

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

June 14, 1991

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. W. W. Vierday
Environmental Programs & Licensing
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

Dear Mr. Vierday:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to construct and operate six simple-cycle combustion peaking units rated 92.9 MW each at the Florida Power Corporation, DeBary Facility in DeBary, Volusia County, Florida.

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

Sincerely,

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

CHF/PL/kt

Attachments

c: Allen Zahn, Central District
Kenneth Kosky, P.E., KBN
Jewell, Harper, EPA

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

Florida Power Corporation
DeBary Facility
3201 34th Street South
St. Petersburg, FL 33733

DER File No. AC 64-191015
PSD-FL-167
Volusia County

INTENT TO ISSUE

The Department of Environmental Regulation gives notice of its intent to issue an air construction permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Florida Power Corporation, applied on December 31, 1991, to the Department of Environmental Regulation for a PSD permit to permanently install six simple cycle combustion turbines at the DeBary Facility in Volusia County.

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, Florida Statutes 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the Department at

the address or telephone number listed below. The applicant shall provide proof of publication to the Department, at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

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

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

The Petition shall contain the following information;

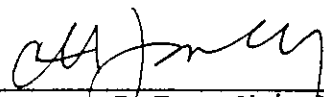
- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c)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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the

right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


C.H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-1344

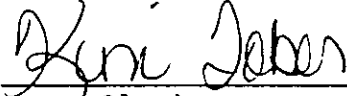
CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 6-14-91 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

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


Clerk 6-14-91
Date

Copies furnished to:

Allen Zahn, Central District
Kenneth F. Kosky, P.E.
Jewell Harper, EPA

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

The Department of Environmental Regulation gives notice of its intent to issue a PSD permit to Florida Power Corporation, 3201 34th Street South, St. Petersburg, Florida 33733, to construct six 92.9 MW simple cycle combustion turbines. A determination of Best Available Control Technology (BACT) was required. For sulfur dioxide, the maximum increment consumption is 26%. 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 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

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

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

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

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Central District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination. Further, a public hearing can be requested by any person. Such requests must be submitted within 30 days of this notice.

Technical Evaluation
and
Preliminary Determination

Florida Power Corporation
DeBary Facility
DeBary, Volusia County, Florida

Six 92.9 MW Simple Cycle Combustion Turbines
For Peaking Service

Permit Number: AC 64-191015
PSD-FL-167

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

June 14, 1991

394 TPY of particulate matter (PM), 131 TPY of volatile organic compounds (VOC), 0.068 TPY of beryllium, 0.24 TPY of lead, 0.081 TPY of mercury, and 1,816 TPY of sulfuric acid mist if operated 8,760 hours per year.

IV. PROJECT DESCRIPTION

The Florida Power Corporation proposes to operate six combustion peaking turbines (CT) rated at 92.9 MW each for a total of 557.4 MW at the DeBary Facility in DeBary, Florida. The six CT's will be located along side six existing CT's generating 282 MW (total capacity).

V. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, Chapters 17-2 and 17-4, Florida Administrative Code (F.A.C.), and 40 CFR (July, 1990 version).

The plant is located in an area designated attainment for all criteria pollutants in accordance with F.A.C. Rule 17-2.420.

The proposed project will be reviewed under F.A.C. Rule 17-2.500(5), New Source Review (NSR) for Prevention of Significant Deterioration (PSD), because it will be a major modification to a major facility. This review consists of a determination of Best Available Control Technology (BACT) and unless otherwise exempted, an analysis of the air quality impact of the increased emissions. The review also includes an analysis of the project's impacts on soils, vegetation and visibility; along with air quality impacts resulting from associated commercial, residential and industrial growth.

The sources shall be in compliance with the New Source Performance Standards for Gas Turbines, Subpart GG, Appendix A, which is contained in 40 CFR 60, and is adopted by reference in F.A.C. Rule 17-2.660. The proposed sources shall also comply with applicable provisions of F.A.C. Rule 17-2.700, Stack Test Procedures, and F.A.C. Rule 17-2.630, Best Available Control Technology.

