# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit

Mr. John L. West Stone Container Corporation Post Office Box 26998 Jacksonville, Florida 32226-6998 DEP File No. 0310067-004-AC PSD-FL-252

Enclosed is the FINAL Permit Number PSD-FL-252 for increased steam production and heat input rate for the three existing boilers (Units 22, 23 and 26) at the Jacksonville Mill, Duval County. This permit is issued pursuant to Chapter 403, Florida Statutes and in accordance with Rule 62-212.400., F.A.C. - Prevention of Significant Deterioration (PSD).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

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

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 3-9-00 to the person(s) listed:

John L. West, Stone Container Corp. \*

C. Kirts, DEP NED

J. Manning, RESD

B. Oven, DEP-OSC

D. Neely, EPA

J. Bunyak, NPS

D. Buff, Golder Associates

D. Roberts, Esq., HGSS

J. Antista, General Counsel, FG & FWFC

D. Russ, Esq., DCA

E.M. Barker, Esq., Slott & Barker

L.N. Curtin, Esq., Holland & Knight

G.K. Radlinski, Esq., City of Jacksonville

N.B. Barnard, Esq., St. Johns River WMD

R. Vandiver, General Counsel, PSC

Clerk Stamp

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

(Clerk)

(Date)

#### FINAL DETERMINATION

### **Stone Container Corporation**

### Permit No. 0310067-004-AC, PSD-FL-252

#### Jacksonville Mill

An Intent to Issue an air construction permit to Stone Container Corporation for an increase in the maximum steam production rate and heat input rate for each of the three package boilers at the Jacksonville Mill in Duval County, was distributed on January 11, 2000. The Notice of Intent was published in the Florida Times Union on January 22, 2000. Copies of the draft construction permit were available for public inspection at the Department offices in Jacksonville and Tallahassee.

No comments were submitted by the National Park Service, the U.S. Environmental Protection Agency or the public. The Department will remove the requirement in Specific Condition 11 of the permit of submitting the compliance test results to the Bureau of Air Regulation. The results will be submitted only to the Northeast District Office as well as RESD.

The final action of the Department is to issue the permit with the change noted above.

### Z 031 391 877

	US Postal Service					
	Receipt for Cer	tified Mail				
	No Insurance Coverage Provided.					
	Do not use for International Mail (See reverse)					
	Sent to					
	Loun West					
	Street & Number					
	Post Office, State, & ZIP Cod	te FI				
	Postage	\$				
	Certified Fee					
	Special Delivery Fee					
ß	Restricted Delivery Fee					
199	Return Receipt Showing to Whom & Date Delivered					
April	Return Receipt Showing to Whom, Date, & Addressee's Address					
S Form 3800, April 1995	TOTAL Postage & Fees	\$				
ည်	Postmark or Date 3-9-CiD					
Forn	031 c067-004-AC					
\$ POD-F1-252.						

ADDRESS completed on the reverse side?	SENDER:  © Complete items 1 and/or 2 for additional services.  © Complete items 3. 4a, and 4b.  Print your name and address on the reverse of this form so that we card to you.  Attach this form to the front of the mailpiece, or on the back if space permit.  Write 'Return Receipt Requested' on the mailpiece below the article. The Return Receipt will show to whom the article was delivered and delivered.  3. Article Addressed to:  The Back Slength Carbon Cap.  Purpose Sand Slength Sle	does not number. the date  4a. Article N 4b. Service Register Express	31.39/ Type ed Mail ceipt for Merchandise	s (for an ee's Address d Delivery	for using Return Receipt Service.
s your RETURN A	5. Pechaived By: (Print Name) 6. Signature: (Addressee or Agent)	and fee is			Thank you
_	6. Signature: (Addressee or Agent)			,	



### Department of Environmental Protection

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

David B. Struhs Secretary

#### PERMITTEE:

Stone Container Corporation 9469 East Port Road Jacksonville, Florida 32229

Authorized Representative: Mr. John L. West, General Manager

**FID No.** 0310067

PSD No. PSD-FL-252

SIC No. 2621

**Project:** 3 Package Steam Boilers

Expires: January 31, 2001

#### PROJECT AND LOCATION:

Permit to increase the maximum steam production rate for each package boiler at the Stone Container Corporation Recycled Fiber Paper Mill in Jacksonville. Each of the three package boilers will be rated at 150,000 lb/hr steam at 650 psig and 750°F. The project is located at 9469 East Port Road, Jacksonville, Duval County. The UTM coordinates of this facility are Zone 17; 442.4 km E; 3365.4 km N.

#### STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

#### Attached appendices are made a part of this permit:

· Appendix BD

**BACT** Determination

Appendix GC

Construction Permit General Conditions

Howard L. Rhodes, Director Division of Air Resources

Management

#### SECTION I. FACILITY INFORMATION

#### **FACILITY DESCRIPTION**

Stone Container Corporation (SCC) is a 100-percent recycled fiber paper mill facility located in Jacksonville, Duval County. Most of the steam required at SCC is provided by the adjacent U.S. Generating Company Cedar Bay Facility. The SCC facility includes three package boilers rated at 150,000 lb/hr steam at 650 psig and 750°F. These provide additional steam and serve as backup when steam is not available from Cedar Bay.

#### REGULATORY CLASSIFICATION

The Stone Container facility is classified as a "Major or Title V Source" per Rule 62-210.200, F.A.C., because it has the potential to emit more than 100 tons per year of at least one regulated air pollutant.

This industry is included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one regulated pollutant, the facility is a major facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Per Table 62-212.400-2, modifications at the facility resulting in emissions increases greater than the listed significance levels require review per the PSD rules and a determination of Best Available Control Technology (BACT) per Rule 62-212, F.A.C.

#### PERMIT SCHEDULE:

07-06-98: Date of Receipt of Application

12-07-99: Application complete

01-11-00: Issue Intent

01-22-00: Notice of Intent published in the Florida Times Union

#### **RELEVANT DOCUMENTS:**

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received 07-06-98
- DEP Completeness Requests dated 08-04-98, 9-08-99, 09-10-99 and 09-22-99
- SCC's responses dated 08-12-99, 09-23-99, 10-07-99 and 12-07-99
- SCC's response to DEP's 3rd Completeness Request: 12-07-99
- Technical Evaluation and Preliminary Determination dated 01-11-00
- Best Available Control Technology determination (issued concurrently with permit)

#### SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

- 1. Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department's Northeast District Office, 7825 Baymeadows Way, Jacksonville, Florida 32256-7590 and Regulatory & Environmental Services Department (RESD) in Jacksonville. All applications for permits to construct or modify an emissions unit(s) subject to the Prevention of Significant Deterioration or Nonattainment (NA) review requirements should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP). 2600 Blair Stone Road (MS 5505), Tallahassee, Florida 32399-2400 (phone number 850/488-0114).
- 2. <u>General Conditions</u>: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in *Appendix GC* of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 3. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- 4. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
- 5. Expiration: This air construction permit shall expire on January 31, 2001 [Rule 62-210.300(1), F.A.C.]. The permittee may, for good cause, 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. However, the permittee shall promptly notify the Department's Northeast District Office and RESD of any delays in completion of the project which would affect the startup day by more than 90 days. [Rule 62-4.090, F.A.C]
- 6. <u>Application for Title V Permit</u>: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the Department's Northeast District Office and RESD. [Chapter 62-213, F.A.C.]
- 7. New or Additional Conditions: Pursuant to Rule 62-4.080(1), F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080(1), F.A.C.]
- 8. <u>Annual Reports</u>: Pursuant to Rule 62-210.370(3), F.A.C., Annual Operating Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the Department's Northeast District Office and RESD by March 1<sup>st</sup> of each year. [Rule 62-210.370(3), F.A.C.]

### SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

The Specific Conditions listed in this section apply to the following emission units:

EMISSION UNIT NO.	System	EMISSION UNIT DESCRIPTION
022	Process	PACKAGE BOILER NO. 1
023	Process	PACKAGE BOILER NO. 2
026	Process	PACKAGE BOILER NO. 3

