



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Carol Browner
FROM: Howard L. Rhodes *[Signature]*
DATE: July 14, 1992
SUBJECT: Approval of Construction Permit PSD-FL-151
Lee County Waste to Energy Recovery Facility

Attached for your approval and signature is the construction permit for the above mentioned company to construct a waste to energy recovery facility comprised of Units No. 1 and 2. The facility will be located at Buckingham Road and State Road 82 in Fort Myers, Florida.

I recommend your approval and signature.

CF/MB/pa

Attachments

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

DER File No. PSD-FL-151
Lee County

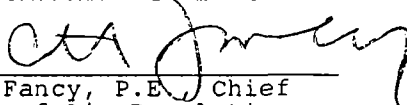
David S. Dee, Esquire
Carlton, Fields, Ward, Emmanuel,
Smith & Cutler, P.A.
Post Office Box 190
Tallahassee, FL 32302

Enclosed is Permit Number PSD-FL-151 to construct a waste to energy recovery facility comprised of Units No. 1 and 2 in Fort Myers, Lee County, Florida. This permit are issued pursuant to Section(s) 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 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 Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

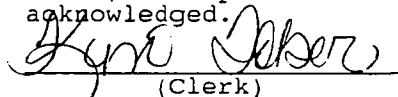

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

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 7-20-92 to the listed persons.

Clerk Stamp

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


(Clerk)

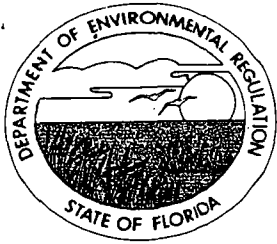
7-20-92
(Date)

Copies furnished to:

David Knowles, South District
Jewell Harper, EPA
Chris Shaver, NPS

FINAL DETERMINATION

The power plant site certification of Lee County Solid Waste resource recovery facility was approved by the Governor and the Cabinet sitting as the Siting Board on June 16, 1992. The Department is issuing a PSD air permit for this facility which is substantially identical to the terms of the Conditions of Certification contained in the power plant site certification. There are no changes in the process input or steam production rates. Revised mercury emission standards are contained in the PSD permit as were prescribed in the final power plant site certification approved by the Siting Board.



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:
Lee County Utilities
2178 McGregor Blvd.
Ft. Myers, FL 33902

Permit Number: PSD-FL-151

County: Lee
Latitude/Longitude: 26°37'54"N
81°45'41"W

Project: Lee County Waste to Energy
Recovery Facility Units
1 and 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of the Lee County Solid Waste Energy Recovery Facility located at Buckingham Road and State Road 82, in Fort Myers, Florida consisting of two mass-burn Municipal Waste Combustors (MWC) with two units to be constructed initially and the third unit to be installed in the future. These mass-burn units shall have a maximum permitted capacity of 660 tons/day, each unit, for a total capacity for both units not to exceed 1320 tons/day; and a maximum heat input of 275 MMBtu/hr, per unit, for a total heat input for both units not to exceed 550 MMBtu/hr, based on a municipal solid waste average heating value of 5000 Btu/lb.

Each combustor unit shall be of Stoker Waterwall design (or equivalent) capable of generating 20 MW for a total of 40 MW from both units. Each unit shall be allowed to produce a maximum of 186,200 lbs of steam per hour at 865 psig and 830°F. Each combustor unit shall be equipped with auxiliary burners to be fired by only propane gas. Emissions from each combustor shall be controlled by a slaked lime scrubber followed by a baghouse. NO_x emissions shall be controlled by a SNCR System. Mercury emissions shall be controlled by injecting activated carbon.

The permittee must submit four copies of complete information prior to purchase and installation of any combustor and related equipment. Such information shall include the following: make and model numbers of each MWC and all pollution control and continuous emissions monitoring devices and related equipment.

PERMITTEE: Lee County

Permit Number: PSD-FL-151

The power plant site certification number for this facility is PA90-30.

This source shall be constructed in accordance with the permit application; plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions:

Attachments are as follows:

Power Plant Site Certification package filed on June 29, 1990 and related correspondence.

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

PERMITTEE: Lee County

Permit Number: PSD-FL-151

GENERAL CONDITIONS:

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:

- 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: Lee County

Permit Number: PSD-FL-151

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: Lee County

Permit Number: PSD-FL-151

GENERAL CONDITIONS:

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

c. Records of monitoring information shall include:

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

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. This facility shall be allowed to operate continuously (i.e. 8760 hours/year).