VI. SOURCE IMPACT ANALYSIS

VI.1 Emission Limitations

The operation of the simple cycle combustion plant burning No. 2 fuel oil will produce emissions of NO_x, SO₂, CO, sulfuric acid mist, PM, Be, Pb and Hg. The impact of these pollutant emissions are below the Florida ambient air quality standards (AAQS) and/or the acceptable ambient concentration levels (AAC). Table 1 lists each contaminant and its maximum expected emission rate, along with the proposed increase of emissions.

SYNOPSIS OF APPLICATION

I. NAME AND ADDRESS OF APPLICANT

Florida Power Corporation
DeBary Facility
3201 34th Street South
St. Petersburg, Florida 33733

II. REVIEWING AND PROCESS SCHEDULE

Date of Receipt of Application: December 3, 1990
1st Completeness Review: Department letter dated January 30, 1991.

Response to 1st Incompleteness Letter: Company letter received on February 18, 1991.

2nd Completeness Review: Department telephone call to KBN March 18, 1991 (chart missing).

Response to 2nd Incompleteness Notification: Fax letter (with chart) received from KBN March 20, 1991.

Application Completeness Date: March 20, 1991.

III. FACILITY INFORMATION

III.1 Facility Location

This facility is located at Highlands Road in DeBary, Volusia County, Florida. The UTM coordinates are Zone 17, 467.5 km East and 3197.2 km North.

III.2 Facility Identification Code (SIC)

Major Group No. 49 - Electric, Gas and Sanitary Services.

Industry Group No. 493 - Combination Electric, Gas and Other Utility Services.

Industry Group No. 4931 - Electric and Other Services Combined.

III.3 Facility Category

The Florida Power Corporation DeBary combustion peaking units are classified as major emitting facilities. The proposed project will burn No. 2 fuel oil and emit approximately 4,794 tons per year (TPY) of nitrogen oxides (NO_x), 14,581 TPY of sulfur dioxide (SO₂),

VI.2 Air Toxics Evaluation

The operation of the sources will produce emissions of chemical compounds that may be toxic in high concentrations. The emission rates of these chemicals shall not create ambient concentrations greater than the acceptable ambient concentrations (AAC) as shown below. Determination of the AAC for these organic compounds shall be determined by Department approved dispersion modeling or ambient monitoring.

$$\text{AAC} = \frac{\text{OEL}}{\text{Safety Factor}}$$

Where,

AAC = acceptable ambient concentration

Safety Factor = 50 for category B substances and 8 hrs/day
100 for category A substances and 8 hrs/day
210 for category B substances and 24 hrs/day
420 for category A substances and 24 hrs/day

OEL = Occupational exposure level such as ACGIH, ASHA and NIOSH published standards for toxic materials.

MSDS = Material Safety Data Sheets

VI.3 Air Quality Analysis

a. Introduction

The operation of the proposed six combustion peaking turbines will result in emissions increases which are projected to be greater than the PSD significant emission rates for the following pollutants: NO_x, SO₂, PM, PM₁₀, Be, Hg, inorganic arsenic, and H₂SO₄ mist. Therefore, the project is subject to the PSD NSR requirements contained in F.A.C. Rule 17-2.500(5) for these pollutants. Part of these requirements is an air quality impact analysis for these pollutants, which includes:

- An analysis of existing air quality;
- A PSD increment analysis (for SO₂, PM, PM₁₀, and NO_x);
- An ambient Air Quality Standards analysis (AAQS);
- An analysis of impacts on soils, vegetation, visibility and growth-related air quality impacts; and,
- 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 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 ambient air quality standard. A brief description of the modeling methods 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

