

Department of Environmental Protection

date

Lawton Chiles Governor Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

Virginia B. Wetherell Secretary

PERMITTEE:

Tampa Electric Company Post Office Box 111 Tampa, FL 33601-0111 /

PERMIT/CERTIFICATION:

Permit No: A029-250137 County: Hillsborough

Expiration Date: 07/12/99
Project: F.J. Gannon Station
Units 5 and 6 Fly
Ash Silo with

Baghouse and Pugmill

This permit is issued under the provisions of Chapter 403, Florida Statutes, (F.S.) and Florida Administrative Code, (F.A.C.) Rules 17-200 through 299 and 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 operation of F.J. Gannon Station Units 5 and 6 Fly Ash Silo (silo No. 1) with baghouse and pugmill. Fly ash that is collected in the hoppers of the electrostatic precipitators of Units 5 and 6 is pneumatically conveyed to a 25 foot diameter, 50 foot high silo. The fly ash in the silo is gravity fed by chute into enclosed tanker trucks or to a pugmill where it is "conditioned" by wetting with water and gravity fed by chute into open bed trucks. The fly ash is then transported to an off-site consumer.

Particulate emissions generated during the filling of the silo are controlled by a 11,300 ACFM United States Filter Corporation Mikro-Pulsaire Model 1F3-24 baghouse.

Location: Port Sutton Road, Tampa, Hillsborough County

UTM: 17-360.1 3087.5 N NEDS NO: 0040 Point ID:

10-Fly Ash Silo/Baghouse 12-Fly Ash Silo/Truck Loading

Replaces Permit No.: A029-160258

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Baghouse and Pugmill

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.

2. Total allowable particulate matter emissions based on a design flow rate of 11,300 ACFM for the following source shall not exceed the following (Rule 17-296.711(2)(b), F.A.C.):

Source pounds/hour tons/year Emission Limitation

Fly Ash Silo 2.9 12.7 0.03 grains/dscf

3. Visible emissions for the following sources shall not exceed the following (Rule 17-296.711(2)(a), F.A.C.):

Source

Emission Limitation

Fly Ash Silo/Baghouse Truck Loading 5% Opacity

5% Opacity

4. Test the emissions from the *fly ash silo/baghouse and **truck loading annually for the following pollutants within 60 days prior to or on March 22. A report of the test data shall be submitted to the Air Section of the Department's Southwest District Office and the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of the testing (Rules 17-297.340 and 17-297.570, F.A.C.).

- *(X) Particulate Matter **(X) Visible Emissions
- *(X) Visible Emissions
- 5. Compliance with the emission limitations of Specific Conditions No. 2 and 3 shall be determined using EPA Methods 1, 2,3,4,5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 17-297, F.A.C. The minimum requirements for stationary point source sampling and reporting shall be in accordance with Rule 17-297, F.A.C. and 40 CFR 60, Appendix A. The visible emissions compliance tests shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The visible emission compliance tests on the truck loading shall alternate from year to year, so that over a two year period both conditioned and unconditioned fly ash loading will be tested.
- 6. Tampa Electric Company shall notify the Air Management Division of the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which the compliance test is to begin. The notice shall include, the date, time, and place of each test, and the test contact person who will be responsible for coordinating and having each test conducted (Rule 17-297.340(1)(i), F.A.C.).

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All compliance tests will be conducted under the following conditions (Rule 17-4.070(3), F.A.C.):

- Conveyance blower will be turned off at least 1 hour prior to A) the test to allow an adequate build-up of fly ash in the precipitator hoppers.
- B) All conveyance hoppers will be operational during the tests.
- All fly ash will be directed to the silo, no re-injection of fly ash to the boiler systems will occur during the tests.
- Both boilers shall be operational during the tests.
- Testing of emissions to show compliance shall be conducted while silo loading and truck loading are within 90-100% of the maximum loading rate of 13.05 tons/hour. Determination of process rate may be done by calculations, which shall be employed on a consistent basis. A compliance test submitted at an operating rate less than 90% of the permitted rate will automatically constitute an amended permit at the lesser rate plus 10%, until another test, showing compliance at a higher rate, not to exceed the maximum loading rate, is submitted. time the permitted rate of the sources is exceeded by more than 10% a compliance test shall be performed within 15 days of initiation of the higher rate and the test results shall be submitted to the Department and the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of testing. Acceptance of the test by the Department will constitute an amended permit at the higher rate plus 10%, but in no case shall the maximum loading rate be exceeded. Failure to submit the process rate and actual operating conditions in the test report may invalidate the test data (Rule 17-4.070(3), F.A.C.).
- 9. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because the fly ash silo is equipped with a baghouse emission control device, the Department, pursuant to the authority granted under Rule 17-297.620(4), F.A.C., hereby establishes a visible emission <u>limitation not to exceed an opacity of 5%</u> in lieu of a particulate stack test.
- 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 testing in accordance with Rule 17-297, F.A.C. (Rule 17-297.620(4), F.A.C.).