2. Emission Standards

Based on the permitted capacities mentioned in the project description the stack emissions from each unit shall not exceed any of the following limitations:

a. Particulate matter: Particulate emissions from the baghouse shall not exceed 0.010 grains/dry standard cubic

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

- foot, corrected to 7% O₂; 5.34 lbs/hr per unit; and 21.3 tons/year per unit.
- b. PM₁₀: In no case shall PM₁₀ emissions exceed 0.010 gr/dry cubic standard foot, corrected to 7% O₂ for the fraction of particles less than 10 microns in diameter; 5.34 lbs/hr per unit; and 21.3 tons/year per unit.
 - c. *Opacity: In no case shall visible emissions from each baghouse exhaust exceed 10% opacity (six minute average).
 - d. *SO₂: 30 ppm_{dv} corrected to 7% O₂, 24 hour daily geometric average or at least 80% removal efficiency, whichever is least restrictive. In no case shall SO₂ emissions exceed 0.150 lbs/MMBtu per unit, 41 lbs/hr/unit, and 163.3 tons/year, per unit.
 - e. *NO_x: 180 ppm_{dv} corrected to 7% O₂, 24 hour daily block average (midnight to midnight). In no case shall NO_x emissions exceed 0.290 lb/MMBtu, 80 lbs/hr per unit, and 320 tons/year, per unit.
 - f. *Carbon Monoxide: 100 ppm_{dv} at 7% O₂, 4-hour block average beginning at midnight. In no case shall CO emissions exceed .10 lb/MMBtu, 27.2 lbs/hr/unit, and 108 tons/year, per unit.
 - g. *VOC (Hydrocarbons): 37 ppm_{dv} at 7% O₂. In no case shall VOC emissions exceed 0.021 lb/MMBtu, 5.80 lbs/hr/unit and 23 tons/year, per unit.
 - h. HCl: 25 ppm_{dv} at 7% O₂, or at least 95% removal efficiency, which ever is least restrictive. In no case shall HCl emissions exceed 0.064 lb/MMBtu, 17.70 lbs/hr/unit, and 70.70 tons/year, per unit.
 - i. H₂SO₄ (sulfuric acid mist): In no case shall H₂SO₄ emissions exceed 0.036 lb/MMBtu, 9.85 lbs/hr/unit and 39.3 tons/year per unit.
 - j. *F (fluoride): 5.0 ppm_{dv} at 7% O₂. In no case shall F emissions exceed 0.0035 lb/MMBtu, 0.96 lbs/hr/unit, and 3.8 tons/year, per unit.

SPECIFIC CONDITIONS:

- k. *Pb (lead): In no case shall lead emissions exceed 0.00060 lbs/MBtu, 0.165 lbs/hr/unit and 0.66 tons/yr., per unit.
- l. *Be (Beryllium): In no case shall Be emissions exceed 1.35×10^{-7} lbs/MMBtu, 3.70×10^{-5} lbs/hr/unit, and 1.47×10^{-4} tons/year, per unit.
- m. *Hg (Mercury): In no case shall mercury emissions exceed 0.000138 lbs/MMBtu, 0.0379 lbs/hr/unit, and 0.166 tons/yr per unit at 140 ug/dscm at 7% O₂ or at least 70 percent removal efficiency by weight.
- n. As (Arsenic): In no case shall arsenic emissions exceed 9.10×10^{-6} lbs/MMBtu, 2.50×10^{-3} lbs/hr/unit, and 0.01 tons/year, per unit.
- o. *Dioxins/Furans: In no case shall emissions of total (tetra thru octa-chlorinated dibenzo-p dioxins and dibenzofurans) exceed 30 ng/dscm @ 7% O₂, 2.54×10^{-8} lbs/MMBtu, 7.0×10^{-6} lbs/hr/unit, and 2.80×10^{-5} tons/year, per unit.
- p. *NH₃: In no case shall ammonia slip from exhaust gases exceed 50 ppmv.
- q. There shall be no visible emissions (less than 5% opacity) during the operations of the lime silo.
- r. In no case shall emissions from the ash handling building baghouse exceed a particulate limit of 0.010 grains/dscf and visible emissions of 5% opacity.
- * Pursuant to Rule 17-4.080 F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions for the pollutants CO, VOC, F, NH₃, SO₂, NOx, Pb, Be, Hg, dioxins and furans, and visible emissions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

3. Test Methods/Continuous Emissions Monitoring System (CEMS)/Testing Frequency/Sampling Ports/Record Keeping/Reporting of Excess Emissions and Malfunctions.

a. Test Methods

Compliance with emission limiting standards mentioned in Specific Condition No. 2 shall be demonstrated using EPA Methods, as 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), or any other method as approved by the Department, in accordance with F.A.C. Rule 17-2.700(3). A test protocol shall be submitted for approval to the South Florida District and to the Bureau of Air Regulation at least 90 days prior to testing. This protocol shall include details on how the weight percentage of used tires in the MSW stream will be accounted for during the compliance testing.

<u>EPA Method</u>	<u>For Determination of</u>
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3 or 3A	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM ₁₀ emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary sources.

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

- 9 Visible emission determination of opacity.
- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
 - At least one lime truck unloading into the lime silo (start to finish).
- 10 Carbon monoxide emissions from stationary sources.
- 12 Lead concentration from stationary sources.
- 13A or 13B Fluoride emissions from stationary sources.
- 23 Dioxin/furan concentration.
- 18 or 25 Volatile organic compounds concentration.
- 26, 26a HCl emissions or other methods approved by DER.
- 101A Mercury emissions based on an average of three runs.
- 29 Antimony, Cadmium
- 104 Beryllium emission rate and associated moisture content.
- 108 Arsenic

Note: The weight of MSW being fed to each combustor during the stack test shall be continuously monitored and recorded by a weighing device which is properly calibrated. Stack tests shall be conducted upstream and downstream of the applicable control device for SO₂, Hg and HCl. Soot blowers shall be operated in a mode consistent with the normal cleaning requirements of the system during the compliance testing.

b. Continuous Emissions Monitoring System (CEMS)

Continuous emission monitors with recorders shall be installed, calibrated, maintained and operated subject to approval by the Department for the following:

SPECIFIC CONDITIONS:

Carbon Monoxide, Oxygen, Nitrogen Oxide, Opacity, and Sulfur Dioxide (for SO₂ one monitor shall be located upstream of the scrubber and one shall be located downstream of the baghouse), as specified in 40 CFR 60, Appendix B; total steam production (lbs/hr, pressure, and temperature) and power generation (MW) for each unit; ammonia injection rate; slaked lime; activated carbon injection or usage rates; and thermocouple to measure temperature of combustion zone (to be specified by the vendor). The monitoring devices shall meet the applicable requirements of Chapter 17-2, Section 17-2.710, F.A.C. and 40 CFR 60.45, and 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7 (a)(5). Data on monitoring equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location after the economizer or in the air pollution control equipment outlet duct shall be provided to the South District Office for review prior to installation together with and subject to the same provisions as submittal of air pollution control equipment as mentioned earlier.

c. Testing Frequency

Compliance with emission standards contained in Specific Condition 2 shall be determined by conducting stack tests within 120 days of completion of construction and initial operation and annually thereafter. In addition to the three test runs conducted under normal operation, three compliance test runs shall be conducted annually under soot blowing conditions for particulate and VE. Each soot blowing test run shall be a representative of normal soot blowing operation. The compliance tests may be staggered throughout the year with the approval of the Bureau of Air Regulation. Pursuant to Rule 17-2.700(2)(b), when the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in this permit is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the Department. Compliance testing for the flyash handling building (baghouse) and the lime silo loading operation (V.E. test) shall be conducted within 120 days of completion of

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

construction and initial operation and annually thereafter. All notification requirements of 40 CFR parts 60 and 61 shall be complied with by the owner/operator of the SWERF.

d. Sampling Ports

The Permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with Section 17-2.700, F.A.C. Drawings of testing facilities including sampling port locations as required by Section 17-2.700 shall be submitted to the South District Office for approval at least 60 days prior to construction of the sampling ports and stack.

e. Record Keeping

Lee County Solid Waste Energy Recovery Facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. This file shall include but not be limited to:

- (i) the data collected from in-stack monitoring instruments,
- (ii) the records on MSW input rate,
- (iii) the amount of propane gas burned per unit,
- (iv) the results of all source tests or performance tests,
- (v) the amount of ammonia, activated carbon, or other chemicals used for NOx and mercury control,
- (vi) calibration logs for all instruments,
- (vii) maintenance/repair logs for any work performed which is subject to this permit.