Preconstruction ambient air quality monitoring may be required for pollutants subject to PSD review. However, an exemption to the monitoring requirement can be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined through air quality modeling, is less than a pollutant-specific de minimus concentration. The predicted maximum concentration increase for each pollutant subject to PSD (NSR) is given below:

| | SO ₂ | TSP & PM ₁₀ | NOx | CO | Be | Hg |
|---|-----------------|---------------------------|--------|------|---------|----------|
| PSD de minimus Concentra. (ug/m ³) | 13 | 10 | 14 | 575 | .001 | .25 |
| Averaging Time | 24-hr | 24-hr | Annual | 8-hr | 24-hr | 24-hr |
| Maximum Predicted Impact (ug/m ³) | 11.4 | 1.2 | 0.31 | 2.9 | .000053 | 0.000063 |

There are no monitoring de minimus concentrations for H₂SO₄ mist and inorganic arsenic. As shown above, the predicted impacts are all less than the corresponding de minimus concentrations; therefore, no preconstruction monitoring is required for the pollutants. However, background concentrations were developed by the applicant and approved by the Department for use in the SO₂ AAQS analysis. Values of 90 ug/m³, 3-hr average; 25 ug/m³, 24-hr average; and 4 ug/m³, annual average, were based on 1988 data from the DeBary SO₂ monitoring site in Volusia County. This site is located 2.8 km away from the project.

c. Modeling Method

The EPA-approved Industrial Source Complex Short-Term (ISCST) dispersion model was used by the applicant to predict the impact of the proposed project on the surrounding ambient air. All recommended EPA default options were used. Direction-specific downwash parameters were used because the stacks were less than the good engineering practice (GEP) stack height. Five years of sequential hourly surface and mixing depth data from the Tampa/Orlando Florida National Weather Service (NWS) station

collected during 1982 through 1986 were used in the model. Since five years of data were used, the highest-second-high (HSH) short-term predicted concentrations are compared with the appropriate ambient air quality standards or PSD increments. For the annual averages, the highest predicted yearly average was compared with the standards.

d. Modeling Results

The applicant first evaluated the potential increase in ambient ground-level concentrations associated with the project to determine if these predicted ambient concentration increases would be greater than specified PSD significant impact levels for SO₂, CO, NO_x, PM and PM₁₀. This evaluation was based on the proposed CT units operating at load conditions of 100, 75, 50 and 25 percent. The modeling was performed using the highest emissions at 20°F design condition coupled with the lowest exit gas flow rates at 95°F design condition to maximize predicted impacts. The maximum predicted concentrations generally occur for the maximum capacity at 100% operating load. Dispersion modeling was performed with receptors placed along the 36 standard radial directions (10 degrees apart) surrounding the proposed units at the following downwind distances: (1) the first 36 receptors were located at the plant property boundaries with an additional near-field grid of 27 receptors located 300m from the proposed units off of plant property, (2) subsequent receptors were located at distances of .5, .8, 1.2, 1.6, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 6.0, 7.0 and 8.0 km off of plant property. The results of this modeling presented below show that the increases in ambient ground-level concentrations for all averaging times are less than the PSD significant impact levels for CO, NO_x, PM and PM₁₀.

| Avg. Time PSD Signifi. Level (ug/m ³) | Annual | SO ₂ | | NO ₂ Annual | CO | | PM and PM ₁₀ | |
|---|--------|-----------------|-------|---------------------------|------|------|-------------------------|-------|
| | | 3-hr | 24-hr | | 1-hr | 8-hr | Ann. | 24-hr |
| | 1.0 | 25.0 | 5.0 | 1.0 | 2000 | 800 | 1.0 | 5.0 |
| Ambient Concen. Increase (ug/m ³) | 0.94 | 50.9 | 11.4 | 0.31 | 13.3 | 2.9 | 0.10 | 1.2 |