PERMITTEE: Permit No.: A029-250137 Tampa Electric Company Project: F.J. Gannon Station Units 5 and 6 Fly Ash Silo with Baghouse and Pugmill All reasonable precautions shall be taken to prevent and control the generation of unconfined emissions of particulate matter in accordance with Rule 17-296.310(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition of wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include, but are not limited to, the removal of fugitive fly ash emissions from the grounds adjacent to the loadout area on an as needed basis. Operation and Maintenance Plan for Particulate Control (Rule 17-296.700(6), F.A.C.): A) Process Parameters: Source Designators: Units 5 and 6 Fly Ash Silo 2. Baghouse Manufacturer: United States Filter Corporation Mikro-Pulsaire Unit #1F3-24 3. Model Name and Number: Design Flow Rate: 11,300 ACFM 4. Efficiency Rating at Design Capacity: 5. Pressure Drop: 5 in. water (maximum) 6. 7. Air to Cloth Ratio: 5:1 8. Bag Material: Polyester HCE 9. Filter Cleaning Method: Pulse Jet @ 100 psig 10. Gas Flow Rate: 11,300 ACFM Gas Temperature: inlet and outlet; 300°F 11. 12. Stack Height Above Ground: 104 feet 18 in. X 26 in. 13. Exit Diameter: 14. Exit Velocity: 58 fps 15. Process Controlled by Collection System: Fly Ash Material Handling 16. Material Handling Rate: Calculated to be 13.05 ton/hour Fly Ash Operation Schedule: 8,760 hours/year (24 hours/day, 7 days/week, 52 weeks/year) B) The following observations, checks and operations apply to this source and shall be conducted on the schedule specified: Daily: Baghouse pressure drop - inspect the manometer at each change in shift (3 times daily). Log information. Change filter bags if necessary. Visually inspect baghouse for abnormal emissions. Change filter bags and document if necessary. Page 4 of 5.

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Specific Condition No. 12 continued:

3. Walk through system listening for proper operation (audible leaks, proper fan and motor functions, bag cleaning, etc.).

4. Observe indicators on control panel for abnormal

operating conditions.

5. Unplug hopper if necessary.

C) Records:

Records of inspections, maintenance, and performance parameters shall be retained for a minimum of the last two years and shall be made available to the Department or the Air Management Division of the Environmental Protection Commission of Hillsborough County upon request (Rule 17-296.700(6)(e), F.A.C.).

- 13. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 17-200 through 17-299, or any other requirements under federal, state or local law (Rule 17-210.300, F.A.C.).
- 14. Submit to both the Air Management Division of the Environmental Protection Commission of Hillsborough County and the Air Section of the Department's Southwest District Office each calendar year on or before March 1, completed DER Form 17-210.900(4), "Annual Operating Report for Air Pollutant Emitting Facility," for the preceding calendar year (Rule 17-210.370(2), F.A.C.).
- 15. The permittee shall submit a minimum of two applications for the renewal of this operating permit to the Air Section of the Department's Southwest District Office and one copy of the application to the Air Management Division of the Environmental Protection Commission of Hillsborough County at least 60 days prior to the expiration date of this permit (Rule 17-4.090(1), F.A.C.).

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Dr. Richard D. Garrity, Ph.D.

Director of District Management

Southwest District

ATTACHMENT - 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 403.141, 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 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.
- 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:

GENERAL CONDITIONS:

- 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 Florida Statutes 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 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 17-730.300, 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.

GENERAL CONDITIONS:

- 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)
 - () 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.
- 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.