

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301



BOB GRAHAM  
GOVERNOR

JACOB D. VARN  
SECRETARY

STATE OF FLORIDA

**DEPARTMENT OF ENVIRONMENTAL REGULATION**

M E M O R A N D U M

TO: Mr. R. W. Galphin, Container Corporation of America  
Mr. G. Doug Dutton, St. Johns River Subdistrict

FROM: *Laurence A. George*  
for Steve Smallwood, Chief, Bureau of Air Quality Management

DATE: January 29, 1981

SUBJ: Container Corporation of America - Application for  
Permit to Construct Coal/Wood-waste Boiler.

Attached is one copy of the Application, Technical Evaluation and Preliminary Determination, BACT Determination, and proposed permit to construct a coal/wood-waste boiler at Fernandina Beach, in Nassau County, Florida.

Please send any comments you wish to have considered concerning this action to Willard Hanks of the Bureau of Air Quality Management.

SS:caa

*1/20/81 Tech; Prelim. Determination*

Technical Evaluation  
and  
Preliminary Determination

Container Corporation of America  
Fernandina Beach  
Nassau County, Florida

Construction Permit  
Application Number:  
AC 45-35532

Florida Department of Environmental Regulation  
Bureau of Air Quality Management  
Central Air Permitting  
January 20, 1981

I. PROPOSED DEPARTMENT ACTION:

The Department intends to issue the requested permit to Container Corporation of America (CCA) for the construction of a coal/wood-waste boiler, capable of generating 825,000 pounds of steam per hour at 825<sup>0</sup>F and 850 psig, at the Fernandina Beach mill located on the inland side of Amelia Island, Florida. The permit will include conditions to assure compliance with Chapter 17-2, F.A.C.

Any person wanting to comment on this action may do so by submitting such comments in writing to:

Willard Hanks  
Florida Department of Environmental  
Regulation  
Bureau of Air Quality Management  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Any comments received within thirty days after publication of this notice will be considered and noted in the Department's final determination.

Any person whose substantial interest would be affected by the issuance or denial of this permit may request an administrative hearing by filing a petition for hearing as set forth in Section 28-5.15, F.A.C. (copy attached). Such petition must be filed within 14 days of the date of this notice with:

Mary Clark  
Florida Department of Environmental  
Regulation  
Office of General Counsel  
2600 Blair Stone Road  
Tallahassee, Florida 32301

II. SUMMARY OF EMISSIONS AND AIR QUALITY ANALYSIS:

a. The proposed source is a major emitting facility of particulate, sulfur dioxide, nitrogen oxides, and carbon monoxide because the potential emission of each pollutant is greater than 100 tons per year. Therefore, application of Best Available Control Technology (BACT) is required for each of these pollutants.

b. The proposed source location at Fernandina Beach is in that portion of Nassau County which is classified as the "area of influence" for the Duval County particulate nonattainment area. An air quality analysis has been performed which demonstrates that, after application of BACT, particulate emissions from the source will not have a "significant" impact on the nonattainment area.

c. The air quality analysis further demonstrates that, after the application of BACT, emissions of all pollutants will neither cause nor contribute to ambient concentrations in excess of any ambient air quality standard or Prevention of Significant Deterioration (PSD) increment.

III. SYNOPSIS OF APPLICATION:

a. Name and Address of Applicant:

Container Corporation of America  
North 8th Street  
Fernandina Beach, Florida 32034

b. Description of Project:

The proposed project is a new coal/wood-waste power boiler which will replace existing power boilers No. 3 and No. 6, and recovery boiler No. 3 and its associated smelt tank. The new boiler, capable of generating 825,000 pounds of steam per hour at 825°F and 850 psig, will be designed to burn either 100% coal or a mixture of up to 30% woodwaste based on heat value, which is approximately a 50/50 mixture based on fuel weights.

Auxiliary equipment includes an economizer, fans and drives, air preheater, instrumentation, breaching and duct work, and related piping to comprise a fully operational boiler installation.

The coal handling and preparation facilities, designed to deliver a nominal 41 tons of coal per hour, consist of the unloading area, storage area, preparation facility, and conveyor system.

c. Description of Process and Controls:

Particulate control equipment for the proposed power boiler consists of a multiclone collector followed by an electrostatic precipitator or equivalent control equipment. The overall design collection efficiency of the mechanical collectors will be 65% on wood waste and 35% on coal. The design efficiency of the electrostatic precipitator will be 99%.

For sulfur dioxide emission control, CCA proposes the use of Eastern (or Mid-Western) low sulfur content, bituminous coal. The sulfur content in the coal is limited to 0.75% based on a heating value of 12,500 BTU/lb, in order to meet the New Source Performance Standard (NSPS) limit of 1.2 pounds of SO<sub>2</sub> per million BTU generated.