Therefore, further dispersion modeling for comparison with AAQS and PSD increment consumption were not required for CO, NO_x, PM and PM₁₀. However, the results also show that the increases in maximum ambient groundlevel concentrations for the 3-hr and 24-hr averaging times for SO₂ were greater than the PSD significant impact levels, thus requiring the applicant to do a full impact analysis for SO₂. The significant impact area for the facility was determined to be greater than 50 km; therefore, all sources within 50 km of the facility were evaluated by the applicant. Screening analyses were performed for predicting maximum SO₂ concentrations for comparison to the PSD Class II increments and the AAQS using

the same receptor grid described above. Refined AAQS and PSD Class II analyses were based on modeling the years during which the overall HSH 3-hour, HSH 24-hour, and highest annual concentrations were predicted in the screening analyses. The refined 3-hr and 24-hr modeling was conducted using a receptor grid centered on the receptor which had the HSH 3-hr or 24-hr concentration determined from the screening analysis. These receptors were located at intervals of 100m between the distances considered in the screening phase, along 9 radials spaced at 2-degree increments centered on the radial along which the maximum concentration was predicted. The results of these analyses for SO₂ and comparison with the appropriate standards and increments are summarized in the following tables. The maximum predicted SO₂ concentration are all less than the appropriate AAQS and PSD increments.

AAQS Analysis (all values in ug/m³)

| <u>Avg. Time</u> | <u>Annual</u> | <u>3-hr</u> | <u>24-hr</u> |
|---------------------------------|---------------|-------------|--------------|
| Maximum Predicted Concentration | 37.7 | 792 | 215 |
| Includes Background Value | 4 | 90 | 25 |
| AAQS | 60 | 1300 | 260 |

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

| <u>Avg. Time</u> | <u>Annual</u> | <u>3-hr</u> | <u>24-hr</u> |
|------------------------------------|---------------|-------------|-------------------|
| Max. Predicted Consumption Concen. | 2.53 | 138 | 23.2 |
| Increment | 20 | 512 | 138 91 |

The impact of this project on the Class I increments for SO₂, PM, and NO₂ in the closest Class I area, the Chassahowitzka National Wilderness Area, was not evaluated by the applicant or the Department since this area is located 120 km away from the project.

Sulfuric acid mist, beryllium, mercury and arsenic are noncriteria pollutants, which means that neither national AAQS nor PSD Significant Impacts have been defined for these pollutants. However, the Department does have a draft Air Toxics Permitting Strategy, which defines no threat levels for these pollutants. The Department and the applicant have used the same modeling procedure described above for the screening analysis to evaluate the maximum increase in ground level concentration of these pollutants for comparison with the no-threat levels. The results of this analysis are shown on the following page:

| <u>Avg. Time</u> | <u>H₂SO₄ mist 24-hr</u> | <u>Be Annual</u> | <u>Hg 24-hr</u> | <u>As Annual</u> |
|---|---|----------------------|---------------------|----------------------|
| No Threat-Level (ug/m ³) | 2.4 | .0004 | .024 | .00023 |
| Max. Concen. Increase | 1.2 | .000004 | .000063 | .000007 |

All of these values are less than their respective no-threat levels.

e. Additional Impacts Analysis

The maximum predicted concentrations from NO_x, SO₂, PM and PM₁₀ are predicted to be less than the AAQS, including the national secondary standards designed to protect public welfare-related values. As such, no harmful effects on soil and vegetation are expected. The increased emissions at the facility are not expected to affect the visibility in the Chassahowitzka Class I area located over 100 km away. In addition, the proposed modification will not significantly change employment, population, housing or commercial/industrial development in the area to the extent that a significant air quality impact will result.

VII. CONCLUSION

Based on the information provided by Florida Power Corporation, the Department has reasonable assurance that the proposed installation of the 557.4 MW simple cycle gas turbine system, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.