- 1. The construction and operation of these sources shall be in accordance with the capacities stated in the application dated June 1998. This permit shall replace PSD-FL-198(A).
- 2. The package boilers may each be operated continuously (8760 hrs/yr).
- 3. The maximum heat input rate to each boiler shall neither exceed 215 MMBtu/hr while firing natural gas nor 200 MMBtu/hr while firing No. 2 fuel oil.
- 4. In accordance with the terms of the Cedar Bay Cogeneration Project (CBCP) site certification, Stone Container Corporation (SCC) is limited to 640,000 lb/hr total steam consumption (380,000 lb/hr imported from CBCP and 260,000 lb/hr produced by SCC). When CBCP is not in operation or operating at reduced rates, SCC is permitted to produce up to 450,000 lb/hr steam and import up to 190,000 lb/hr from CBCP. This allows a maximum firing rate of 645 MMBtu/hr for all three package boilers when the CBCP facility is shutdown or operating at reduced rates.
- 5. The maximum allowable NO<sub>x</sub> emissions shall not exceed 0.2 lb/MMBtu, 34.94 lbs/hr and 153.1 tons/yr per boiler. The total NO<sub>x</sub> emissions from the three package boilers, in accordance with the terms of the CBCP site certification, shall not exceed 310 tons per year.
- 6. The three package 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<sub>2</sub> emissions from No. 2 fuel oil firing, totaling all three boilers, shall not exceed 25 tons/year. In the event that the ceiling for SO<sub>2</sub> is expected to be exceeded due to unavailability of natural gas caused by factors beyond the control of SCC, SCC shall notify the Department that it anticipates exceeding the ceiling as provided herein; and, the emissions of SO<sub>2</sub> 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 SCC's control.

In no event shall the total annual emissions of SO<sub>2</sub> 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 SCC, 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.

- 7. Visible emissions (VE) shall not exceed 5 percent (%) opacity during natural gas firing and 10% opacity during fuel oil firing.
- 8. In accordance with the requirements of 40 CFR 60.48b(b), a continuous emission monitoring system (CEMs) for nitrogen oxides shall be installed, operated, and maintained. Also, the natural gas, fuel oil and steam flows (both from the package 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.
- 9. Before this construction permit expires, each package boiler shall be tested and monitored for compliance with the emission limits in Specific Conditions No. 3, 5, 6 and 7. For the duration of all tests the emission units shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90 percent of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.
- 10. Compliance tests for NO<sub>x</sub> shall be conducted in accordance with 40 CFR 60.46b(e)(4). Compliance with SO<sub>2</sub> limits shall be in accordance with 40 CFR 60.49b(r), and a stoichiometric quantification for SO<sub>2</sub> 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.
- 11. 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 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, Chapter 62-297 and 40 CFR 60, Appendix A.
- 12. 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. (Rule 62-4.090, F.A.C.)

13. Pursuant to 40 CFR 60.49b(r), quarterly reports shall be submitted to the RESD office (i.e., Administrator) certifying that only very low sulfur oil (i.e., ≤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 SO₂ 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 SO₂ emissions for the year.

#### Stone Container Corporation Recycled Fiber Paper Mill/ 3 Package Boilers PSD-FL-252 / 0310067-004-AC Jacksonville, Duval County

Stone Container Corporation (SCC) has applied to increase the maximum steam rate and heat input rate to the three package boilers. The boilers are operated to support the paper mill operations. The boilers are fired with natural gas or No. 2 fuel oil with a maximum sulfur content of 0.05 percent by weight. SCC is currently requesting an increase in the maximum steam production rate for each boiler from 125,000 lb/hr to 150,000 lb/hr steam. The Cedar Bay cogeneration facility that is located adjacent to the existing SCC facility provides part of the steam required for the recycle fiber facility. The recycle fiber facility requires additional steam beyond that provided by the Cedar Bay facility. SCC desires more flexibility in steam production in the case of a shutdown or curtailment by Cedar Bay. According to the terms of the Cedar Bay Site Certification proceedings. SCC is to be limited to a total steam consumption of 640,000 lb/hr. which includes 380,000 lb/hr, imported from the Cedar Bay facility. This leaves 260,000 lb/hr to be produced by the three package boilers under normal operating conditions. During periods when Cedar Bay facility is shut down or operating at reduced rates, SCC will be allowed to produce up to 450,000 lb/hr steam from the three package boilers and import up to 190,000 lb/hr steam from the Cedar Bay facility. The total steam consumption cap of 640,000 lb/hr for SCC will still be in place.

The project is subject to Prevention of Significant Deterioration (PSD) review for NO<sub>x</sub> in accordance with Rule 62-212.400, Florida Administrative Code (F.A.C.). A Best Available Control Technology (BACT) determination is part of the review required by Rules 62-212.400 and 62-296, F.A.C. Air pollution control equipment will consist of Low-NO<sub>x</sub> burners and flue gas recirculation to minimize NO<sub>x</sub> emissions from the 3 Package Boilers.

