



7-28-89  
Atlanta, Ga

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV  
345 COURTLAND STREET  
ATLANTA, GEORGIA 30365

RECEIVED  
JUL 31 1989  
DER-BAQM

4APT/APB-aes

JUL 28 1989

Mr. Douglas E. Burnham  
Babcock and Wilcox Company  
Power Generation Group  
20 S. Van Buren Avenue  
Post Office Box 351  
Barberton, Ohio 44203-0351

Re: Palm Beach County Solid Waste Resource Recovery Facility  
PSD-FL-108

Dear Mr. Burnham:

This is to acknowledge the receipt of your letter dated July 7, 1989, transmitting the protocol procedure for measuring emissions of multiple metals from stationary sources and a write-up on the proposed method 13B procedure for determining HF and HCl emissions.

The documents have been reviewed by our staff and it is our opinion that these methods are acceptable for use in the compliance of the above referenced source.

Thank you for transmitting these documents and for your cooperation in this matter. If you have any further questions, please contact Gregg Worley of my staff at (404) 347-2864.

Sincerely yours,

*Wayne J. Arnsperger*

Bruce P. Miller, Chief  
Air Programs Branch  
Air, Pesticides, and Toxics  
Management Division

cc: Marc Broner - Solid Waste Authority  
C. H. Fancy - Florida DER

CHF/BT/PA  
Barry Andrews  
Pradeep Kaval  
Tom Rogers  
Gene Dacc - PBC  
Isidore Goldman  
8-1-89 RAN

BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In Re: )  
 )  
North Broward Resource Recovery Facility )  
Modification of Certification )  
No. PA 86-22 )  
Broward County, Florida )

FINAL ORDER MODIFYING CONDITIONS  
OF CERTIFICATION

On September 29, 1988, Broward County submitted a request to modify the Conditions of Certification for the North Broward Resource Recovery Project relating to the number of boilers, boiler nameplate capacity, heat input rate, maximum charging rate, and related emission limitations. On November 9, 1988, the United States Environmental Protection Agency (EPA), requested that we incorporate the July 28, 1987, Prevention of Significant Deterioration (PSD) permit conditions in the revised Conditions of Certification.

The requested modification was submitted pursuant to Section 403.516, F.S., and Condition XII of the Conditions of Certification, which delegate modifications of conditions to the Department.

On November 23, 1988, a Notice of Proposed Agency Action was served on all parties with a provision that a hearing would be held if requested on or before January 6, 1989. No hearing was requested. No party has objected to the proposed modifications. Therefore,

IT IS ORDERED:

The Department hereby modifies the Conditions of Certification for the North Broward Resource Recovery Facility as follows:

Condition XIV.A.1. is modified as follows:

1. Emission Limitations upon the operation of Units 1-3

a. Stack emissions from each unit shall not exceed the following assuming a Btu content of 4500 Btu/lb of MSW:

(1) Particulate matter: 0.015 grains per standard cubic foot dry gas corrected to 12% CO<sub>2</sub>.

(2) SO<sub>2</sub>: 0.140 lb/mmBtu and 60 ppm (3-hr rolling average, dry volume, corrected to 12% CO<sub>2</sub>); or 65% reduction of uncontrolled SO<sub>2</sub> emissions.

In no case shall SO<sub>2</sub> emissions exceed 0.310

lb/mmBtu heat input and 124 ppm (3-hr rolling average, dry volume, corrected to 12% CO<sub>2</sub>).

The 124 ppm limit above shall be modified to reflect a new emission limit (in ppm) from the control device at 65% control efficiency.

Within 18 months of start-up of operation the

County shall submit compliance test that will

be used to determine the new SO<sub>2</sub> emission limit

(in ppm). The limit will be determined by

observed average emission rate (u) from the

submitted compliance tests and will be statis-

tically analyzed using the one-tailed student T

test ( $t_{.05} = (X - u) n^{0.5}/s$ ) at the 95% confid-

ence level to derive an emission rate (x) where

s is the standard deviation of observed values

n. The final SO<sub>2</sub> emission limit (in ppm) shall

be this mean emission rate (x). This value

shall be restricted to no more than 124 ppm or

less 60 ppm (3-hr rolling average, dry volume,

corrected to 12% CO<sub>2</sub>).

