

Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

May 8, 1991

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. F. Doug Owenby, Vice President Operations Manager Champion International Corporation Post Office Box 87 Cantonment, Florida 32533

Dear Mr. Owenby:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to permanently install a temporarily permitted gas fired package boiler at Champion's existing facility located in Cantonment, Escambia County, Florida.

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

Sincerely,

Barry D. C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/JR/plm

Attachments

c: E. Middleswart, NW Dist.

R. Reynolds, P.E.

E. Inman, CIC

G. Worley, EPA

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of Application for Permit by:

Champion International Corporation
Post Office Box 87
Cantonment, Florida 32533

DER File No. AC 17-192933 PSD-FL-126A

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue an air construction permit (copy attached) for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Champion International Corporation, applied on February 25, 1991, to the Department of Environmental Regulation for a permit to permanently install a temporarily permitted gas fired package boiler at their existing facility located in Cantonment, Escambia County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER 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, at the address specified 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 Florida Statutes. The petition must contain 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 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 receipt of this intent, whichever 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 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:

- The name, address, and telephone number 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
 - 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.
 - 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(s) 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 in General Counsel at the above address of the Failure to petition within the allowed time frame Department. 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

Copies furnished to:

- E. Middleswart, NW Dist.
- R. Reynolds, P.E.
- E. Inman, CIC
- G. Worley, EPA

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 5-9-9.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to \$120.52(9), Florida Statuts, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Date

State of Florida Department of Environmental Regulation Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Champion International Corporation, P. O. Box 87, Cantonment, Florida 32533, to construct a gas fired package boiler at their facility located in Escambia Florida. A determination of Best Available Control County, Technology (BACT) was required. The proposed project is subject to Prevention of Significant Deterioration regulations. The project will involve combustion of natural gas and is not expected to in significant deterioration of the environment. Approximately 20 percent of the annual NOx PSD increment will be The Department is issuing this Intent to Issue for the reasons stated in the 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 Florida Statutes. The petition must contain 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 fourteen (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 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 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Department of Environmental Regulation Northwest District 160 Governmental Center Pensacola, Florida 32501-5794

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation and Preliminary Determination

Champion International Corporation Escambia County Cantonment, Florida

No. 5 Gas Fired Package Boiler Permit No. AC 17-192933 PSD-FL-126A

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

I. Application

A. Applicant

Champion International Corporation Post Office Box 87 Cantonment, Florida 32533

B. Project and Location

The applicant proposes to permanently install a skid mounted gas fired package boiler, generating 125,000 lbs/hr steam at 600 psig, at Champion's plant site in Escambia County, Florida. The proposed project will emit the pollutants nitrogen oxides (NOX), sulfur dioxide (SO₂), particulate matter (PM), carbon monoxide (CO) and volatile organic compounds (VOC). The UTM coordinates of this facility are Zone 16, 469 km East and 3386 km North.

Champion applied for a construction permit for the proposed project on February 25, 1991, and the application was deemed complete on March 25, 1991.

C. Facility Category

Champion's facility in Cantonment is classified in accordance with the Standard Industrial Classification (SIC) Code as Major Group 26, Paper and Allied Products; Group No. 262, Paper Mills; Industry No. 2621, Paper Mills.

The proposed project will be a major modification to a major facility, as defined by Chapter 17-2 of the Florida Administrative Code (F.A.C.).

II. Project Description

The applicant proposes to permanently install a temporarily permitted skid mounted gas fired boiler to supply 125,000 lbs/hr steam at 600 psig. The maximum heat input capacity of the boiler will be 195 MMBtu/hr.

Originally, Champion intended to repair and upgrade two existing power boilers over a two year period and thereby eliminate the need for the package boiler. However, they determined that the two power boilers could not be sufficiently upgraded to meet their original design steam requirements.

