



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**NOTICE OF PERMIT**

In the matter of an  
Application for Permit by:

DEP File No. 0250470-001-AC  
Dade County

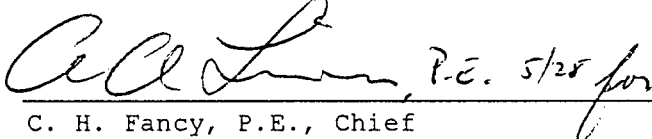
Mr. Leonard Shapiro  
Cypress Cogeneration Company  
2707 North Loop, 8th Floor  
Houston, Texas 77251 /

Enclosed is Permit Number 0250470-001-AC to construct a GE LM 2500 CT Combustion Turbine at the Downtown Government Center facility in Miami, Dade County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3900; 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 14 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

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

904-488-1344



Final Determination

Cypress Cogeneration Company  
Dade County  
Miami, Florida

Construction Permit Number  
0250470-001-AC

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

May 22, 1996

## **I. Public Notice**

An Intent to Issue a permit to construct a combustion turbine for the Dade County Government Center Cogeneration Facility in Dade County, Florida was distributed on March 1, 1996. The Notice of Intent to Issue was published in The Miami Herald on April 8, 1996. The Preliminary Determination and Technical Evaluation with the draft permit were available for public inspection at the Dade County Environmental Resources Management office in Miami and the Department of Environmental Protection Division of Air Resources Management office in Tallahassee. Proof of publication of the Notice of Intent to Issue was received on May 1, 1996.

## **II. Public Comments**

No comments were received during the 30 day public comment period. However, written comments were received prior to the publication of the notice on April 5, 1996 from Mr. Albert Morneault of KBN Engineering and Applied Sciences, Inc. Mr. Morneault's comments are discussed below:

1. Mr. Morneault requests the maximum heat input described in the project description on the first page of the permit be changed from 174.1 to 174.7 million Btu per hour.

Both of the numbers were used in the permit application. Since the use of the higher value will not change any applicable requirements in the preliminary determination or the final permit, the maximum heat input value will be changed to 174.7 million Btu per hour. In addition, the heat input limit in Specific Condition 3 will be changed to 174.7 for the same reasons.

2. Mr. Morneault requests Specific Condition 1 include the maximum heat input and the cubic feet per hour equivalent of natural gas.

Since the maximum heat input is stated in Specific Condition 3 and the volume of natural gas can be calculated from the heat input, the inclusion of this information in Specific Condition is redundant and the condition will remain as noticed.

3. Mr. Morneault requests Specific Conditions 4 through 14 be renumbered 5 through 15.

These conditions will be renumbered to correct a typographical error.

4. Mr. Morneault requests Specific Condition 5 be changed so that the standard for SO<sub>2</sub> reads 0.015% by volume sulfur in fuel. Also he requests the CO rate be changed from 57.4 to 57.7 pounds per hour.

Since the turbine is permitted to burn only natural gas, the appropriate standard is 0.015% by volume sulfur in fuel and the condition will be changed to reflect this standard. The two figures for the hourly rate of CO were both used in the application form. The same rationale used in response to the first comment also applies here and the condition will be changed to 57.7 pounds per hour for CO.

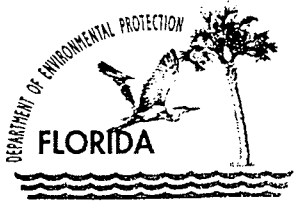
5. Mr. Morneau points out that no EPA method for CO was specified in Specific Condition 6. He recommends EPA Method 10.

Specific Condition 6 will be changed to reflect EPA Method 10.

In addition, several more typographical errors were identified. These typographical errors are corrected in the final version.

### **III. Final Determination**

The final action of the Department will be to issue construction permit 0250470-001-AC as proposed except for the changes noted above.



