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June 17, 1994

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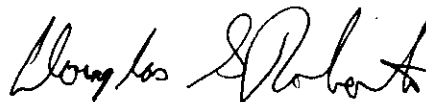
Re: North Broward Resource Recovery Project, PA 86-22  
Request for Modification,  
Responses to Agency Questions

Dear Mr. Oven:

Enclosed are responses to the questions raised in your May 27, 1993 letter (copy attached) concerning the requested modification of site certification for the North Broward Resource Recovery Project. The responses are numbered in order of the questions. Per your request, I am forwarding copies of this response to the individuals listed below.

Should there be any additional information you may desire, please let me know.

Sincerely,



Douglas S. Roberts

Enclosure

cc: Martha Nebelsiek, w/encls  
Al Rushanan, Water Facilities, w/encls  
Raisa Neginsky, SE Dist., w/encls  
John Reynolds, Air Resources, w/encls.

RECEIVED

JUN 20 1994

Bureau of  
Air Regulation

NORTH BROWARD RESOURCE RECOVERY PROJECT:  
REQUEST FOR MODIFICATION OF SITE CERTIFICATION  
PA86-22

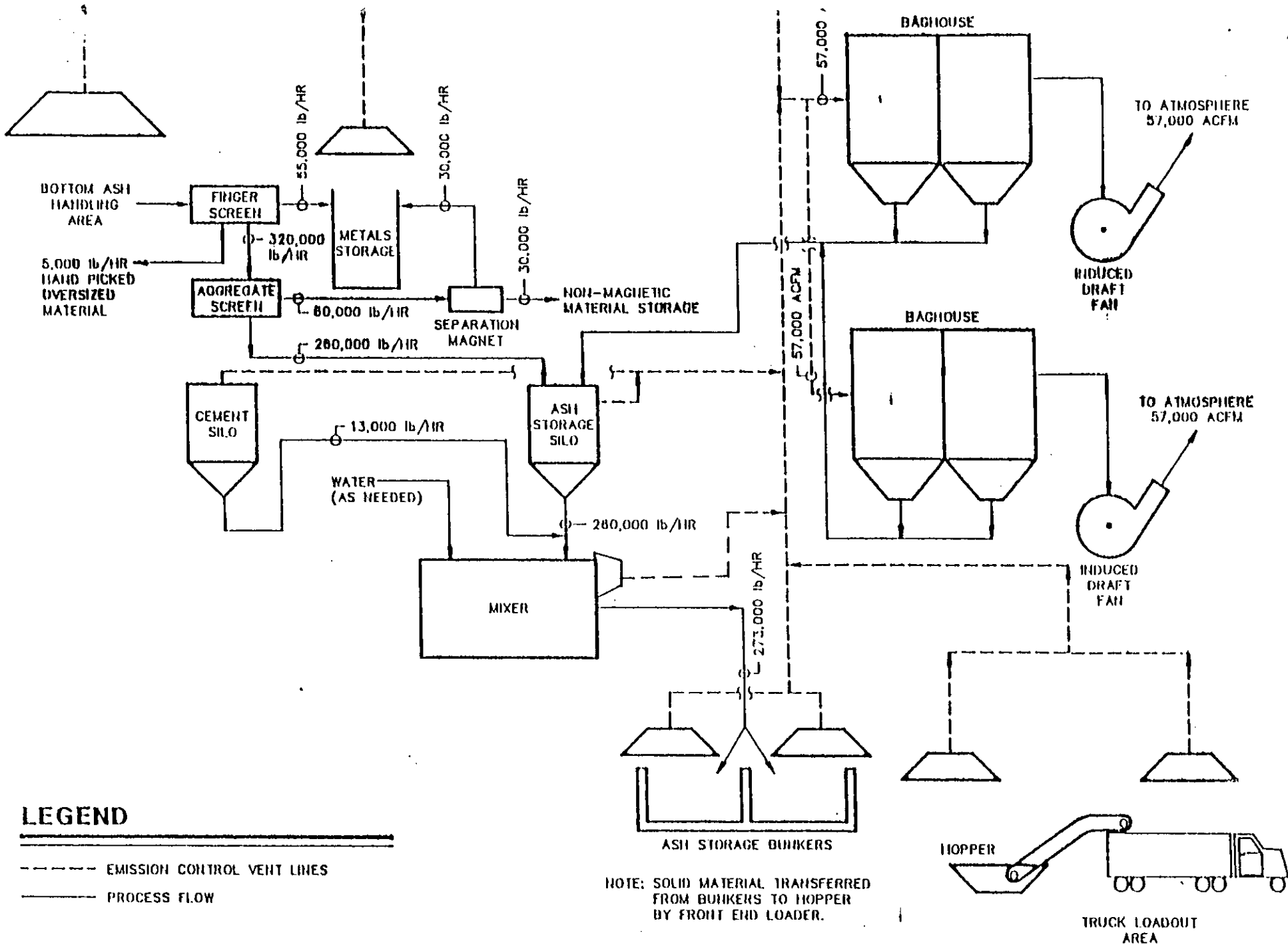
RESPONSES TO FDEP QUESTIONS

June 17, 1994

1. The intent of this process is to manufacture a combination of two products, landfill daily cover and/or a construction aggregate. In the production of landfill daily cover, combined ash will undergo both ferrous recovery and size gradation. In the production of a construction aggregate, we are proposing to process only the course fraction of the ash, which will ensure the final aggregate product will meet F.D.O.T. and customer physical specifications. Ash fines may be processed into landfill daily cover or disposed of. Aggregate production as outlined in the process description on page 1 encompasses ferrous recovery, size gradation, reagent addition, curing and final additional sizing to meet customer demands. The construction aggregate is also suitable for landfill daily cover. Process flows for the production of landfill daily cover and construction aggregate are detailed in Figures 1 and 2 of the Request for Modification.
2. The last paragraph of the ferrous recovery portion of the process description should be amended to read as follows: The ash residue is conveyed to a finger screen where the stream is divided into plus 4" and minus 4" fractions. The plus 4" material is primarily ferrous metal, and is conveyed to a storage bunker. Prior to shipping, the ferrous fraction will be magnetically separated and loaded into trucks for shipment. The non magnetic fraction (ash and large bulk objects) will either be returned to the process or disposed of, as appropriate.
3. As a point of clarification, the "water storage tank and contact water recycle tank" are one in the same. As depicted in the attached facility water balance diagram (Figure No.1), during average daily conditions the facility's 200,000 gallon contact water recycle tank (Waste water storage, Figure No. 1) receives 38,000 gallons of plant wastewater per day. The primary uses of this recycled wastewater are ash quenching and flue gas cleaning which require 250,800 gallons per day, of which 224,160 gallons can originate from the contact water recycle tank. This results in the ability to utilize an additional 186,160 gallons per day of plant wastewater or tertiary effluent supplied by the North Broward Waste Water Treatment Plant. We feel that this capacity to utilize wastewater, and the 200,000 gallon equalization volume of the existing contact water recycle tank are sufficient to accommodate the increased wastewater burden, including that from truck wash down and captured storm water.
4. The requested water balance diagram has been provided as the attached Figure No. 1.
5. Wastewater will be contained within the ash processing building through the use of floors which will be sloped for collection of wastewater into a U-drain collection system. Building doorways will also be equipped with concrete berms as a secondary means of ensuring wastewater containment. "Blowdown" of the recycle water storage tank will not be

required, as the facility consumes at least one tank volume per day.

6. Cover material produced by the ash processing facility is intended for use as initial cover at lined landfills which met the Department's landfill design criteria at the time of permitting as outlined in F.A.C. 17-701. (Refer to Chris McGuire's letter of March 22, 1994 contained in Appendix C of the Request for Modification).
7. The downleg vent of the ash storage silo is identified incorrectly on the process flow diagram, the vent in question actually vents the mixer directly. A revised process flow diagram is attached.
8. All of the equipment identified on page B4 would be part of the ash processing addition, none of which is existing equipment.
9. The emissions estimates provided in the Request for Modification are based on both vendor guarantees and actual emission test data for a similar collection device currently operated at this facility. The October 1991 stack test (see attached calculation sheet) performed for the existing ash handling system fabric filter indicate average particulate emissions to be 0.000870 grains/ACF or 21.8% of the particulate loading of 0.004 grains/ACF used in the potential emissions analysis supplied by RUST Engineering, which are well below PSD threshold values.



-B4-  
REVISION NO. 1 6/6/94

**LEGEND**

- EMISSION CONTROL VENT LINES
- PROCESS FLOW

NOTE: SOLID MATERIAL TRANSFERRED FROM BUNKERS TO HOPPER BY FRONT END LOADER.

**ASH RECYCLING PROCESSING FACILITY  
FLOW DIAGRAM  
NO SCALE**