All measurements, records, and other data required to be maintained by SWERF shall be retained for at least two years following the date on which such measurements, records, or data are recorded and made available to the Department upon request. The permittee shall keep accurate records of MSW being fired to each combustor along with the weight percent of used tires in the waste stream being combusted on an estimated weekly basis

SPECIFIC CONDITIONS:

for the entire life of this facility. The South District office of the Department and the Bureau of Air Regulation shall be notified in writing at least 30 days prior to any compliance testing.

f. Reporting of Excess Emissions and Malfunctions

(i) 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, any other preventable upset condition, or preventable equipment breakdown shall not be considered malfunctions.

(ii) Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in 24 hour period unless specifically authorized by the Department for longer duration (Rule 17-2.250(1), F.A.C.).

(iii) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonable be prevented during startup, shutdown, or malfunction shall be prohibited (Rule 17-2.250(4), F.A.C.).

(iv) In case of excess emissions resulting from malfunctions, each source shall notify the Department or the appropriate Local Program in accordance with Section 17-4.130, Florida Administrative Code. A full written report on the malfunctions shall be submitted in a quarterly report (Rule 17-2.250(6), F.A.C.).

(v) The owner or operator shall submit excess emission reports for any calendar quarter during which there are excess emissions from the facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report quarterly stating that no excess emissions occurred during the quarterly reporting period. The report shall include the following:

(A) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the

SPECIFIC CONDITIONS:

- date and time of commencement and completion of each period of excess emissions [40 CFR60.7(c)(1)].
- (B) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted [40CFR60.7(c)(2)].
 - (C) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments [40CFR60.7(c)(3)].
 - (D) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report [40CFR60.7(c)(4)].
 - (E) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection [40CFR60.7(d)].

4. Miscellaneous Requirements

a. Start-up and Shut-down Procedures

During start-up procedures, propane gas shall be used to preheat the combustion zone to achieve a furnace roof temperature of 1270°F and a minimum temperature of 1800°F above the grate (at a height to be specified by the vendor) prior to the ignition of MSW.

During all shut-down procedures, propane gas shall be used to ensure that the temperature above the grate, as specified above, does not drop below 1800°F and the furnace roof temperature is maintained above 1270° while any MSW is still burning.

SPECIFIC CONDITIONS:

b. Operating Procedures

Operating procedures shall include good combustion practices and proper training and certification of all operators. The good combustion practices shall meet the guidelines established in 40 CFR 60, Subpart Ea and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained and certified in accordance with the manufacturers guidelines. A list of all such certified personnel shall be submitted to the South District Office. The Permittee/Operator shall inform the District office of any planned training sessions so that Department staff may attend any such training sessions related to operation and maintenance of air pollution control devices.

The emission standards for this facility shall apply at all times, except during periods of start-up, shut-down, or malfunctions, provided that the duration of start-up, shut-down, or malfunction shall not exceed 2 hours within 24 hour period. The start-up period commences when the affected facility begins the continuous burning of MSW and does not include any warm-up period when the affected facility is combusting only propane gas and no MSW is being combusted. During all startups, shutdowns and malfunctions the owner/operator shall use best operational practices to minimize air pollutant emissions. Within 90 days prior to commencing commercial operations of this facility, the permittee shall submit to the South District Office for approval a operational procedures manual that identifies and describes best operational practices that will be used during startup, shutdown, and malfunctions of this facility.

c. Odor Control

No objectionable odors are allowed from this facility pursuant to F.A.C. Rule 17-2.620. The truck access doors to the facility shall remain closed except during normal working shifts when MSW is being received near the storage pit area to allow vehicle passage. To minimize odors at the facility, a negative pressure shall be maintained on the tipping floor and air from within the building will be used as combustion air.

SPECIFIC CONDITIONS:

d. Auxiliary Burners

Auxiliary burners for each unit shall be fired only by propane gas and shall not exceed the 10% capacity factor as determined by 40 CFR 60.44b(d).

e. Baghouse Operations

All baghouses (except for lime silo dust collector) shall be equipped with pressure drop monitoring equipment. Baghouses shall have a maximum air to cloth ratio of 4:1. Extra bags shall be maintained at the site for emergency purposes.

f. Restriction for Type of Wastes Combusted

No biological waste, medical waste, bio-hazardous waste, sewage sludge or hazardous or unauthorized wastes shall be received or combusted at this facility without obtaining proper modification to the power plant site certification and this permit. The Permittee may combust up to 3% (by weight) of used tires along with the MSW. If the applicant wishes to combust used tires in excess of 3% (by weight) a modification to the construction permit will be required prior to increasing the feed rate of the tires. The County shall establish a household battery collection program to be specified by the applicant prior to start of construction, to further minimize mercury emissions. Chromium compounds shall not be used as an additive in the cooling tower water.

g. Fugitive (Unconfined) Emissions

Fugitive emissions at this facility shall be adequately controlled at all times. All roads shall be adequately paved and vacuum swept if appropriate, to keep free of visible dust. Speed limit signs shall be posted. Residue from the grates, grate siftings, and ash from the combustor/boiler and fabric filter hoppers during normal operations shall be discharged into the ash quenching system so as to minimize visible dust. The ash/residue in the ash handling building shall remain sufficiently moist to prevent dust during storage and handling operations.