TABLE 1
ALLOWABLE EMISSION LIMITS
Simple Cycle Combustion Turbine

| Pollutant | Standard Oil Firing | Each Unit lb/hr | Unit T/yr ^(b) | Total 6 Units lb/hr | Units T/yr ^(b) | Basis |
|-----------------------|--|--------------------|-----------------------------|------------------------|------------------------------|-------|
| NOx | 42 ppm at 15% oxygen-dry basis | 182 | 199 | 1092 | 1195 | BACT |
| SO ₂ | No. 2 fuel oil with 0.3% avg. and 0.5% max. sulfur | 555 | 608 | 3330 | 3648 | BACT |
| PM/PM ₁₀ | 0.025 lb/MMBtu | 15 | 16 | 90 | 96 | BACT |
| VOC | - | 5 | 5 | 30 | 33 | BACT |
| CO | - | 54 | 59 | 324 | 354 | BACT |
| Sulfuric Acid Mist | No. 2 fuel oil with 0.3% avg. and 0.5% max. sulfur | 76 | 83 | 454 | 499 | BACT |

(a) Emission rates based on 59°F and 15% O₂.

(b) Annual hours 2190 per year and 25% capacity factor.

Best Available Control Technology (BACT) Determination
 Florida Power Corporation
 DeBary Facility
 Volusia County

The applicant proposes to operate six No. 2 fuel oil fired 92.9 MW peaking cycle combustion turbine systems to be used for peaking power at their DeBary facility on Highlands Road, DeBary, Volusia County, Florida.

The applicant states that the maximum heat input will be 1,144 MMBtu/hr per turbine. The applicant has indicated the maximum annual tonnage of regulated air pollutants emitted from the six turbines based on sea level conditions at 59°F and 100 percent capacity (8760 hours/year) to be as follows:

| Pollutant | Potential Emissions (tons/yr) | PSD Significant Emission Rate (tons/yr) |
|------------------|-------------------------------|---|
| NOx | 4794 | 40 |
| SO ₂ | 14581 | 40 |
| PM | 394 | 25 |
| PM ₁₀ | 394 | 15 |
| CO | 1411 | 100 |
| VOC | 131 | 40 |

Florida Administrative Code Rule 17-2.500(2)(f)(3) requires a BACT review for all regulated pollutants emitted in an amount equal to or greater than the significant emission rates listed in the previous table.

Date of Receipt of a BACT Application

December 31, 1990

BACT Determination Requested by the Applicant

| <u>Pollutant</u> | <u>Determination</u> |
|--|--------------------------------|
| NOx | 42 ppmvd @ 15% O ₂ |
| SO ₂ and H ₂ SO ₄ | Max 0.5% Sulfur No. 2 fuel oil |
| PM/PM ₁₀ | Combustion Controls |
| CO | Combustion Controls |

BACT Determination Procedure

In accordance with Florida Administrative Code Chapter 17-2, Air Pollution, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and

economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

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

The applicant has stated that BACT for nitrogen oxides will be met by using wet injection necessary to limit emissions to 42 ppmvd at 15% oxygen for No. 2 fuel oil firing.

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NOx emission limit established to date for a combustion turbine is 4.5 ppmvd at 15% percent oxygen. This level of control was accomplished through the use of water injection and a selective catalytic reduction (SCR) system.

Selective catalytic reduction is a post-combustion method for control of NOx emissions. The SCR process combines vaporized ammonia with NOx in the presence of a catalyst to form nitrogen and water. The vaporized ammonia is injected into the exhaust gases prior to passage through the catalyst bed. The SCR process can achieve up to 90% reduction of NOx with a new catalyst. As the catalyst ages, the maximum NOx reduction will decrease to approximately 86 percent.

The applicant has rejected using SCR because of technical infeasibility. The applicant was unable to find similar combustion turbines firing fuel oil and equipped with SCR. The applicant states several supporting reasons for the decision in Table 4-3 of the application.

Although the Department agrees that there was a time when SCR was not feasible for oil firing, the latest information available now indicates that SCR can be used for oil firing provided that adjustments are made in the ammonia to NOx injection ratio. By lowering the injection ratio below 1 to 1, testing has indicated that NOx can be controlled with efficiencies ranging from 60 to 75 percent. When the injection ratio is lowered, there is not a problem with ammonium bisulfate formation since essentially all of the ammonia is able to react with the nitrogen oxides present in the combustion gases.

The Department recently reviewed an application for a similar combustion turbine, which included levelized cost for SCR of \$2,190,000. Assuming that the lowered ammonia injection ratio strategy was used to control NOx emissions by 65%, the SCR would control 201 tons (65% x 309 tons/year) of NOx annually. The 309 tons/year assumes an operating rate of 3400 hours/year/unit. When this reduction of NOx is taken into consideration with the total annual cost of \$2,190,000, the cost per ton of controlling NOx is \$10,896. This calculated cost is higher than has previously been approved as BACT and if the capacity factor were limited to 25% (2,190 hrs), the cost per ton would be even higher.

The applicant has stated that sulfur dioxide (SO₂) and sulfuric acid mist (H₂SO₄) emissions when firing fuel oil will be controlled by lowering the operating hours to 3400/year per unit and the fuel oil sulfur content to a maximum of 0.5% by weight, and an average of 0.3%. This would result in a SO₂ reduction of 377 tons/year/unit (0.3/0.5 x 3400/8760 hrs x 14,581 TPY 6 units). Also, H₂SO₄ mist would be reduced by 46 tons/year/unit.

With regard to the operation of turbines on oil, several BACT determinations have established a 25% capacity factor as an operating limit. This is due to the increase in nitrogen oxides emissions that results from the burning of oil as compared to natural gas. In some cases, turbines have been allowed to operate above the 25% capacity factor limitation on oil, provided that they use low NOx combustors (42 ppm) and limit the sulfur content of oil. Those facilities that have been permitted to operate above the 25% capacity factor limitation had a maximum sulfur content ranging from 0.20 to 0.25 percent. Although the DeBary facility is capable of holding NOx emissions to 42 ppm when oil is fired, the proposed maximum sulfur content of 0.5% by weight, is not consistent with what has been allowed for other facilities, thereby establishing a 25% capacity factor operating limit as BACT.

The Department accepts the applicants proposal to control CO and PM/PM₁₀ by combustion design and the use of clean fuels (No. 2 distillate). The Department also agrees with the applicant that there are no feasible methods to control beryllium and arsenic except by limiting the inherent quality of the fuel.

Although the emissions of these toxic pollutants could be controlled by particulate control devices, such as a baghouse or scrubber, the amount of emission reductions would not warrant the added expense. As this is the case, the Department does not believe that the BACT determination would be affected by the emissions of these pollutants.

Potentially Sensitive Concerns

With regard to controlling NOx emissions with SCR, the applicant has identified the following technical limitations:

- o Reduced power output, ammonia slip and disposal of hazardous waste generated (spent catalyst)

BACT Determination by DER

Based on the information presented by the applicant and the studies conducted, the Department believes that the use of SCR for NOx control is not justifiable as BACT. Since these units are intended for peaking service and have operating hours limited to 2,190 hrs/yr/unit, wet injection for NOx emission control is justifiable as BACT for this facility.

As this is the case, the BACT emission limitations are established as follows:

| <u>Pollutant</u> | <u>Emission Limit</u> | <u>Method of Control</u> |
|--------------------------------|-------------------------------|---|
| NOx | 42 ppmvd @ 15% O ₂ | Wet Injection |
| SO ₂ | 555 lbs/hr/unit | Avg. 0.3% and max. 5% sulfur content, by weight, No. 2 fuel oil |
| PM and PM ₁₀ | 15 lbs/hr/unit | Combustion |
| CO | 54 lbs/hr/unit | Combustion |
| VOC | 5 lbs/hr/unit | Combustion |
| H ₂ SO ₄ | 76 lbs/hr/unit | Avg. 0.3% and max. 0.5% sulfur content, by weight, No. 2 fuel oil |

Details of the Analysis May be Obtained by Contacting:

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

Recommended by:

Approved by:

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

Carol M. Browner, Secretary
Dept. of Environmental Regulation

Date 1991

Date 1991

P 832 539 795



Certified Mail Receipt

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

| | |
|---|--|
| Sent to W. W. Vierday | |
| Street & No. FP & C | |
| P.O., State & ZIP Code St. Pete, FL 33733 | |
| Postage | \$ |
| Certified Fee | |
| Special Delivery Fee | |
| Restricted Delivery Fee | |
| Return Receipt Showing to Whom & Date Delivered | |
| Return Receipt Showing to Whom, Date, & Address of Delivery | |
| TOTAL Postage & Fees | \$ |
| Postmark or Date | 6-14-91 AC 64-191015 PSD-FL-167 |

PS Form 3800, June 1990

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

- 1. Show to whom delivered, date, and addressee's address. (Extra charge)
- 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
Mr. W. W. Vierday
Env. Programs & Licensing
Florida Power Corporation
3201 34th Street South
St. Petersburg, FL 33733

4. Article Number
P 832 539 795

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee and DATE DELIVERED.

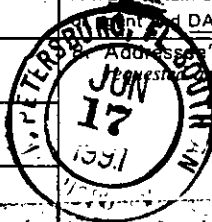
5. Signature - Addressee

X

6. Signature - Agent

X

7. Date of Delivery



PS Form 3811, Apr. 1989

U.S.G.P.O. 1989-238-815

DOMESTIC RETURN RECEIPT



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:
Florida Power Corp.
DeBary Facility
3201 34th Street South
St. Petersburg, FL 33733

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992
County: Volusia
Latitude/Longitude: 28°54'14"N
81°19'59"W
Project: Six 92.9 MW Simple
Cycle Gas Turbines

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 six 92.9 MW simple cycle combustion turbines with maximum heat input of 1,114 MMBtu/hr/unit at 59°F (oil) to be located at the DeBary facility in DeBary, Florida. The turbines are to be GE PG7111EA equipped with wet injection. The UTM coordinates are Zone 17, 467.5 km East and 3197.2 km North.

The sources 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. Florida Power Corporation application received December 31, 1990.
2. Department's letter dated January 30, 1991.
3. Florida Power Corporation's letter received February 18, 1991.

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

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:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

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.

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

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)
- (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.

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

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:

Emission Limits

1. The maximum allowable emissions from these sources shall not exceed the emission rates listed in Table 1.

2. Unless the Department has determined that other concentrations are required to protect public health and safety, the predicted acceptable ambient air concentrations (AAC) of the following pollutants shall not be exceeded:

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

| Pollutant | Acceptable Ambient Concentrations ug/m ³ | | |
|--|--|--------|--------|
| | 8-hrs | 24-hrs | Annual |
| Beryllium | 0.02 | 0.005 | 0.0004 |
| Lead | 1.5 | 0.36 | 0.09 |
| Inorganic mercury compounds all forms of vapor as Hg | - | - | 0.3 |

3. Visible emissions shall not exceed 10% opacity.

Operating Rates

4. These six combustion turbines are allowed to operate for peaking purposes only 2190 HRS/unit/year and/or 25% annual capacity factor.

5. These sources are allowed to use only No. 2 fuel oil with 0.3% average and 0.5% sulfur content maximum, by weight.

6. The permitted materials and utilization rates for the combined cycle gas turbines shall not exceed: a. the maximum heat input of 1,144 MMBtu/hr/unit at 59°F. b. maximum No. 2 fuel oil consumption shall not exceed 7,718 gal/hr unit or 15,719,820 gal/yr/unit.

7. Any change in the method of operation, equipment or operating hours shall be submitted to the DER's Bureau of Air Regulation and Southeast District offices.

8. Any other operating parameters established during compliance testing and/or inspection that will ensure the proper operation of this facility shall be included in the operating permit.

Compliance Determination

9. Compliance with the NO_x, SO₂, CO, PM, PM₁₀ and VOC standards shall be determined within 60 days of construction completeness/initial operation and annually thereafter, by the following reference methods as described in 40 CFR 60, Appendix A (July, 1990 version) and adopted by reference in F.A.C. Rule 17-2.700.

