

Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Ewachmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMITS

January 5, 1990

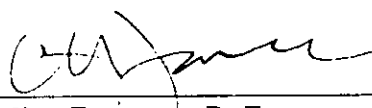
Mr. David S. Beachler
Westinghouse RESD
2400 Ardmore Boulevard
Pittsburgh, Pennsylvania 15221

Enclosed are construction permits Nos. AC 03-145061, -152196, and PSD-FL-129 for the Bay County Waste-to-Energy Facility in Bay County, Florida. These permits are issued pursuant to Section 403, Florida Statutes.

Any party to these permits has the right to seek judicial review of the permits 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 these permits are 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

Copy furnished to:

E. Middleswart, NW District
T. Moody, NW District
W. Aronson, EPA
C. Shaver, NPS
C. Speicher, P.E., Westinghouse
J. Kolk, Audubon Society

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 1-5-90.

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

Kim Doherty
Clerk

1-5-90
Date

Final Determination

Bay Resource Management Center
Panama City, Bay County, Florida

Bay County Waste-to-Energy Facility

Unit 1, AC 03-145061
Unit 2, AC 03-152196

PSD-FL-129

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

December 29, 1989

Final Determination

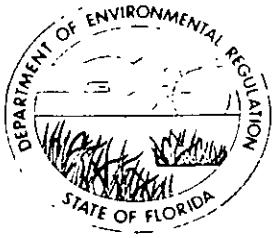
Bay Resource Management Center's application for a revision of the lead emissions from the combustion units at the Bay County Waste-to-Energy Facility in Bay County, Florida, has been reviewed by the Bureau of Air Regulation.

The Public Notice of the Department's Intent to Issue was published in the News-Herald on November 21, 1989. Copies of the Preliminary Determination have been available for public inspection at the Department's Northwest District office in Pensacola, the Northwest District Branch office in Panama City, and the Department's Bureau of Air Regulation office in Tallahassee.

Comments received from Westinghouse (attachment No. 21) in response to the Department's proposed action are addressed below:

1. The units (lb/ton) for the emission factors will added to Specific Condition (S.C.) No. 4.
2. The moisture correction requirement for a wet O₂ monitor used for CO emissions correction will be added to S.C. No. 6.f.
3. S.C. No. 2 will be amended to allow a seven day average of the scalehouse records to determine the charging rate to the combustors.

The final action of the Department is to issue the permit as proposed in the Preliminary Determination with the above mentioned changes to S.C. Nos. 2, 4, and 6.



Florida Department of Environmental Regulation

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Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Bay Resource Mgmt. Center
c/o Westinghouse RESD
Cost Building
2400 Ardmore Blvd
Pittsburgh, PA 15221

Permit Numbers: AC 03-145061
AC 03-152196
PSD-FL-129

County: Bay
Expiration Date: October 1, 1990
Latitude/Longitude: 30°15'54"N
85°30'08"W

Project: Bay County Waste-to-Energy
Facility, Units 1 & 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 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 increase in municipal solid waste (MSW) facility charging rate from 350 TPD (tons per day) to 510 TPD at the Bay County Waste-to-Energy facility, Bay County, Florida.

Construction shall be in accordance with the attached permit application and additional information except as otherwise noted in the General and Specific Conditions.

Attachments are as follows:

1. Westinghouse application package received February 5, 1988.
2. DER's letter of incompleteness dated March 7, 1988.
3. Westinghouse response received March 21, 1988.
4. U.S. EPA's letter dated March 21, 1988.
5. Fish & Wildlife Service letter received April 11, 1988.
6. DER's letter for additional information dated April 19, 1988.
7. Westinghouse response received April 27, 1988.
8. DER's letter dated May 26, 1988.
9. Westinghouse letter received June 10, 1988.
10. Bay County Commissioners' letter received June 16, 1988.
11. Bay County Audubon Society letter received July 22, 1988.
12. DER letter dated August 2, 1988.
13. Westinghouse letter received August 12, 1988.
14. Bay County Audubon Society letter received September 20, 1988.
15. EPA letter received October 11, 1988.
16. Final Determination dated October 12, 1988.
17. Westinghouse letter received April 11, 1989.
18. DER letter dated May 5, 1989.
19. Westinghouse modification request received August 25, 1989.