- (3) Nitrogen Oxides: 350 ppm (3-hr rolling average, dry volume, corrected to 12% CO<sub>2</sub>).
- (4) Carbon Monoxide: 0.090 lb/mmBtu heat input; 400 ppm (1-hr rolling average, dry volume, corrected to 12% CO<sub>2</sub>); and 88 ppm (4-day rolling average, dry volume corrected to 12% CO<sub>2</sub>).
- (5) Lead: 0.00056 lbs/mmBtu.
- (6) Mercury:  $7.5 \times 10^{-4}$  lbs/mmBtu.
- (7) Odor: There shall be no objectionable odor at the site boundary.
- (8) Visible Emissions: Opacity shall be no greater than 15% except that visible emissions with no more than 20% opacity may be allowed for up to three consecutive minutes in any one hour except during start up or upsets when the provisions of 17-2.250, F.A.C., shall apply, provided that: (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess opacity is minimized but in no case allowed to exceed two hours in any 24-hour period, unless specifically authorized by EPA for longer durations. Opacity requirements shall be demonstrated in accordance with 17-2.700(6)(a)9., F.A.C., Method 9.
- (9) Fluoride: 0.0040 lb/mmBtu

c. The incinerator boilers shall not be loaded in excess of their rated nameplate capacity of 67,200 pounds of MSW per hour or  $302.5 \times 10^6$  Btu per hour each.

e. Compliance with the limitations for particulates, sulfur oxides, nitrogen oxides, carbon monoxide, fluoride, sulfuric acid mist, VOC, and lead shall be determined in accordance with Florida Administrative Code Rule 17-2.700, DER Methods 1, 2, 3, 4, and 6 and 40 CFR part 60, Appendix A, Methods 5, 7, 8, (modified with prefilter), 10, 12, 13A or 13B (or modified Method 5 for fluorides), and 18 or other methods as approved by DER. The stack test for each unit shall be performed at +/-10% of the maximum heat input rate of 302.5 x 10<sup>6</sup> Btu per hour or the maximum charging rate of 67,200 pounds of MSW per hour. -----

Condition XIV.A.2. is modified as follows:

a. Each boiler particulate control device shall be designed and constructed to achieve a maximum emission rate of 0.015 grains per dscf corrected to 12% CO<sub>2</sub>. All other particulate control devices shall be designed to meet the provisions of section 17-2.610, F.A.C.

b. Each boiler shall be equipped with an acid gas control device designed to remove at least 90% of the acid gases. The temperature of the flue gases exiting the acid gas control equipment shall not exceed 300 degrees F.

c. The permittee ----.

Any party to this Order has the right to seek judicial review of this Order pursuant to Section 120.68, Florida Statutes by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of the General Counsel, 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the appropriate filing fees with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date of the Final Order is filed with the clerk of the Department.

DONE AND ORDERED this \_\_\_\_\_ day of January, 1989, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

---

DALE TWACHTMANN  
Secretary

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Telephone: (904) 488-9730





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET  
ATLANTA, GEORGIA 30365

4APT-AP/ch

Mr. Clair H. Fancy, P. E.  
Deputy Chief  
Bureau of Air Quality Management  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32301

OCT 9 1986

RE: South Broward and West Palm Beach Counties Resource Recovery Facilities

Dear Mr. Fancy:

This is in reference to your September 25, 1986, letter submitting the staff analysis, hearing officer's recommended orders, and final certifications of the above-referenced power plant site certifications. The staff analyses as presented for both facilities present the Department's preliminary determinations for PSD reviews. However, the public notices were not included. These notices must provide a description of the project, increment consumption, and the opportunity to comment and request a public hearing. We request that you forward these notices to EPA. Based upon our conclusions, drawn from your staff analyses, 90% acid gas control and particulate emissions on the order of 0.015 gr./dscf will be required for both facilities. Although this will be in conflict with the State of Florida final order issued for the South Broward facility, we feel that the BACT determination for acid gas control and stringent particulate emissions limits is in agreement with "state of the art" controls now being employed at similar facilities throughout the country and the PSD remand for the North County Resource Recovery facility in California. The remand states that more stringent BACT requirements for regulated pollutants may be imposed where the simultaneous control of hazardous yet unregulated pollutants is achieved.

Please prepare the final determinations to reflect the requirement for acid gas control and a 0.015 gr/dscf particulate emission limit for the two facilities. Once we receive the final determinations and public notices, we will proceed to issue the PSD permits.

If you have any questions and/or comments regarding this letter, you may contact me at 404-347-2864 or Mr. Wayne J. Aronson at 404-347-4901.

Sincerely yours,

Bruce P. Miller  
Chief  
Air Programs Branch  
Air, Pesticides, & Toxics  
Management Division

DER  
OCT 13 1986  
BAQM