

## Florida Department of Environmental Regulation

Southwest District

3804 Coconut Palm Dr.

Tampa, Florida 33619

Lawton Chiles Governor

KES T44 0100

Virgina Wetherell, Secretary

#### NOTICE OF PERMIT

In the Matter of an Application for Permit by:

DER File No.: AC53-230744

County: Polk

Mr. Robert I. Taylor, Project Manager Central Florida Power Limited Partnership 2500 City West Boulevard, Suite 150 Houston, Texas 77042

Enclosed is Permit Number AC53-230744 for the construction of a wastewater treatment system spray dryer unit at the Tiger Bay Cogeneration Facility located west of Ft. Meade in Polk County, issued pursuant to Section 403.087, 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 the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tampa, Florida.

Sincerely,

J. Harry Kerns, P.E. District Mir Engineer

DRZ/ enclosure

Copy furnished to:
Kennard F. Kosky, P.E., KBN Engineering & Applied Sciences, Inc.

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on \_\_\_\_\_\_\_ to the listed persons.

Clerk Stamp

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

Marilya Cark JUN 29 1993 (Clerk) (Date)



# Florida Department of Environmental Protection

380+ Coconut Palm Dr

Southwest District

Liston Chiles, Governor

Tampa Florida 33619

813-744-6100

Virginia Wetherell, Secretary

PERMITTEE:

Central Florida Power Limited
Partnership
2500 City West Boulevard, Suite 150
Houston, Texas 77042

PERMIT/PROJECT:

Permit No: AC53-230744

County: Polk

Expiration Date: 01/01/96
Project: Wastewater Treatment
System Spray Dryer w/Baghouse

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-200 through 297, and Chapter 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a natural gas fired spray dryer unit and baghouse associated with the wastewater treatment system for a cogeneration facility. This equipment is used to process the concentrated wastewater brine from two falling-film evaporator units. The effluent from the evaporators is pumped to the spray dryer module where it is atomized into a spray and contacted by heated air to evaporate the liquid, thus resulting in the formation of dry particles from the remaining solids. The exhaust gas stream from the spray dryer is sent through a baghouse dust collector where the particulate matter is removed with a removal efficiency of at least 99.9% (based on vendor's guarantee). Design gas flow rate to the baghouse is 5,050 acfm @ 340°F. The spray dryer air heater is fired with natural gas at a maximum heat input rate of 3.07 MMBtu/hr.

Location: Tiger Bay Cogeneration Facility

County 630 Road, 3 miles west of Ft. Meade

UTM: 17-416.3 E 3069.3 N NEDS No: 0223 Point ID No: 02

Replaces Permit No.: N/A

Central Florida Power L.P. Permit No. : 7
Tiger Bay Cogeneration Facility Project: Spray

Permit No. : AC53-230744

Project: Spray Dryer w/Baghouse

#### SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions. [Rule 17-4.160, F.A.C.].

2. All applicable rules of the Department and design discharge limitations specified in the application must be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 17-4.070(7), F.A.C.].

### Operation and Emission Limitations

- 3. This source is permitted for continuous operation (8,760 hours/year).
  [As requested in construction permit application].
- 4. The spray dryer unit air heater shall be fired with natural gas only at a maximum heat input rate not to exceed 3.07 MMBtu/hour. [Construction permit application].
- 5. Particulate matter emissions from the spray dryer unit baghouse exhaust shall not exceed 0.021 pounds per hour and 0.092 tons per year. (Note: on the basis of this limitation this source is exempted from the particulate matter RACT requirements of Rule 17-296.700, F.A.C.)
  [Construction permit application and Rule 17-296.700(2)(b) and (c), F.A.C.].
- 6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse control device, the Department, pursuant to the authority granted under Rule 17-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of a particulate stack test.
- 7. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320(2), F.A.C.].
- 8. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provisions in Rule 17-296.310(3)(c), F.A.C. These provisions are applicable to any source, including but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. [Rule 17-296.310(3)(b), F.A.C.].