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Attachments Continued:

20. DER's Preliminary Determination dated October 30, 1989.
21. Westinghouse's comments received December 21, 1989.
22. DER'S Final Determination dated December 29, 1989.

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.

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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.

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.

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GENERAL CONDITIONS:

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 proscribed 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

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.

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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 permit shall supercede the previous permits, which have the same numbers, issued for the Bay County Waste-to-Energy Facility on October 17, 1988.

2. Municipal Waste Combustor

a. The maximum charging rate of each municipal waste combustor (MWC) shall not exceed 255 tons of municipal solid waste (MSW) per day (a total of 510 TPD for the facility); 95.6 million Btu heat input per hour, assuming a heating value of 4,500 Btu per pound; and a steam production rate of 68,000 lbs/hr (design capacity). A 7-day-average, as of 8 am.- Monday, shall be used to determine the charging rate for each MWC. Load cells used on the loading conveyors shall be used for information purposes, and to determine their accuracy and validity.

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SPECIFIC CONDITIONS:

- b. The wood waste utilization rate shall not exceed 160 TPD for the facility. Wood waste shall be used when sufficient MSW is not available to maintain a steady heat rate.
- c. The furnace mean temperature at the fully mixed zone of the combustor shall not be less than 1,800°F.
- d. The normal operating range of the MWC shall be 80% to 100% of design rated capacity.
- e. The MWC shall be fueled with municipal solid waste and wood waste only. Other wastes shall not be burned without specific prior written approval of DER.
- f. Auxiliary fuel burners shall be fueled only with distillate fuel oil or natural gas. If the annual capacity factor for oil or gas is greater than 10%, as determined by 40 CFR 60.43b(d), the facility shall be subject to 40 CFR 60.44b, standards for nitrogen oxides.
- g. Auxiliary fuel burners shall be used at start up during the introduction of MSW fuel until design furnace gas temperature is achieved.
- h. The facility may operate continuously (8760 hrs/yr).
3. Each MWC shall be equipped with an electrostatic precipitator for particulate emission control.
4. Flue gas emissions from each unit and the facility (two identical units) shall not exceed the following:

Pollutant	Emission Limitations			Emission Factors	
	Per Unit lbs/hr	Facility lbs/hr	TPY	Wood lb/ton	MSW lb/ton
PM, PM ₁₀	6.8	13.5	59.1	0.03 gr/dscf	
CO	92.8	185.6	812.9	20.0	3.58
NOx	26.9	53.9	236.1	2.8	2.41
SO ₂	35.8	71.5	313.2	0.3	3.36
VOC	7.1	14.2	62.2	1.7	0.196
Lead	0.10	0.20	0.876	0	0.0096
Mercury	0.18	0.36	1.58	0	0.0017
Beryllium	5x10 ⁻⁶	1x10 ⁻⁵	4.4x10 ⁻⁵	0	4.8x10 ⁻⁷
Fluoride	0.15	0.30	1.31	0	0.014

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SPECIFIC CONDITIONS:

The following are tabulated for PSD and inventory purposes:

Pollutant	Projected Emissions			Emission Factors	
	Per Unit lb/hr	Facility lb/hr	TPY	Wood lb/ton	MSW lb/ton
Hydrogen Chloride	61.7	123.3	540.0	0	5.8
Sulfuric Acid Mist	1.5	3.0	13.1	0	0.14

Visible emissions shall not exceed 15% opacity (6 min. average).

PM₁₀ emissions are conservatively assumed to be equal to 100% PM.

Compliance with the permit emission limits shall be determined by EPA reference method tests included in 40 CFR Parts 60 and 61 (July 1, 1987 version) and listed in Condition No. 5 of this permit or by equivalent methods approved by Florida DER.

For the purpose of establishing specific increment consumption for TSP and SO₂ at the facility, an hourly emission rate shall be established for each pollutant at the time of performance testing.

