

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% CO₂.

(2) SO₂: 0.140 lb/mmBtu heat input and 60 ppm (3-hr rolling average, dry volume, corrected to 12% CO₂); or 65% reduction of uncontrolled SO₂ emissions. In no case shall SO₂ emissions exceed 0.310 lb/mmBtu heat input and 124 ppm (3-hr rolling average, dry volume, corrected to 12% CO₂).

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 a compliance test that

will be used to determine the new SO₂ 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 ($t_{.05} = (x - u) \frac{n^{0.5}}{s}$) at the 95% confid-

ence level to derive an emission rate (x) where s is the standard deviation of observed values

n. The final SO₂ 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% CO₂).

- (3) Nitrogen Oxides: 350 ppm (3-hr rolling average, dry volume, corrected to 12% CO₂).
- (4) Carbon Monoxide: 0.090 lb/mmBtu heat input; 400 ppm (1-hr rolling average, dry volume, corrected to 12% CO₂); and 88 ppm (4-day rolling average, dry volume corrected to 12% CO₂).
- (5) Lead: 0.00056 lbs/mmBtu heat input.
- (6) Mercury: 7.5 x 10⁻⁴ lbs/mmBtu heat input.
- (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 of 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 heat input.

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 x 10⁶ Btu per hour each. The temperature of the flue gas exiting the combustion chamber of the incinerator shall be equal to or greater than 1800 degrees F.

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 $\pm 10\%$ of the maximum heat input rate of 302.5×10^6 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% CO₂. 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 -----.

Condition XIV.A.3.a. is modified as follows:

a. The permittee shall install and operate continuously on each boiler monitoring devices for the final combustion chamber temperature, steam production, flue gas temperature at the exit of the acid gas removal equipment, flue gas O₂, CO, CO₂, NO_x, SO₂, and opacity. The monitoring devices ---

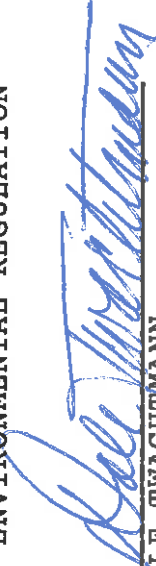
Condition XIV.A.4.b. is modified to read as follows:

b. Excess emissions monitoring for opacity, CO, NO_x, and SO₂ shall be reported to the Southeast District Office and BCEQCB on a quarterly basis in accordance with Section 17-2.710, F.A.C., and 40 CFR, Part 60, Subsection 60.7.

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 15th day of February, 1989, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


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Secretary

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