Central Florida Power L.P. Permit No.: AC53-230744
Tiger Bay Cogeneration Facility Project: Spray Dryer w/Baghouse

### SPECIFIC CONDITIONS:

#### Testing Requirements

- The spray dryer unit baghouse shall be tested for visible emissions within 30 days after it is placed in commercial operation or 180 days after initial operation, whichever occurs first. A test report shall be submitted within 45 days of testing to the Southwest District Office of the Department in conjunction with a Certificate of Completion of Construction. [Rules 17-297.340(1)(a), and 17-297.570, F.A.C.].
- Should the Department have reason to believe the particulate emission standard is not being met, the Department may require that compliance with the particulate emission standard be demonstrated by stack testing in accordance with Rule 17-297, F.A.C. [Rula 17-297.620(4), F.A.C.].
- 11. Compliance with the visible emission limitation of Specific Condition No. 6 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 17-297, The visible emissions test shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The test observation period shall include the period during which the highest opacity can reasonably be expected to occur. The minimum requirements for stationary point source emission test procedures and reporting shall be in accordance with Rule 17-297, F.A.C. and 40 CFR 60 Appendix A. [Rule 17-297.330(1)(b), F.A.C.].
- Stack testing shall be conducted during operation of the wastewater treatment system and spray dryer unit under conditions that could be reasonably expected to represent the worst case particulate loading to the baghouse. The test report shall include a description of the wastewater treatment system and spray dryer unit operating conditions during the test, including the following:
  - spray dryer wastewater brine feed rate (gal/min. or other appropriate units);
  - B. spray dryer air heater heat input rate (MMBtu/hr);
  - C. any other operating parameters (such as pressure drops, temperatures, baghouse gas flow rate (acfm), etc.) that the permittee feels are indicative of the operating conditions during the test.

Failure to submit the above operating information and or operating at conditions which do not reflect the normal operating conditions may invalidate the data and fail to provide reasonable assurance of compliance.

[Rule 17-4.070(3), F.A.C.].

Central Florida Power L.P. Tiger Bay Cogeneration Facility Project: Spray Dryer w/Baghouse

Permit No. : AC53-230744

#### SPECIFIC CONDITIONS:

13. The permittee shall notify the Southwest District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-297.340(1)(i), F.A.C.].

### Reporting and Permit Requirements

- 14. Effective as soon as commercial operation begins at the facility, the permittee shall submit to the Southwest District Office of the Department each calendar year on or before March 1, completed DER Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility," for the preceding calendar year. [Rule 17-210.370(2), F.A.C.].
- The permittee, may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Southwest District Office of the Department at least 60 days prior to the expiration date of the permit. [Rule 17-4.090, F.A.C.].
- Two applications for an operating permit shall be submitted to the Southwest District Office of the Department within 45 days of testing or at least 60 days prior to the expiration date of this permit, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the following:
  - A. the appropriate application form (Certificate of Completion of Construction) noting any deviations from the construction permit application;
  - B. the compliance test report as required by Specific Condition No. 9 of this permit.

[Rules 17-4.070(3) and 17-297.340(1)(a), F.A.C.].

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Richard D. Garrity, Ph., D.,

Director of District Management

Southwest District

#### ATTACHMENT - GENERAL CONDITIONS:

The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 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), 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 this 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.
- 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.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are 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 reasonable times, 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 conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit;
- (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 noncompliance; and
  - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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 struction or operation of this permitted source which are submitted to the behavior 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 403.111 and 403.73, 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 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 Rule 17-4.120 and 17-730.300, Florida Administrative Code, 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)
  - () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
  - ( ) Compliance with New Source Performance Standard
- 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:
    - 1. the date, exact place, and time of sampling or measurements;
    - 2. the person responsible for performing the sampling or measurements;
    - 3. the dates analyses were performed;
    - 4. the person responsible for performing the analyses;
    - 5. the analytical techniques or methods used;
    - 6. 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 the 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.