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

- h. The height of the boiler exhaust stack shall not be less than 275 feet above grade or the height determined to be Good Engineering Practice.
- i. The SWERF's boilers shall not be loaded in excess of their permitted capacity of 55,000 lb/hr. of MSW per unit, and 275×10^6 Btu per hour, each unit, and 186,200 lb/hour of steam, based on heating value of 5000 Btu/lb of MSW.
- j. The combustor boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, and rated capacity.
- k. Combustion efficiency shall be calculated by: $\%CE = (1 / (1 + (CO/CO_2))) \times 100$, and shall be at least 99.5% for an 8 hour average.

5. Emission Control Equipment

- a. The combustor's particulate control baghouse shall be designed, constructed and operated to achieve a maximum emission rate of 0.010 grains per dscf corrected to 7% O₂.
- b. The facility shall be equipped with dry scrubbers which are designed, constructed and operated to remove SO₂ at an efficiency of 80% by weight or to achieve an emission rate of 30 ppm_{dv} at 7% O₂, 24 hour daily geometric average, which ever is less stringent and to cool the flue gases to an average temperature not to exceed 300°F (3-hour rolling average).
- c. The Permittee shall submit to the South Florida District and to the Bureau of Air Regulation within thirty (30) days after it becomes available, copies of technical data pertaining to the selected emissions control systems. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters.

6. Stack Test Reports

- a. Two copies of the results of the emissions tests for the pollutants listed in Specific Condition No. 2 shall be submitted within forty-five days of the last sampling run

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

- to the South District Office, and one copy of the test results shall be submitted to the Bureau of Air Regulation in Tallahassee.
- b. Emissions monitoring shall be reported to the South District Office on a quarterly basis in accordance with Section 17-2.710, F.A.C., 40 CFR, part 60, Subsection 60.7 or 40 CFR part 61 as appropriate.
 - c. Notice of anticipated and actual start-up dates of each waste combustor boiler shall be submitted to the DER South District Office and the Bureau of Air Regulation.
7. Pursuant to Recommended Order on Remand (DOAH Case No. 90-3942 EPP), Appendix B, Exhibit 96, dated May 21, 1992, evaluation test methodology for the mercury control process at this facility shall be subject to the following:
- A. The permittee must operate the pollution control equipment at the facility under procedures designed to minimize emissions of mercury and maximize the removal of mercury from the flue gas of the facility. An activated carbon injection system for mercury control approved by the Department in accordance with Specific Condition No. 2 shall be operated continuously whenever MSW is burned at the facility. The emissions of mercury from the facility shall not exceed the standard established in Specific Condition No. 2(m).
 - B. The permittee shall determine through Department-approved operational testing the feed rate for activated carbon injection which provides the most effective mercury removal over the normal operating regime for the facility while achieving the levels stated hereafter. Following determination of this feed rate, the permittee shall not reduce it without specific written permission from the Department.
 - C. The permittee acknowledges and agrees that the 140 ug/dscm mercury emission standard established by Specific Condition No. 2(m) may be reduced to a level no lower than 70 ug/dscm at 7% O₂ or its equivalent upon written notice to the permittee that Departmental review of at least four operational test results (specified according to protocol) from the facility shows that a reduction of the 140 ug/dscm

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

standard is statistically achievable as determined by the student T-test at the 99 percent confidence limit and is in the public interest. If the Department elects to proceed under this provision, the procedures of Section 403.516(1), Florida Statutes, shall not apply unless the permittee disputes the factual basis for the Department's determination.

- D. If the Department proposes to reduce the 140 ug/dscm mercury emission standard for the facility to a level below 70 ug/dscm at 7% O₂ or its equivalent, it shall proceed in accordance with the provisions of Section 403.516(1), Florida Statutes.

Issued this 20th day
of July, 1992

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Carol M. Browner, Secretary