III. Emissions

Maximum emission estimates are as follows:

Pollutant	lbs/hr	TPY
NOx	19.50	85.40
CO	19.50	85.40
SO ₂	0.12	0.53
PM/PM_{10}	0.98	4.30
VOC	1.80	7.90

IV. Rule Applicability

The proposed project will result in NOx, SO2, PM, CO, and VOC emissions. It is subject to preconstruction review in accordance with Chapter 403 of the Florida Statutes and F.A.C. Chapters 17-2 and 17-4. The source is located in an area designated as unclassifiable for PM and attainment for NOx, SO₂, CO, and VOC. The proposed project will be a major modification to a major facility and will be subject to a Prevention of Significant (PSD) review in accordance with F.A.C. Deterioration 17-2.500(2)(d)4. As previously determined, the boiler will not be subject to New Source Performance Standards (NSPS) set forth in 40 CFR 60 Subpart Db - Standards of Performance for Industrial Steam Generating Units, because the boiler was built before the NSPS applicability date. The applicable emission limiting standards will be determined by the Best Available Control Technology (BACT) for NOx in accordance with F.A.C. Rule 17-2.630, and for PM and SO2 in accordance with F.A.C. Rule 17-2.600(6).

V. Air Quality Analysis

a. Introduction

The operation of the proposed boiler will result in emissions increases which are projected to be greater than the PSD significant rate for NOx. Therefore, the project is subject to the PSD review requirements contained in F.A.C. Rule 17-2.500 for NOx. Part of the requirements is an air quality impact analysis for NOx which includes:

- An analysis of existing air quality.
- o A PSD increment analysis.
- o An Ambient Air Quality Standards (AAQS) analysis.
- o An analysis of impacts on soils, vegetation, visibility and growth-related air quality impacts.
- o A Good Engineering Practice (GEP) stack height determination

The analysis of existing air quality generally relies on preconstruction monitoring data collected in accordance with EPA-approved methods. The PSD increment and AAQS analyses are based on air quality dispersion modeling completed in accordance with the EPA guidelines. Based on these required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any PSD increment or AAQS. A brief description of the modeling method used and results of the required analyses follow. A more complete description is contained in the permit application on file.

b. Analysis of the Existing Air Quality

ambient air quality monitoring Preconstruction required for pollutants subject to PSD review. However, exemption to the monitoring requirement can be obtained if maximum air quality impact resulting from the projected emissions increase, as determined through air quality modeling, is less than pollutant-specific de minimus concentration. The predicted maximum increase for NOx is 4.9 ug/m³ annual average which is less than the de minimus concentration for NOx of 14 ug/m³ annual Therefore, no preconstruction monitoring is required for average. However, a background NO₂ concentration of 22.5 ug/m³ annual average was developed by the Department for use in the ambient air quality analysis. This value was based on data from sites in Jacksonville and Tarpon Springs both about equally distant from There were no quality assured NO2 monitoring sites inthe Pensacola area.

c. Modeling Method

The EPA-approved Industrial Source Complex Long-Term (ISCLT) dispersion model was used by the applicant to predict the impact of NOx emissions from the proposed project on the surrounding ambient air. All recommended EPA default options were used. Downwash parameters were used because the proposed stack was less than the good engineering practice (GEP) stack height. Five years of surface weather observations (1985-1989) from the National Weather Service (NWS) station located at Pensacola were used. These data were input into the National Climatic Data Center (NCDC) stability array (STAR) preprocessor program for use as input to the ISCLT The STAR program converts the hourly data into the joint frequency of occurrence of wind direction, windspread atmospheric stability. The STAR program can produce monthly, seasonal and annual stability arrays for input into ISCLT. highest predicted yearly impact from the proposed NOx emissions was compared with the standards.

d. Modeling Results

The applicant performed screening modeling to determine the "worst case" load conditions for the proposed boiler. The worst case ambient impacts were predicted to occur during the 100% load condition. The applicant then evaluated the potential increases in ambient ground-level concentrations associated with the project and that the maximum projected determined ambient concentration increase would be greater than the specified PSD significant level for NOx, thus requiring the applicant to perform a full impact analysis for NOx. The significant impact area was determined to be 2 km and all sources within 50 km of the significant impact area were evaluated by the applicant. Refined dispersion modeling was done with an extensive network of discrete receptors along the boundary of Champion's property, which is long and narrow. receptors were placed at approximately 100 meter intervals along the perimeter of the facility boundaries. In addition, since the

receptor grid was centered on the Number 5 boiler stack, additional discrete receptors were required to adequately fill in the area between the property boundary and the start of the grid. These additional receptors included points at 100m spacing out to 1000m and 250m spacing from 1000m to 4250m where the full polar grid started. This grid continued with receptors placed along the 36 standard radial directions (10 degrees apart) at distances of 4500m, 4750m, 5000m, 6000m, 7000m, 8000m, 9000m, and 10,000m from the number 5 boiler.

The results of the AAQS analysis and the PSD Class II increment analysis for NOx are shown below. No PSD Class I increment analysis was done since the project is located more than 100 km from the nearest Class I area.

NOx AAQS Analysis (all values in uq/m³)

Maximum Predicted Concentration	94.3
Includes Background Value	22.5
AAQS, Annual Average	100

NOx PSD Class II Increment Analysis (all values in uq/m3)

Maximum Predicted Concentration 4.9 Increment, Annual Average 25

e. Additional Impacts Analysis

The maximum predicted concentrations from NOx emissions are less than the AAQS and the PSD Class II increment. As such, no harmful effects on soils and vegetation is expected. In addition, the proposed modification will not significantly change employment, population, housing or commercial/industrial development.

VI. Conclusion

Based on the information provided by Champion International Corporation, the Department has reasonable assurance that the proposed project, as proposed herein, will not cause or contribute to a violation of an ambient air quality standard, PSD increment, or any other technical provisions of Chapter 17-2 of the Florida Administrative Code.

Barry D. Arlem ## 3662 /



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

Champion International Corp.
Post Office Box 87

Post Office Box 87 Cantonment, Florida 32533 Permit Number: AC 17-192933 PSD-FL-126A

Expiration Date: Dec. 31, 1991

County: Escambia

Latitude/Longitude: 30°36'19"N

87°19'13"W

Project: No. 5 Gas Fired Package

Boiler

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 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 permanent installation of a steam generating facility consisting of a skid mounted gas fired package boiler at Champion's plant site in Escambia County, Florida. The boiler will have a maximum heat input capacity of 195 MMBtu/hr producing 125,000 lbs/hr steam at 600 psig.

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. Champion's Application package received February 25, 1991.
- Additional Information submitted by Champion dated March 6, 1991.

Permit Number: AC 17-192933

PSD-FL-126A

Expiration Date: December 31, 1991

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.

PERMITTEE: Permit Number: AC 17-192933 Champion International Corp. PSD-FL-126A

Expiration Date: December 31, 1991

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.

Permit Number: AC 17-192933

PSD-FL-126A

Expiration Date: December 31, 1991

GENERAL CONDITIONS:

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, 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 17-30.300, 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 (PSD)
- 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.

Permit Number: AC 17-192933

PSD-FL-126A

Expiration Date: December 31, 1991

GENERAL CONDITIONS:

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 this source shall be in accordance with the capacities and specifications stated in the application.
- The package boiler may operate continuously (8760 hrs/yr).
- 3. Only natural gas shall be fired in the boiler. The maximum heat input shall not exceed 195 MMBtu/hr, reflecting a steam generation rate of 125,000 lbs/hr at 600 psig.
- 4. The maximum allowable NOx emissions shall not exceed 19.5 lbs/hr and 85.4 tons/yr.

Permit Number: AC 17-192933 PSD-FL-126A

Expiration Date: December 31, 1991

SPECIFIC CONDITIONS:

5. Visible emissions (VE) shall not exceed 5% opacity.

6. Initial and annual compliance tests shall be conducted as follows:

EPA Method 7 for NOx DER Method 9 for VE

- 7. The Department shall be notified in writing 15 days or more prior to each compliance test. The tests shall be conducted at permitted production capacity or no less than 90% thereof. Actual heat input rate during the test shall be reported along with the emission results. Test reports shall be submitted to the Department's Northwest District office within 45 days of compliance test completion.
- 8. 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).
- 9. An application for an operation permit must be submitted to the Northwest District 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).

Issued this	day _, 1991
STATE OF FLORIDA OF ENVIRONMENTAL	
Carol M. Browner Secretary	

Best Available Control Technology (BACT) Determination Champion International Corporation Escambia County

The applicant plans to permanently install a temporarily-permitted 195 MMBtu/hr natural gas fired boiler at their facility in Cantonment, Florida. The boiler is a skid mounted package unit and will be used to supply process steam. The boiler is scheduled to operate 8,760 hours per year.

A BACT determination is required for particulates and sulfur dioxide as set forth in the Florida Administrative Code Rule 17-2.600(6) - Emissions Limiting and Performance Standards. In addition, the Department performed a BACT determination for nitrogen oxides (NOX) since those emissions are greater than the PSD significant rate of 40 tons per year.

BACT Determination Request by the Applicant:

Particulate, sulfur dioxide, nitrogen oxides emissions to be controlled by the firing of natural gas.

Date of Receipt of a BACT Application:

February 25, 1991

BACT Determined by DER:

The amount of particulate and sulfur dioxide emissions from the boiler will be limited by the firing of natural gas.

Visible emissions shall not exceed 5% opacity.

Nitrogen oxides emissions shall not exceed 0.10 lbs/MMBtu heat input.

BACT Determination Rationale:

Sulfur in fuel is a primary air pollution concern in that most of the fuel sulfur becomes SO_2 and particulate emissions from fuel burning are related to the sulfur content. The Department agrees with the applicant's proposal that the firing of natural gas is BACT for particulates and SO_2 .

The emission rate of nitrogen oxides proposed by the applicant is equivalent to 0.10 pound per million Btu heat input. This proposed emission rate is half of the New Source Performance Standard (NSPS) for natural gas steam generating units with heat input capacities greater than 100 million Btu/hr and maximum design heat release rates greater than 70,000 Btu/hr-ft³. A review of other BACT determinations for natural gas fired boilers indicates that the proposed emission level for nitrogen oxides meets or exceeds

several of the determinations on record. Additional NOx control could be provided by using add on control devices such as selective catalytic reduction (SCR) or selective non catalytic reduction (SNCR). A review of these control technologies indicates a cost effectiveness ranging from \$7,470 to \$8,100 per ton of NOx removed. These costs exceed those which have been previously judged to be representative of BACT, thereby dismissing these technologies as BACT for this facility. In accordance with these criteria, the applicant's proposed NOx emission rate is justified as BACT for this source.

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E.
Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:	Approved by:	
C. H. Fancy, P.E., Chief Bureau of Air Regulation	Carol M. Browner, Secretary Dept. of Environmental Regulati	— on
1991	1991	
Date	Date	

P 407 852 679

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED NOT FOR INTERNATIONAL MAIL (See Reverse)

234-555	Sent to Mr. F. Doug Owenby,	
1989.	Street and No. P. O. Box 87	Int.
U.S.G.P.O. 1989-234-555	PO. State and ZIP Code Cantonment, FL 3251 Postage	33
ţ	Certified Fee	
. [Special Delivery Fee	
[Restricted Delivery Fee	
	Return Receipt showing to whom and Date Delivered	
198	Return Receipt showing to whom, Date, and Address of Delivery	
June	TOTAL Postage and Fees	\$
PS Form 3800, June 1985	Postmark or Date Mailed: 5-9-91 Permit: AC 17-192933	

SENDER: Complete items 1 and 2 when additional 3 and 4. Put your address in the "RETURN TO" Space on the reverse from being returned to you. The return receipt fee will provide the date of delivery. For additional fees the following service and check box(es) for additional service(s) requested. 1. Show to whom delivered, date, and addressee's an (Extra charge)	side. Failure to do this will prevent this card e you the name of the person delivered to and es are available. Consult postmaster for fees
3. Article Addressed to:	4. Article Number
Mr. F. Doug Owenby, Vice Pres.	P 407 852 679
Operations Manager	Type of Service:
Champion International Corp.	Registered Insured
P. O. Box 87	X Certified COD
Cantonment, FL 32533	Express Mail I for Merchandise
	Always obtain signature of addressee
	or agent and DATE DELIVERED.
5. Signature - Addressee	8. Addressee's Address (ONLY if
X 7 2	requested and fee paid)
6. Signature - Agent	7
x / / / / / /	
7. Date of Delivery 13 MAY 91	
PS Form 3811, Apr. 1989 *U.S.G.P.O. 1989-238-81	5 DOMESTIC RETURN RECEIPT