#### **PROCESS EMISSIONS**

The applicant proposes the following emissions:

POLLUTANT	EXISTING EMISSIONS (TPY)	PROPOSED EMISSIONS (TPY)	NET CHANGE IN EMISSIONS (TPY)	PSD REVIEW APPLIES?
PM	0.63	20.9	20.3	No
PM <sub>10</sub>	0.63	15.5	14.9	No
SO <sub>2</sub>	0.08	39.8	39.7	No
NO <sub>x</sub>	6.28	310	303.7	Yes

Stone Container Corporation 3 Package Boilers

DEP File No. 0310067-004-AC PSD-FL-252

POLLUTAŅT	EXISTING EMISSIONS (TPY)	PROPOSED EMISSIONS (TPY)	NET CHANGE IN EMISSIONS (TPY)	PSD REVIEW APPLIES?
CO	2.62	58.4	55.8	No .
VOC	0.18	3.88	3.70	No
Pb	3.40E-05	0.0072	0.0072	No
Hg	1.88E-08	0.0022	0.0022	No
F	0.0	0.024	0.024	No
SAM	0.0	0.66	0.66	No

#### DATE OF RECEIPT OF COMPLETE BACT APPLICATION:

December 7, 1999

#### **BACT DETERMINATION PROCEDURE:**

In accordance with Chapter 62-212.400, F.A.C., this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (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 methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

- 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.
- All scientific, engineering, and technical material and other information available to the Department.
- The emission limiting standards or BACT determination of any other state.
- 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 unit in question, the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown

that this level of control is technically or economically infeasible for the emission unit 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 EMISSION LIMITS PROPOSED BY APPLICANT:**

POLLUTANT EMISSION LIMIT		EMISSION LIMIT	CONTROL TECHNOLOGY	
NO	),	0.2 lb/MMBtu, 34.94 lb/hr and 153.1 TPY	Low-NOx burners and FGR	

#### **BACT ANALYSIS**

### NITROGEN OXIDES (NO<sub>x</sub>)

Oxides of nitrogen ( $NO_x$ ) are generated during fuel combustion by oxidation of chemically bound nitrogen in the fuel (fuel  $NO_x$ ) and by thermal fixation of nitrogen in the combustion air (thermal  $NO_x$ ). As flame temperature increases, the amount of thermally generated  $NO_x$  increases. Fuel type affects the quantity and type of  $NO_x$  generated. Generally, natural gas is low in nitrogen. However it causes higher flame temperatures and generates more thermal  $NO_x$  than oil or coal, which have higher fuel nitrogen content, but exhibit lower flame temperatures.

NO<sub>x</sub> emissions represent a significant portion of the total emissions generated by this project, and must be minimized using BACT. A review of EPA BACT/LAER Clearinghouse (BACT Clearinghouse) information indicates that no boilers in the size range of the SCC boilers (i.e., 100-300 MMBtu/hr) which fire primarily natural gas have been required to install Selective Catalytic Reduction (SCR) or Selective Non-Catalytic Reduction (SNCR) as BACT. All have employed low-NO<sub>x</sub> burners and flue gas recirculation (FGR), which the SCC boilers employ.

The applicant has proposed combustion controls equipped on the three package boilers which includes FGR and low  $NO_x$  burners. The combination of FGR and low  $NO_x$  burners results in less  $NO_x$  formation. Low  $NO_x$  burners reduce  $NO_x$  by conducting the combustion process in stages. Staging partially delays the combustion process, resulting in a cooler flame which suppresses thermal  $NO_x$  formation.  $NO_x$  reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low  $NO_x$  burners when combined with flue gas recirculation.

In a FGR system, a portion of the flue gas is recycled from the stack to the burner windbox. Upon entering the windbox, the cooler gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces  $NO_x$  emissions by two mechanisms. In the first mechanism, the recycled flue gas is made up of combustion products which acts as inerts during combustion of the fuel/air mixture. This additional mass is heated in the combustion zone, thereby lowering the peak flame temperature and reducing the amount of  $NO_x$  formed. Second, to a lesser extent, FGR also reduces  $NO_x$  formation by lowering the oxygen concentration in the primary flame zone. **This** 

combination of NO<sub>x</sub> controls and good combustion practices should provide effective emissions control.

#### BACT DETERMINATION BY THE DEPARTMENT:

Based on the information provided by the applicant and the information searches conducted by the Department, lower emissions limits can be obtained employing the top-down BACT approach for NO<sub>x</sub>.

#### NO, DETERMINATION

The top-down BACT approach for natural gas/fuel oil boilers listed in order from most stringent control to least:

- 1. Selective Catalytic Reduction (SCR)
- 2. Selective Noncatalytic Reduction (SNCR)
- 3. Good combustion design/practices

The following table summarizes the feasibility of using these control technologies with the Package Boilers as designed for installation in SCC Recycle Fiber Paper Mill.