- Method 1. Sample and Velocity Traverses
- Method 2. Volumetric Flow Rate
- Method 3. Gas Analysis

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

- Method 5. Determination of Particulate Matter Emissions from Stationary Sources
- Method 9. Determination of the Opacity of the Emissions from Stationary Sources
- Method 10. Determination of the Carbon Monoxide Emission from Stationary Sources
- Method 20. Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines

10. Method 5 must be used to determine the initial compliance status of this unit. Thereafter, the opacity emissions test may be used unless 10% opacity is exceeded.

11. Compliance with the SO₂ emission limit can also be determined by calculations based on fuel analysis using ASTM D2880-71 for the sulfur content of liquid fuels and ASTM D1072-80, D3031-81, D4084-82 or D3246-81 for sulfur content of gaseous fuels.

12. Compliance with the total volatile organic compound emission limits will be assumed, provided the CO allowable emission rate is achieved; specific VOC compliance testing is not required.

13. During performance tests, to determine compliance with the proposed NO_x standard, measured NO_x emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$\text{NO}_x = (\text{NO}_x \text{ obs}) \left(\frac{P_{\text{ref}}}{P_{\text{obs}}} \right)^{0.5} e^{19 (H_{\text{obs}} - 0.00633)} \left(\frac{288^\circ\text{K}}{T_{\text{AMB}}} \right)^{1.53}$$

where:

NO_x = Emissions of NO_x at 15 percent oxygen and ISO standard ambient conditions.

NO_x obs = Measured NO_x emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

H_{obs} = Specific humidity of ambient air at test.

e = Transcendental constant (2.718).

T_{AMB} = Temperature of ambient air at test.

14. Test results will be the average of 3 valid runs. The Central District office will be notified at least 15 days in writing in advance of the compliance test(s). The sources shall operate between 90% and 100% of permitted capacity during the compliance test(s). Compliance test results shall be submitted to the Central District office no later than 45 days after completion.

15. A continuous monitoring system shall be installed to monitor and record the fuel consumption. Continuous monitoring shall also be installed, operated, and maintained in accordance with 40 CFR 60, Appendix F, for the peaking cycle unit to monitor nitrogen oxides emissions.

- a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B.
- b. CEMS data shall be recorded and reported in accordance with Chapter 17-2, F.A.C., and 40 CFR 60. The record shall include periods of startup, shutdown and malfunction in accordance with F.A.C. Rule 17-2.250, Excess Emissions.
- c. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset conditions or preventable equipment breakdown shall not be considered malfunctions.
- d. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.
- e. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. 22 herein, which exceeds the applicable emission limits in Condition No. 1.

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

16. Sulfur, nitrogen content and lower heating value of the fuel being fired in the combustion turbines shall be recorded daily. The records of fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes.

17. Compliance with the acceptable ambient concentrations for Be, Lead, and Hg emissions shall be demonstrated based on calculations certified by a Professional Engineer registered in Florida, using actual operating conditions. Determination of the ambient concentrations for chemical compounds shall be determined by Department approved dispersion modeling. This compliance determination shall be made available upon request.

Rule Requirements

18. This source shall comply with all applicable provisions of Chapter 403, Florida Statutes, Chapters 17-2 and 17-4, Florida Administrative Code and 40 CFR (July, 1990 version).

19. The sources shall comply with all requirements of 40 CFR 60, Subpart GG, and F.A.C. Rule 17-2.660(2)(a), Standards of Performance for Stationary Gas Turbines.

20. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (F.A.C. Rule 17-2.210(1)).

21. The sources shall comply with F.A.C. Rule 17-2.700, Stationary Point Source Emission Test Procedures.

22. Pursuant to F.A.C. Rule 17-2.210(2), Air Operating Permits, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur nitrogen contents and the lower heating value of the fuel being fired, fuel usage, hours of operation, air emissions limits, etc. Annual reports shall be sent to the Department's Central District office by March 1 of each calendar year.

23. 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).

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: July 31, 1992

SPECIFIC CONDITIONS:

24. An application for an operation permit must be submitted to the Central 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
of _____, 1991

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION**

Carol M. Browner
Secretary