To limit nitrogen oxides emissions to 0.6 lb/MMBTU, CCA proposes the use of staged combustion and low excess air techniques.

A dust suppression system will be incorporated in the coal preparation and handling facilities. Coal unloading will be accomplished through a bottom discharge system employing side curtains and surfactant spray. The coal crusher will be housed in the power boiler building to minimize fugitive dust. Surfactants will be used in conjunction with the coal pile as will compaction of the pile itself to minimize fugitive dust. Conveyors to transport the coal will be covered.

IV. RULE APPLICABILITY:

The proposed source is to be located in an area classified as attainment for all pollutants; however, the location is within the "area of influence" of the Duval County particulate nonattainment area (17-2.13). The proposed source is a major source of particulate (17-2.02(6) and 17-2.17(1)(c)2.c) and therefore exempt from the nonattainment rule only if reasonable assurance is provided that the source will not have a significant impact on the nonattainment area (17-2.17(3)(a)1.a.(ii)). The proposed source is also a major emitting facility with respect to particulate, sulfur dioxide, nitrogen oxides, and carbon monoxide, and therefore subject to the PSD provisions of 17-2.04 for particulate and SO<sub>2</sub> emissions and to the BACT requirements of 17-2.03 for all of the above pollutant emissions.

V. FINDINGS:

1. BACT has been determined, as required by 17-2.03, for particulate matter, sulfur dioxide, and nitrogen oxides from the proposed boiler and the coal preparation and handling systems. A copy of this determination is attached. The BACT emission limits are as follows:

<u>Pollutant</u>	<u>Maximum Emission Limit</u>
Particulate Matter	0.1 lb/MMBTU input
Sulfur Dioxide	1.2 lb/MMBTU input
Nitrogen Oxides	0.6 lb/MMBTU input
Opacity	Not to exceed 20%

2. After application of BACT, total maximum emissions are projected to be equal to or less than the amounts shown in the following table:

Source	Particulate		Sulfur Dioxide		Nitrogen Oxides	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Boiler	102.1	429	1,225	5,142	612	2,570
Coal Handling System		7.2				

3. Dispersion modeling for particulate emissions indicates that after application of BACT emissions from the proposed source will have no significant impact on the Duval County particulate nonattainment area.

4. The proposal in this application includes re-tiring the No. 6 power boiler, the No. 3 recovery boiler and its associated smelt tank, and placing No. 3 power boiler on "cold" standby.

5. Dispersion modeling for particulate and SO<sub>2</sub> emissions indicates that after application of BACT and shut-down of other sources as detailed above, emissions from the proposed source will neither cause nor contribute to ambient concentrations in excess of any ambient air quality standard or PSD increment.

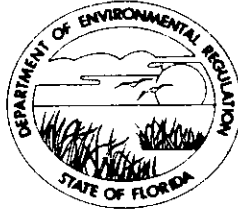
6. The boiler will operate 8,400 hours per year, with a maximum capacity of approximately 825,000 pounds of steam per hour.

7. Fuel oil with 2.5% maximum sulfur content will be used for start-ups and emergencies.

VI. PROPOSED ALLOWABLE EMISSIONS AND PERMIT CONDITIONS:

See Draft Permit.

TWIN TOWERS OFFICE BUILDING  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32301



BOB GRAHAM  
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SECRETARY

STATE OF FLORIDA

## DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICANT: Container Corporation of America  
North 8th Street  
Fernandina Beach, Florida 32034

PERMIT/CERTIFICATION  
NO. AC 45-35532

COUNTY: Nassau

PROJECT: Coal/Wood Boiler

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2  
17-4, Florida Administrative Code. The above named applicant, hereinafter called Permittee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications attached hereto and made a part hereof and specifically described as follows:

For the construction of a coal/wood waste boiler, capable of generating 825,000 pounds of steam per hour at 825°F and 850 psig, controlled by a multiclone collector and an electrostatic precipitator (or equivalent control equipment) at an existing plant located on the inland side of Amelia Island, in Nassau County, Florida. The UTM Coordinates of the proposed plant are 456.213 E and 3394.186 N.

Construction shall be in accordance with the attached permit application, and plans, documents and drawings except as otherwise noted on pages 3 and 4, "Specific Conditions".

1. Application to Construct Air Pollution Sources, DER Form 17-2.122(16).
2. Container Corporation of America, Responses to Technical Discrepancies, December 12, 1980.
3. Stack sampling drawing.