Control Technology	Emission Reduction (%)	Technically Feasible	Cost per ton	Adverse Environ. Impacts
SCR with ammonia	80-90	Yes	\$4,600	Yes
SNCR	40-70	Yes	\$8,000	No
Low NO <sub>x</sub> Burners with Flue Gas Recirculation	20-50	Yes	N/A	No

Assuming maximum boiler operation, the cost per ton for SCR is about \$4,600/ton. Using a still very conservative annual capacity factor of 50 percent, the cost effectiveness increases to more than \$7,300/ton. This economic impact is very high considering that normally SCC's boilers will not operate or will operate at very reduced rates, since Cedar Bay will provide the majority of the steam to SCC. For NO<sub>x</sub> emissions, the Department accepts the applicants proposed use of low NO<sub>x</sub> burners with flue gas recirculation as BACT for this project.

The BACT emission level established by the Department is as follows:

POLLUTANT	EMISSION LIMIT		
Nitrogen Oxides (NO <sub>x</sub> )	0.2 lb/mmBtu; 34.94 lb/hr and 153.1 TPY. Total NO <sub>x</sub> emissions from 3 package boilers is limited to 310 TPY.		

#### **COMPLIANCE**

Each package boiler shall be tested and monitored for compliance with the  $NO_x$  emission limits in accordance with 40 CFR 60.46b(e)(4).

### **DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:**

Syed Arif, P.E., Permit Engineer

Department of Environmental Protection

Bureau of Air Regulation - MS 5505

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

Recommended By:

Approved By:

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

3/8/00

Date:

Hóward ⊭. Rhodes, Director

Division of Air Resources Management

Data

#### GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.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.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and 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 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.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment 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.
- G.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.
- G.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.
- G.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 and 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.

- G.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.

#### APPENDIX GC

#### GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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.

- 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.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, 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.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This perinit also constitutes:
  - (a) Determination of Best Available Control Technology (X)
  - (b) Determination of Prevention of Significant Deterioration (X); and
  - (c) Compliance with New Source Performance Standards (X).
- G.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, land records of all data used to complete the application or 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:
    - 1. The date, exact place, and time of sampling or measurements;
    - 2. The person responsible for performing the sampling or measurements;
    - 3. The dates analyses were performed;
    - , 4. The person responsible for performing the analyses;
    - 5. The analytical techniques or methods used; and
    - 6. The results of such analyses.
- G.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.

#### Memorandum

# Florida Department of Environmental Protection

BAR

TO:

Howard L. Rhodes

THRU:

Clair Fancy (

Al Linero 🧷

**FROM** 

Syed Arif

DATE:

February 28, 2000

SUBJECT:

Stone Container Corporation, 0310067-004-AC,

PSD-FL-252

Attached for your approval and signature is a construction permit to increase the maximum steam production rate and heat input rate for each of the three existing package boilers at Stone Container in Jacksonville, Duval County, Florida.

Stone Container used to be a Kraft Mill but now relies solely on recycled fiber. Several years ago Stone Container shut down its regular boilers allowing Cedar Bay Cogen to build a facility next door. Stone is now basically a "steam host" for Cedar Bay.

To provide for occasional interruption of steam from Cedar Bay, Stone Container installed three packaged boilers that operate almost exclusively on natural gas. The steam production rate from each was limited to levels well below capacity. Stone Container wants to increase the maximum production rate from 125,000 lb/hr to 150,000 lb/hr while maintaining their current permitted emission levels for  $NO_x$  and  $SO_2$ .

Because the boilers are restricted to back-up service, historical  $NO_X$  emissions have only been about 6 tons per year of  $NO_X$ . However potential emissions are 310 TPY so that PSD was triggered on a past actual to future potential emission comparison.

A Technical Evaluation and Preliminary Determination was issued, and the facility was required to do a public notice. A Best Available Control Technology determination was required for  $NO_x$  pursuant to Rule 62-212.400, F.A.C.  $NO_x$  emissions will be controlled through low- $NO_x$  burners and flue gas recirculation. If the units were new and operated continuously, we might have specified selective catalytic reduction.

Many parties were involved during the certification of Cedar Bay and the conversion of Stone Container to a recycling facility. They were all copied on the Intent and none provided comments.

The project modification provides reasonable assurance that all the requirements of the permit and BACT determination will be complied with. I recommend your approval and signature.

SA/a

Attachments