218

4a. Article Number
Z 311 902 924

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)
Chris Clark

PS Form 3811, December 1991 *U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 311 902 924

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

PS Form 3800, March 1993

Sent to	John West
Street and No.	Seminole Kraft
P.O., State and ZIP Code	Jax, Fl
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	4-27-95

AC16-222359
PSD-Fl-198A