PERMIT NO.: AC 45-35532  
APPLICANT: Container Corporation of America  
North 8th Street  
Fernandina Beach, Florida 32034

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions", and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161(1), Florida Statutes. Permittee is hereby placed on notice that the department will review this permit periodically and may initiate court action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations indicated in the attached drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit shall constitute grounds for revocation and enforcement action by the department.
3. 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 notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact 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 revocation of this permit.
4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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.
5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.
6. 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.
7. In the case of an operation permit, 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.
8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.
9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.
10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.
11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.
12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.
13. This permit also constitutes:

- Determination of Best Available Control Technology (BACT)
- Determination of Prevention of Significant Deterioration (PSD)
- Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)



PERMIT NO.: AC 45-35532  
APPLICANT: Container Corporation of America  
North 8th Street  
Fernandina Beach, Florida 32034

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

3. 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 notify and provide the department with the following information: (a) a description of and cause of non-compliance; and (b) the period of non-compliance, including exact 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 revocation of this permit.

4. As provided in subsection 403.087(6), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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.

5. This permit is required to be posted in a conspicuous location at the work site or source during the entire period of construction or operation.

6. 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.111, F.S.

7. In the case of an operation permit, 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.

8. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant, or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, except where specifically authorized by an order from the department granting a variance or exception from department rules or state statutes.

9. This permit is not transferable. Upon sale or legal transfer of the property or facility covered by this permit, the permittee shall notify the department within thirty (30) days. The new owner must apply for a permit transfer within thirty (30) days. The permittee shall be liable for any non-compliance of the permitted source until the transferee applies for and receives a transfer of permit.

10. The permittee, by acceptance of this permit, specifically agrees to allow access to permitted source at reasonable times by department personnel presenting credentials for the purposes of inspection and testing to determine compliance with this permit and department rules.

11. This permit does not indicate a waiver of or approval of any other department permit that may be required for other aspects of the total project.

12. This permit conveys no title to land or water, nor constitutes state recognition or acknowledgement of title, and does not constitute authority for the reclamation 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.

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- Determination of Prevention of Significant Deterioration (PSD)
- Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)

PERMIT NO.: AC 45-44532  
APPLICANT: Container Corporation of America

**SPECIFIC CONDITIONS:**

1. Construction shall reasonably conform to the plans and schedule given in the application. The applicant shall report any delays in construction and completion of the project covered by this permit to the Department.
2. Reasonable precautions shall be taken by the applicant to prevent fugitive particulate emissions during construction and operation of the source.
3. Based on New Source Performance Standard 40 CFR 60.45, as referenced by 17-2.21(2)(a), the applicant shall install, calibrate, maintain and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide.
4. Before the construction permit expires, the proposed boiler will be sampled for pollutant emissions. Test procedures will be EPA reference methods 1,2,3,5,6,7, and 9 as described in 40 CFR 60, Appendix A or other state approved methods.
5. Stack sampling facilities will include the eyebolts and angle described in the attached figures.
6. The applicant will demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit to St. Johns River Subdistrict Office prior to 90 days before the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or until issuance of an operating permit.
7. Upon obtaining an operating permit, the applicant will be required to submit periodic reports on the actual operation and emissions of the source. These reports will give emission test data, emission test results, scrubber parameters (pressure drop and water flow, pH), fuel composition and amount of steam produced.
8. Fuel oil may be used for start-ups, shut-down, and stand-by when coal is not available. The oil will have a maximum sulfur content of 2.5%.
9. Coal fuel is limited to a maximum of 0.75% sulfur.

PERMIT NO.: AC 45-33532  
APPLICANT: Container Corporation of America

Specific Conditions (Con't)

10. Maximum emission limits are:

<u>Pollutant</u>	<u>lb/MMBTU</u>	<u>lb/hr</u>
Particulate	0.1	102
SO <sub>2</sub>	1.2	1,225
NO <sub>x</sub>	0.6	612
Opacity	20% except 27% for one 6 minute period per hour.	

11. The maximum hours of operation shall be 8,400 hours per year.

12. As soon as the applicant submits an operating permit application for this boiler, the No. 3 recovery boiler and its associated smelt tank, and the No. 6 power boiler will be retired, and the No. 3 power boiler will be put on "cold" stand-by. The Department will be notified whenever the No. 3 power boiler is placed into operation.

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Jacob D. Varn,  
Secretary

Expiration Date: January, 1983

Issued this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

\_\_\_\_\_ Pages Attached.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

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Signature

PERMIT NO.: AC 45-33532  
APPLICANT: Container Corporation of America

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Jacob D. Varn,  
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STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

\_\_\_\_\_ Pages Attached.

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Signature

RULES OF THE ADMINISTRATIVE COMMISSION  
MODEL RULES OF PROCEDURE  
CHAPTER 28-5  
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name and address of the petitioner or petitioners;
  - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
  - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
  - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
  - (f) A demand for the relief to which the petitioner deems himself entitled; and
  - (g) Such other information which the petitioner contends is material.