

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In Re:
South Broward Resource Recovery Facility)
Modification of Certification)
No. PA 85-21)
Broward County, Florida)

FINAL ORDER MODIFYING CONDITIONS
OF CERTIFICATION

On December 18, 1990, Wheelabrator South Broward, Inc., on behalf of Broward County, submitted to the Department a request to modify the Conditions of Certification for the South Broward Resource Recovery Facility concerning emission limitations. Previously, on November 9, 1988, the United States Environmental Protection Agency (EPA), requested that its July 28, 1987, Prevention of Significant Deterioration (PSD) permit conditions be incorporated in revised Conditions of Certification for the North Broward Resource Recovery Facility. This was done by order dated February 1, 1989. A similar revision is needed to conform the emission limitations for the South Broward Facility to those contained in the EPA's June 20, 1987, PSD permit for the substantially identical North Broward facility.

On November 1, 1991, Wheelabrator South Broward, Inc., requested modifications of the conditions of certification relating to ash analysis based on changes in Florida

Administrative Code Rule 17-702, in accordance with Section 403.511, (5)(a) Florida Statutes.

The requested modification was submitted pursuant to Section 403.516, F.S., and Condition XII of the Conditions of Certification, which delegates authority to modify certain conditions of certification to the Department.

On January 11, 1991, notice of the requested modification was published in the Florida Administrative Weekly. On January 15, 1991, a Notice of Proposed Agency Action was served on all parties. The notice specified that a hearing would be held if requested on or before 45 days from the date of receipt by the Party. No hearing was requested. No person has objected to the proposed modifications.

Accordingly, in the absence of any dispute,

IT IS ORDERED:

The Department hereby modifies the Conditions of Certification for the South 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 the 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 statistically analyzed using the one-tailed student T test ($t_{.05} = (X - u) n^{0.5}/s$) at the 95% confidence 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: 0.56 lb/mmBtu heat input and 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: 0.00150 lbs/mmBtu heat input.

(6) Mercury: 7.5×10^{-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 DER 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 863 tons per day of MSW or 323.6 mmBtu 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 3A, 5, 6C, 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 323.6 x 10⁶ Btu per hour or the maximum charging rate of 71,875 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.

Condition XIV.E.9. is modified to read as follows:

9. A representative composite ash sample shall be gathered within 30 days after commencement of commercial operation and prepared for analysis by total digestion, using

EPA Method 3050 Acid Digestion of Sediments, Sludges and Soils, "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," EPA Publication SW-848 (3rd edition as amended by Update 1-12/87). Ash samples shall be collected and analyzed by the methods listed in the Quality Assurance/Quality Control plan as required under F.A.C. 17-702.400(5) Rev., 7/19/90 and approved by the Southeast District Office.

Condition XIV.E.10. is modified to read as follows:

10. Results of the as analyses shall be submitted to the Southeast District Office within 30 days of receipt. Results will be used by the Southeast District Office to establish a baseline of levels of metals concentrations in the ash as compared to other facilities in the State. Results of these analyses may also be used for correlation with groundwater monitoring information or ash landfill leachate as discussed in F.A.C. 17-702.570 and in any subsequent modification of conditions.

Condition XIV.E.11. is modified to read as follows:

11. If the ash compositional results indicate significantly elevated levels of metals compared to metals concentrations in MSW ash at other facilities in the State, an investigation to determine the source(s) of the metals shall be conducted following notification by the Southeast

District Office. Subsequent actions by the Southeast District Office regarding plans to reduce or eliminate the source(s) of the metals shall be governed under F.A.C. 17-702.570(4).

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 17 day of April, 1991, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



CAROL M. BROWNER
Secretary

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Certificate of Service

I hereby certify that a copy of the Final Order Modifying Conditions of Certification of the South Broward County Resource Recovery Facility was sent to the following parties by United States mail on April 19th, 1991.

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