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**Permittee:**  
**Cypress Cogeneration Company**  
**2702 North Loop, 8th Floor**  
**Houston, Texas 77251**

**Permit Number: 0250470-001-AC**  
**Expiration Date: 12/31/96**  
**County: Dade**

**Latitude/Longitude: 25°46'32"**  
**80°11'50"**

**Project: GE LM 2500 CT**  
**Combustion Turbine**

This permit is issued under the provision of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4 and 62-210 through 62-296, Florida Administrative Code (F.A.C.). 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 and specifically described as follows:

For modification of the existing facility by installing a GE LM 2500 CT combustion turbine located at the Dade County Downtown Government Center in Miami, Dade County, Florida. The UTM coordinates of the site are Zone 17, 580.5 km E and 2850.9 km N. The combustion turbine will burn only natural gas, have a maximum heat input of 174.7 million Btu per hour and be capable of generating 17.1 megawatts of electric power.

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

Attachment listed below:

1. Application received December 4, 1995.
2. Comment letter from A. Morneault received April 5, 1996.

**PERMITTEE:**  
Cypress Cogeneration Company

**PERMIT NUMBER: 0250470-001-AC**

**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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or 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.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
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.

**PERMITTEE:**  
**Cypress Cogeneration Company**

**PERMIT NUMBER: 0250470-001-AC**

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

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

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

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

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



**PERMITTEE:**  
Cypress Cogeneration Company

**PERMIT NUMBER: 0250470-001-AC**

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-30.300, 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:

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

14. The permittee shall comply with the following:

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

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

c. Records of monitoring information shall include:

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

**PERMITTEE:**  
Cypress Cogeneration Company

**PERMIT NUMBER: 0250470-001-AC**

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 combustion turbine shall operate no more than 7,000 hours per year, as requested by the permittee.
2. The combustion turbine shall burn only natural gas.
3. The heat input to the combustion turbine shall not exceed 174.7 million Btu per hour.
4. The permittee shall comply with all applicable requirements in 40 CFR 60, Subpart GG- Standards of Performance for Stationary Gas Turbines.
5. Maximum emissions from the combustion turbine shall not exceed any of the following:

Pollutant	Emission Standard	lbs/hr	TPY
SO <sub>2</sub>	0.015% by weight sulfur in fuel	0.53	1.8
NO <sub>x</sub>	42 ppmvd @ 15% O <sub>2</sub>	29.9	104.7
CO	Good combustion	57.7	202.0
VOC	Good combustion and not exceed the CO limits	7.31	25.6

Visible emissions shall not exceed 20 percent opacity, F.A.C. Rule 62-296.310(2)(a).

6. Initial and annual compliance tests for NO<sub>x</sub> shall be conducted using EPA Method 20 in accordance with F.A.C Rule 62-297 and 40 CFR 60 Appendix A.
7. Initial and annual compliance tests for CO shall be conducted using EPA Method 10 in accordance with F.A.C. Rule 62-297 and 40 CFR 60 Appendix A.
8. Initial and annual compliance tests for visible emissions shall be conducted using EPA Method 9 in accordance with F.A.C. Rule 62-297 and 40 CFR 60 Appendix A.

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9. Initial and annual compliance with the SO<sub>2</sub> limits and the fuel sulfur content will be determined through fuel analysis in accordance with 40 CFR 60.335.
10. The unit will be assumed to be in compliance with the VOC standard provided the CO emissions are met.
11. The compliance test reports shall be submitted to the Department's Southeast District office and Dade County Department of Environmental Management within 45 days of completion of the last test run.
12. The Department's Southeast District office and Dade County Department of Environmental Management shall be notified in writing at least 15 days in advance of any emission test required by this permit. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 95-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.
13. An annual operation report shall be submitted to the Department's Southeast District office and Dade County Department of Environmental Management by March 1 of each year pursuant to Rule 62-210.370(2), F.A.C.
14. 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.).
15. An Application for an operation permit must be submitted to the Department's Southeast District office and Dade County Department of Environmental Management 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 while 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).

PERMITTEE:  
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STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

A handwritten signature in cursive script, reading "Howard L. Rhodes". The signature is written in black ink and is positioned above a horizontal line.

Howard L. Rhodes, Director  
Division of Air Resources  
Management