The combustors are subject to 40 CFR Part 60, Subpart E; and Subpart Db, when heat input per unit exceeds 100 MMBtu/hr; except that where requirements within the permit are more restrictive, the requirements of the permit shall apply.

5. Compliance Tests

a. Initial compliance tests for particulate matter, SO₂, nitrogen oxides, CO, VOC, lead, fluorides, mercury and beryllium shall be conducted in accordance with 40 CFR 60.8 (a), (b), (d), (e), and (f).

b. Annual compliance tests for particulate matter, sulfur dioxide, and nitrogen oxides shall be performed.

c. Initial and annual visible emissions compliance tests shall be determined in accordance with 40 CFR 60.11(b) and (e).

d. The compliance tests shall be conducted within 10% of the maximum capacity and firing rate of each permitted fuel.

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e. The following test methods and procedures of 40 CFR Parts 60 and 61 or other DER approved methods with prior DER approval shall be used for compliance testing:

- (1) Method 1 for selection of sample site and sample traverses.
- (2) Method 2 for determining stack gas flow rate.
- (3) Method 3 or 3A for gas analysis for calculation of percent O₂ and CO₂.
- (4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.
- (5) Method 5 or Method 17 for particulate matter.
- (6) Method 9 for visible emissions, in accordance with 40 CFR 60.11.
- (7) Method 6, 6C, or 8 for SO₂.
- (8) Method 7, 7A, 7B, 7C, 7D, or 7E for nitrogen oxides.
- (9) Method 10 for CO.
- (10) Method 12 for lead.
- (11) Method 13B for fluorides.
- (12) Method 25 or 25A for VOCs.
- (13) Method 101A for mercury.
- (14) Method 104 for beryllium.

6. Continuous Emission Monitoring

Continuous emission monitors for opacity, oxygen, and carbon monoxide shall be installed, calibrated, maintained and operated for each unit.

- a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B.

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SPECIFIC CONDITIONS:

- b. CEMS data shall be recorded during periods of startup, shutdown and malfunction but shall be excluded from emission averaging calculations for CO and opacity.
- 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 condition 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. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).
- f. CO emissions, corrected to 7% O₂, shall be recorded. A wet O₂ monitor may be used for CO emission correction. A wet O₂ monitor shall be corrected to dry basis using a moisture correction determined annually using EPA Method 4. A CO value of 400 ppmvd shall indicate good combustion (800 ppm corresponds to the emission limitation in Condition No. 4).
- g. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. 8 herein, which exceeds the applicable emission limit in Condition No. 4.

7. Operations Monitoring

- a. Devices shall be installed to continuously monitor and record steam production, furnace exit gas temperature (FEGT) and flue gas temperature at the exit of the control equipment. An FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.
- b. The furnace heat load shall be maintained between 80% and 100% of the design rated capacity during normal operations. The lower limit may be extended provided compliance with the carbon monoxide emissions limit and the FEGT within this permit at the extended turndown rate are achieved.

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SPECIFIC CONDITIONS:

8. Reporting

a. A minimum of fifteen (15) days prior notification of compliance test shall be given to DER's Northwest District office.

b. The results of compliance test shall be submitted to the Department's Northwest District office within 45 days after completion of the test.

c. 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 semiannually stating that no excess emissions occurred during the semiannual reporting period. The report shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (60.7(c)(1)).

(2) 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 measured adopted (60.7(c)(2)).

(3) 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 (60.7(c)(3)).

(4) 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 (60.7(c)(4)).

(5) 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 (60.7(d)).

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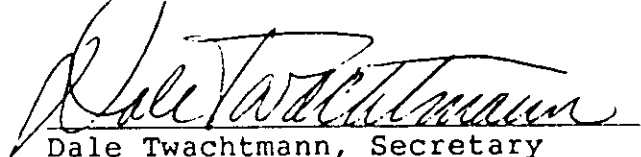
9. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to the Department's Northwest District office.

10. 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. 17-4.090).

11. An application for an operation permit must be submitted to the Northwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. 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. 17-4.220).

Issued this 4 day
of Jan, 1990

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary