

PALM BEACH COUNTY SOLID WASTE AUTHORITY



January 13, 1985

Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Attn: Mr. Hamilton S. Oven, Jr., P.E.
Administrator
Siting Coordination Section

Re: Response to August 15, 1985 Letter
Application for Power Plant Siting Certification
Resource Recovery Facility
Solid Waste Authority
Palm Beach County, Florida

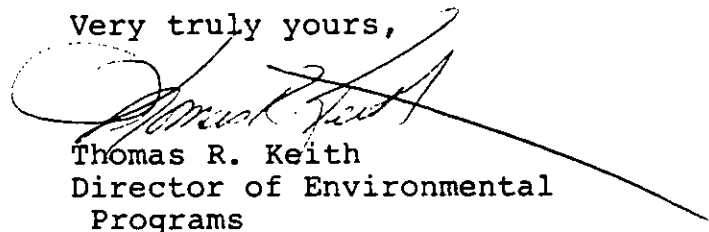
Dear Mr. Oven:

Accompanying this letter are 45 copies of the response to your letter of August 15, 1985, in which a number of questions/comments were raised by the Department of Environmental Regulation's Southeast Florida District Office concerning the application. Individual responses to each of the Programs (i.e. Solid Waste Program, Industrial Waste Programs, etc.) as outlined in your letter are included on each response booklet for distribution.

It should be noted that the information included in the "Update to the Application for Power Plant Site Certification" dated December, 1985, has superseded some of the responses the the questions/comments.

Should you have any questions, please contact our office.

Very truly yours,

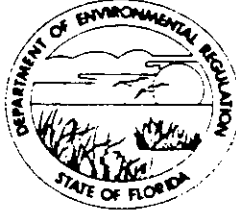


Thomas R. Keith
Director of Environmental
Programs

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED
AUG 19 1985

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

August 15, 1985

Mr. Tim Hunt, Jr.
Executive Director
Palm Beach County Solid
Waste Authority
5114 Okeechobee Blvd.
Suite 2C
West Palm Beach, FL 33409

RE: Palm Beach County Resource Recovery Facility
PA 84-20

Dear Mr. Hunt:

Please respond to the attached comments from the department's Southeast Florida District Office concerning sufficiency of the certification application.

Sincerely,

Hamilton S. Oven, Jr.
Hamilton S. Oven, Jr., P.E.
Administrator
Siting Coordination Section

HSOjr/sb

Attachment

cc: William Kendrick
All Parties

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee	
To: <u>Buck Owen</u>	Locn.: <u>TT-545</u>
To: _____	Locn.: _____
To: _____	Locn.: _____
From: _____	Date: _____
Reply Optional: <input type="checkbox"/>	Reply Required: <input type="checkbox"/> Info. Only: <input type="checkbox"/>
Date Due: _____	Date Due: _____

TO: Hamilton S. Owen, Jr., P.E.

FROM: D. B. White, P.E. *Itm*

DATE: August 9, 1985

SUBJECT: Palm Beach County Solid Waste Authority Resource
Recovery Facility Power Plant Siting Certification
Application

In addition to my letter of July 24, 1985 wherein were requested various program applications, please make it clear to the applicant that any applications which cannot be submitted before certification will be required to be submitted in a timely fashion as a special condition of the certification. Also, as we review the program applications, request additional information and then ultimately approve the application, we may require subsequent information such as monitoring data, etc. in the body of the letter approving the program applications and the resource recovery facility itself.

Please relay the following comments also regarding sufficiency of the certification application:

Solid Waste Program

1. What is the depth of the existing N.E. borrow lake?
2. On page 2-13 paragraph 3, a statement is made that "Resistivity soundings can be repeated in exactly the same locations"...as shown in Figure 2.3-1. Please explain how readings numbers 1, 2, 3, 4 and 6 can be done as stated above when Figure 2.1-2 illustrates that this will be landfilled and dredge lakes? How can accurate or meaningful data be obtained?
3. On page 2-27, paragraph 4, the statement is made that the high analyses recorded from Well #2 for total dissolved solids, chlorides and sodium were due to "piles of illegally disposed trash on the site". Please explain how these piles of trash on top of the ground could have possibly affected a well 60 feet deep and why the adjacent shallow Well #7 (5 feet deep) was not affected.

4. Due to the fact that the closed western portion of Dyer Landfill (approximately 80 acres) was disposed of into the water table, please explain if the groundwater analyses recorded on the eastern side of Site 7 indicates a plume emanating from Dyer?
5. Table 2.3-7d reveals higher analyses for organic nitrogen and total nitrogen in SW 2, 4, and 5. Please explain where this source of pollution is coming from.
6. Table 2.3-7d reveals high numbers of fecal streptococci in SW-3 and fecal coliform in SW-10. Please explain where this source of pollution is coming from.
7. Figure 3.2-3, Appendix 10.4 sheet 4 of 25 and sheet 20 of 25 illustrate that the applicant intends to construct the Class I landfill on top of EPB-10 Canal. Please provide detailed engineering drawings and cross sections of this plan. In addition, please explain in detail what steps will be taken for the prevention of an accidental leachate discharge into this surface water?
8. What precautions will be taken during liner construction over the EPB-10?
9. Explain why surface waste runoff from the landfill could not be directed into the southwest dredge lakes first, then easterly along 45th Street to the Turnpike, then northerly into EPB-10, instead of under the landfill.
10. On page 3-32 of 3.5.3, the applicant states that Well DW10A will be utilized for "potable water" at the plant site. Further statements are made that a plume of mineralized waters is emanating from the Dyer Landfill in this same direction. Please explain how one can utilize an 18 foot deep well that may be contaminated for human consumption?
11. On page 4-8, paragraph 1, reference is made to "the continuous pumping of 4 wells aligned along the eastern side of the Class I and III landfills as shown on Figure 4.2-1." This figure was not provided in the application. Please submit.
12. On page 4-8, paragraph 1, please show by figure which 2 wells (if already existing) will be continuously pumped at the Dyer Landfill, and their depths.

13. On page 4-8, paragraph 3, please explain how sealant will be "injected into the area of liner destruction or leakage?"
14. In Appendix 10.4, please explain item 32 of the solid waste disposal facility data form what is indicated to be "EPB IV-Cond" for class of receiving waters?
15. Provide detailed engineering drawings of the Class I and Class III liners overlapping sections. In addition provide details of the liner anchoring and seaming installation.
16. Provide details of quality assurance and quality control techniques utilized for liner seaming.
17. Provide an agreement between the landowner(s) and applicant identifying and explaining the terms of lease or contract. The only attachment in the application was a list of the owners.
18. The applicant has failed to sign and date the application.
19. The Executive Director shall submit a letter from the Palm Beach County Solid Waste Authority Board authorizing him to sign the application.
20. The date is not completed below the engineer of records signature.
21. Item #29 of the Solid Waste Disposal Facility Data Form was not completed indicating the method of treatment for leachate.

Industrial Waste Program

1. A detailed design of the treatment system to treat the effluent prior to deep well injection must be submitted in the Industrial Waste Permit Application format (DER Form 17-1.204(2)). As provided for in Section 17-6.300(1)(n)1., F.A.C., the source shall, as a minimum level of treatment, provide secondary waste treatment as required by Section 403.085, Florida Statutes. This treatment shall be applied against the total untreated waste produced by the plant. If the combined waste stream is shown to be not amendable to biological treatment, a comparable degree of treatment will be determined and applied through the issuance of department permit, or specific conditions applied to the letter of approval of this program application.

2. The design of the treatment system must also address "low volume wastestreams" including, but not limited to, floor drains, cooling tower basin cleaning wastes and metal cleaning wastes (with or without chemical cleaning compounds) generated from cleaning metal process equipment such as boiler tubes.
3. In accordance with Section 17-6.300(1)(p), F.A.C. all sources of industrial wastes reasonably expected to be sources of pollution to Class G-IV Waters shall provide a minimum level of treatment such that the waste to be discharged does not:
 - a. affect the mechanical integrity of the well;
 - b. jeopardize the integrity of the confining zone;
 - c. alter the hydrologic characteristics of the injection zone to the point of endangering underground sources of drinking water.

Domestic Waste Program

There is proposed a 29,000 gpd extended air activated sludge STP for domestic wastewater only, as generated by employees of site with effluent discharge to the deep injection well. This proposal if constructed and operated in compliance with F.A.C. Chapter 17-6 to meet technology based secondary treatment without disinfection will satisfy State statutes and Department rules. The following information should be required prior to approval of construction of the STP (F.A.C. 17-6.070):

SWA
RESPONSE

- 1
 1. Application for construction or equivalent submittal signed and sealed by engineer (previously requested).
 2. Complete construction drawings (signed and sealed by engineer).
 3. Brief engineering report.
- 2
 - Following completion of construction the following submittals are required for compliance with F.A.C. Rule Sections 17-6.140 and 17-6.150:
 1. Certification of Completion
 2. Operation and Maintenance manual
 3. Application for approval of operation.
 4. Compliance with operator and reporting requirement of F.A.C. 17-16 and 17-19.

SWA
RESPONSE

3

The proposal for diversion of wastewater to leachate basin does not appear practical nor desirable during plant upsets. Such provision is not required. Treated effluent could be diverted under emergency conditions to a holding basin during periods when the injection well is out of service.

4

If the leachate is considered an industrial waste, F.A.C. Rule Section 17-6.300 (1) m and (n) appears to apply. This rule implies that the statutory requirement for secondary treatment applies to industrial waste.

Air Program

Since the Palm Beach County Solid Waste Authority has submitted a complete application to construct/operate an air pollution source, the only comment we have is that the air section needs complete documentation on the process and pollution control equipment after the vendors have been selected.

Dredge & Fill Program

1

Please note the request already forwarded for a valid dredge and fill jurisdiction determination to be made. It is quite probable that dredge and fill jurisdiction will remain. In addition, jurisdiction may also be applicable to the transmission line corridor, which corridor was not addressed in the dredge and fill application submitted with PA 84-20. This can be corrected by the submission of the dredge and fill application requested to you by letter dated July 24, 1985.

2

The applicant has indicated that mitigation is in order, however, no plan has been presented and no time frame given. These items must be quantified prior to the program application approval.

UIC Program

1

All UIC projects for Class I Injection wells are normally reviewed by the Technical Advisory Committee. This system has served very well both for the initial review and for the review of progress during construction. Many of the specific specifications such as the setting depth of the final string of casing, location (depth) of the monitoring wells, cementing program, etc., must be determined during construction and the TAC's recommendation has been invaluable in assuring optimum specifications. In addition, problems encountered during construction such as lost tools down-hole, requires the review of a knowledgeable group to determine whether proposed corrective actions are acceptable.

SWA
RESPONSE

2

We also have some questions about the monitoring proposed for the system. The proposal to monitor a single zone (approximately 1800') is a departure from previous practice which will require justification. Rather than attempt to define all questions via correspondence I suggest we add a condition to the certification such as the following:

For the injection well system the bid specifications and plans shall be submitted to the Technical Advisory Committee (TAC) for the Southeast Florida District Office for review and approval prior to beginning the bidding process.

Drinking Water Program

An "Application to Construct" was requested in my letter of July 24, 1985.

General Comments

1

The agency having the responsibility to enforce compliance with design standards during construction does not appear to be designated. Will this be designated official(s) of the Palm Beach County Solid Waste Authority? If not, who will it be?

2

If certain contractual rights are transferrable, the application should state, and the certification should require who will be responsible for compliance with certification, fully identifiable by us and fully subjected to the limitations and conditions of the certification. The Office of General Counsel of the Department of Environmental Regulation should review all contracts between the Palm Beach County Solid Waste Authority and its contractors and vendors. We need legal access to both the Palm Beach County Solid Waste Authority and the operator in case of compliance trouble.

3

Referring to 3.7.2 "Hazardous Wastes", the applicant must submit facility designs for the isolated storage of hazardous wastes for further disposition. The applicant refers to the training of personnel for the identification of potentially hazardous wastes, but does not indicate how a final hazardous waste determination will be made. Will all suspect materials be manifested? Will there be onsite laboratory capability for an analytical determination of suspected materials? What assurance will we have that the material handling equipment will not puncture or otherwise cause containers of potentially hazardous materials to leak their contents into this resource recovery system?

Mr. Owen
Page 7 of 7
August 9, 1985

SWA
RESPONSE

Historically, some significant environmental threats from this type of operation have been prompted by management deficiencies, omissions and perversities. An important aspect of the project is the management plan which will.

- 4 1. Allow the operator sufficient financial incentive to operate an environmentally safe plant. The management plan should provide for reasonable tipping fees, power sale rates and other income items and a means for periodically re-opening these considerations. And not freezing them for the life of an extended operating contract.
- 5 2. Provide for a planning procedure for expansion which will mesh all operating aspects of the system to keep them in balance. For instance, without adequate landfill site acquisition plan, there will not be adequate landfill cells. Without adequate landfill cell space, the incinerator ash will not be properly elevation-graded according to the plan.
- 6 3. Require the Palm Beach County Solid Waste Authority, or the properly authorized financial authority to present a long term financial plan for the financial "nutrition" of the system so that the system can be properly operated. The short and long term operating budgets must display all supplemental financing needs in a forthright and reasonably accurate manner in order that timely action can be taken as needed. Of course, the operating budgets shall be as complete as possible to include all important aspects: Projected income, all operating costs including amortization, maintenance costs, manifesting costs, personal and financial liability, spare parts costs, inventory costs etc.
- 7 4. Include written operating procedures for all aspects of the operation which are critical to the uninterrupted operation of the system.
- 8 5. Include written contingency plans for the continued operation of the system during breakdowns etc., stoppages which compromise the integrity of the operations must have appropriate contingency plans.
- 9 6. Require the maintenance of "as-built" and modified engineering plans and documents in order to facilitate the smooth acquisition or fabrication of spare parts, mechanical modifications etc.

DBW:my:6

cc: Roy M. Duke

RESPONSE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Letter Dated August 15, 1985

AIR PROGRAM

ITEM 1: Since the Palm Beach County Solid Waste Authority has submitted a complete application to construct/operate an air pollution source, the only comment we have is that the air section needs complete documentation on the process and pollution control equipment after the vendors have been selected.

RESPONSE: Complete documentation on the process and pollution control equipment will be submitted to the State of Florida Department of Environmental Regulation as soon as the Vendor has or Vendors have been selected and such documentation becomes available.