

Florida Department of
Environmental Protection

Memorandum

PSD-FL-112

TO: Buck Oven
FROM: Clair H. Fancy 
DATE: July 25, 1994
SUBJ: North Broward County Resource Recovery Facility

Attached please find the conditions of certification for the ash reuse processing project at the North Broward County Resource Recovery Facility.

CHF/JR/pm

Attachment

Revised and Additional Conditions of Certification

North Broward Resource Recovery Facility
PA 86-22

1. ADDITIONAL AUTHORIZED FACILITIES:

Ash Handling System Particulate Control

Particulate emissions from the ash handling system shall be controlled by a baghouse having an outlet loading not to exceed 0.01 gr/dscf or 3.0 tons per year.

Lime Silo Particulate Control

Particulate emissions from the unloading of pebble lime into a storage silo shall be controlled by a baghouse having an outlet loading not to exceed 0.01 gr/dscf or 0.021 tons per year.

Ash Reuse Process Facility

Particulate emissions from the ash processing addition shall be controlled by a baghouse having an outlet loading not to exceed 0.0040 gr/dscf or 11.7 tons per year.

2. REVISED CONDITIONS OF CERTIFICATION:

Condition of Certification XIV., E.5., Solid/Hazardous Waste is revised to read as follows:

Ash, prior to transport to the landfill or processed into landfill daily cover or construction aggregate shall be stored in an enclosed building on an impervious surface or by another method approved by the Department. Final disposal of unprocessed ash shall be into a lined landfill or by another method approved by the Department. Any leachate generated within the building shall be collected and reused within the facility or disposed of by a method approved by the Department. The Department shall notify the SFWMD of the plans and specifications regarding the above referenced method.

Conditions XIV., E. Solid/Hazardous Waste, 8 is revised as follows:

8. The sampling analysis and reporting of results of municipal solid waste combustor ash residue shall be in accordance with F.A.C. Chapter 17-702.

9. Deleted.

10. Deleted.

Conditions XIV., E. Solid Hazardous Waste 12 is added to read as follows:

12. Chemical and physical properties of the processed ash shall be determined and reported in accordance with F.A.C. Chapter 17-702 and reported to the Department.

3. ADDITIONAL SPECIFIC CONDITIONS OF CERTIFICATION:

Condition XIV., A. Air, 6. is added to read as follows:

6. Ash Handling, Reuse Facility, Lime Silo

- a. Wheelabrator North Broward, Inc.'s fly ash handling system and the lime silo shall be allowed to operate continuously (i.e. 8,760 hrs/yr).
- b. Particulate emissions from the fly ash handling system, and lime silo baghouses shall not exceed 0.01 gr/dscf, or 3.0 tons/year and 0.021 tons/year, respectively.
- c. The ash reuse facility shall be allowed to operate up to 6,000 hrs/yr at a maximum process rate of 260,000 lbs/hr of ash residue.
- d. Particulate emissions from the ash reuse process facility shall not exceed 0.0040 gr/dscf or 3.91 lbs/hr or 11.7 tons/yr.
- e. Visible emissions from the fly ash handling system and the lime silo process facility shall not exceed 5% opacity.
- f. Visible emissions from the ash reuse facility baghouse shall not exceed 5% opacity.
- g. Compliance with the particulate and visible emissions tests shall be determined annually using EPA Methods 1, 2, 3, 4, 5 and 9 contained in F.A.C. Rule 17-297. The visible emissions test for the fly ash handling system and ash reuse facility conducted along with the particulate tests shall be for at least 60 minutes. The visible emissions tests for the lime silo shall be conducted for the entire truck unloading operation. The minimum requirements for stack sampling facilities, source sampling and reporting shall be in accordance with F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A. A stack drawing showing sampling locations for the proposed ash processing facility baghouse shall be submitted to the Department at least 90 days prior to testing.

- h. The maximum allowable emission rate for particulate matter for the lime silo is 0.021 tons/year. Because of the expense and complexity of conducting a stack test on minor sources of particulate matter, the Department, pursuant to the authority granted under F.A.C. Rule 17-2.700(3)(d), hereby waives the requirement for a stack test. The alternate standard set forth by this provision establishes a visible emission not to exceed an opacity of 5%. Any exceedance of 5% opacity as determined by a certified visual emissions observer is considered a violation.
- i. Should the Department have any reason to believe the particulate emission standard is not being met for the lime silo, the Department may require that compliance with the particulate emission standards be demonstrated by testing in accordance with F.A.C. Rule 17-297.
- j. No objectionable odors from this facility will be allowed.
- k. The DEP Southeast District Office shall be given written notice at least 15 days prior to compliance testing.
- l. All conveyor loading points, transfer points and all ash processing equipment shall be properly enclosed. The facility shall be operated by personnel properly trained for the equipment herein. The Department shall be notified in writing on how the facility will be staffed and trained.
- m. Reasonable precautions shall be taken during operation to prevent and control generation of unconfined emissions of particulate matter in accordance with the provisions in F.A.C. Rule 17-2.610(3). Such reasonable precautions shall be: application of water or chemicals to control fugitive emissions from activities such as vehicular movement, loading, unloading, storage and handling.
- n. The permittee shall comply with all applicable provisions of Florida Administrative Code Chapters 17-4 and 17-210 through 297.
- o. Prior to the use of ash at this facility, the permittee shall submit to the Department the following information required by F.A.C. Rule 17-702.600(2) and obtain written confirmation from the Department that F.A.C. Rule 17-702.600(2) has been complied with.

- (1) Describe the chemical and physical properties of the finished product line, identify the quantity of ash residue used in a product, and identify quantity and quality of the product to be marketed or used.
- (2) Demonstrate that the proposed process will physically or chemically change the ash residue so that any leachates produced after processing will not cause a violation of surface or ground water quality standards contained in Chapters 17-3 and 17-550, F.A.C.
- (3) Demonstrate that processed ash residue or products using ash residue will not endanger human health or the environment. Exposure risks to be considered include, but are not limited to, inhalation, ingestion, skin contact, and migration to soil, surface and ground water.
- (4) Establish performance standards and operational criteria for the process that are designed to demonstrate reliable operation in compliance with Rules 17-702.600(2)(a) through (c), F.A.C.