



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

December 15, 1994

41193

4029C30075

Mr. Daryl Smith, Director
Hillsborough County
Department of Solid Waste
Post Office Box 1110
Tampa, FL 33601

RECEIVED
JAN 18 1995

EA, SOLID WASTE

Re: Southeast Landfill, Hillsborough County
Operation Permit Renewal
Pending Permit No.: S029-256427

Dear Mr. Smith:

This is to acknowledge receipt of the additional information in support of your permit application received November 18, 1994 to operate the solid waste management facility referred to as Southeast Class I Sanitary Landfill.

This letter constitutes notice that a permit will be required for your project pursuant to Chapter(s) 403, Florida Statutes.

Your application for a permit remains incomplete. Please provide the information listed below promptly. Evaluation of your proposed project will be delayed until all requested information has been received.

The following information is needed in support of the solid waste application [Chapter 17-701, Florida Administrative Code (F.A.C.)]:

In reference to the permit renewal application (DEP Form 17-701.900(1)), the following information is requested:

1. The cross-sections on Sheet 16B show increments of time other than 6 months. Are these correct? If not, please provide this corrected plan sheet.
2. Please describe the use of each type of temporary drainage device shown in Exhibit H, and provide the details for the existing "rip-rap velocity dissipators". The use of each should be based on the quantity and velocity of runoff conveyed. What is the maximum quantity and velocity for each type of conveyance? Provide calculations that verify the appropriate type of device has been used for each existing runoff conveyance.

3. Sheet C3 shows temporary sprinkler heads located on proposed Lifts 5 and 6. Are these sprinkler heads needed during the period of filling for Lifts 5 and 6, and if so, how will leachate be managed while these heads are removed for filling?
4. Maintaining an inward gradient is a critical element of this landfill's design. Ardaman's October 25, 1994 report concludes that higher leachate levels have no effect on the clay consolidation and recommended 7-year waiting period; and fluctuations of the groundwater table have no impact as long as the average water table remains the same. SCS's June 24, 1994 report concludes that up to 3.6 feet of leachate will not affect the gradient based on Figure 2 of the report. These reports appear to conflict with one concluding no effects from increased leachate levels and the other concluding possible effects from leachate levels above 3.6 feet. Please provide all equations, tables and figures necessary to establish the conditions that adversely impact the gradient as the result of increased leachate levels, fluctuations of the groundwater table, and variable waiting periods.
5. SCS states that Ardaman's boring PP-2 was at the worst case location because it had been 6.7 years since that area was last filled. At the time of Ardaman's investigation, how long had it been since Phase I was last filled? Did Ardaman test the worst case location?
6. SCS's proposal to allow up to 3.6 feet of leachate within the Southeast Landfill appears to be beyond the intent of DEP's rule and entirely unnecessary. DEP estimates the maximum one foot depth requirement in the current operating permit allows one million gallons to be stored within the landfill. A depth of 3.6 feet would allow 9 million gallons to be stored within the landfill. Why is SCS and the County interested in allowing more leachate to be stored within its landfill?
7. SCS indicates the proposed sump will be extended into all Phases of the landfill and that the "leachate levels should be maintained at less than 12 inches in the vicinity of the berms". Phases V and VI are not scheduled to be used for disposal until 1998. How will less than 12 inches be maintained along the interior berms between those Phases that have received waste and those that have not? Please describe methods that will be implemented to ensure that the depth of leachate will be continuously maintained at less than 12 inches along all berms.
8. The top of clay contour map shows most settlement has occurred in Phases I and IV. Since Phase I will be filled in 1995, it appears that the top of clay will be lowest under Phase I for the next several years. Did the original design account for this shifting sump? If the sump moves to Phase I, how will the depth of leachate be reduced to no more than one foot.

9. The June 21, 1994 agreement with the Public Utilities Department for disposal of leachate at Falkenburg WWTP allows up to 76,000 gpd. Is this a daily average for the month or a daily maximum? This agreement is only valid until July 19, 1995. Please provide an amended agreement to cover the next five year duration of the pending landfill operation permit.
10. 62-701.500(8)(e) requires a contingency plan for interruptions of discharges to a treatment plant. Please provide a contingency plan to be implemented in event of interruptions of discharges to the Falkenburg WWTP.
11. SCS states "HCDSW will continue to operate and maintain the SELF in compliance with all the applicable criteria of 62-701 F.A.C. rules". F.A.C. rules 62-701.400(3)(b) and (c) limits the leachate head to one foot above the liner. The lined berms are considered part of the bottom liner system. SCS has provided information that shows up to 8 feet of leachate exists in the current disposal area. Please explain why this current condition at the SELF is in compliance with DEP's rules according to SCS.
12. Specific Condition No. 12 states in part that "The leachate depth on top of the liner shall not exceed one foot depth of leachate". Daily logs provided by Waste Management on December 14, 1994 show leachate levels in excess of four feet over the liner for the past 5 years. These records also note for the past 5 years "PROBLEMS OBSERVED: LEACHATE LEVEL IN PHASE IV SUMP" and "CORRECTIVE ACTION: COUNTY NEEDS TO INCREASE REMOVAL AND OFF-SITE TREATMENT OF LEACHATE". These logs are signed by Hillsborough County's staff. Why did the County allow its landfill to be operated in violation of its current permit for the past 5 years?
13. Based on the leachate depth data provided, could leachate have discharged through the damaged liner in Phase II? Could groundwater have flowed into Phase II through the damaged liner due to an inward ingradient? It remained damaged for at least four months during the rainy season. Please quantify the flow and discharge through the damaged liner. What techniques were used to minimize the flow and subsequent discharge? Was a preliminary contamination assessment done? If the answer is no, why not?
14. It appears, based on the applicant's submission, the discharges from the 30,000 gallon tank resulted in release of contaminants into the environment. Aside from failing to report this discharge, it appears that some remedial action in the form of pump and treat was performed. Why wasn't a more detailed preliminary assessment performed? What was the basis of ceasing the treatment while analytical data still reflected contamination? Please address and evaluate this issue in more detail.

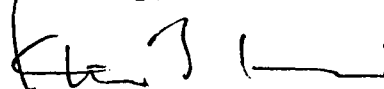
15. Are the stormwater basins performing adequately? Do all the basins drain completely in three days?
16. Please provide your response to resolve Ms. Allison Amram's concerns in her December 14, 1994 memorandum attached. You may contact Ms. Amram may be contacted at (813) 744-6100, extension 336.

Please be advised that a separate construction permit is required for the review and approval of permanent site improvements such as the future downchutes, leachate collection gallery in Phase VI, and closure.

"NOTICE! Pursuant to the provisions of Section 120.600, F.S. and Chapter 17-12.070(5), F.A.C., if the Department does not receive a complete response to this request for information within 30 days of the date of this letter, the Department may issue a final order denying your application. You need to respond within 30 days after you received this letter, responding to all of the information requests and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 30 days to develop, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order of Denial for lack of a timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant may reply as soon as the requested information is available."

You are requested to submit your response to this letter as one complete package. If there are points which must be discussed and resolved, please contact me at (813) 744-6100, extension 382.

Sincerely,



Kim B. Ford, P.E.
Solid Waste Section
Division of Waste Management

KBF/ab
Attachment

cc: Patricia V. Berry, Hillsborough County DSW
Paul Schipfer, HCEPC
Robert Gardner, P.E., SCS Engineers
Robert Butera, P.E., FDEP Tampa
Allison Amram, P.G., FDEP Tampa
Steve Morgan, FDEP Tampa
Susan Pelz, FDEP Tampa
Fred Wick, FDEP Tallahassee

Memorandum

**Florida Department of
Environmental Protection**

TO: Kim Ford, P.E.

FROM: Allison Amram, P.G. *Allison Amram*

DATE: December 14, 1994

SUBJECT: Southeast Hillsborough Landfill Operating Permit Renewal
Pending Permit No. SO29-256427

CC: Bob Butera, P.E.
Steve Morgan

=====

I have reviewed the November 14, 1994 Southeast Hillsborough Landfill operating permit renewal application responses, submitted by SCS Engineers for the Hillsborough County Department of Solid Waste. This memorandum includes my comments only on the water quality and gas monitoring sections of the engineering report.

General Comments

Are the proposed depths for these wells 23 feet? Other wells in the area are deeper. Other than the depths, the proposed well construction for surficial aquifer monitoring wells TH-57 and TH-58 are acceptable.

Thank you for providing the map with existing well locations, and a copy of the 1983 Ardaman and Associates 1983 report, "Hydrogeological Investigation, Southeast County Landfill", which contains the well construction, boring log data and surveyed elevations.

The comments below are numbered by section of the engineering report.

3.3.7 Effluent Spray Irrigation

The treated leachate effluent must meet the criteria listed in permit SC29-199393.

3.7 Gas Control System Performance

No further comments.

6.2.1. Groundwater Findings

1. This comment has been adequately addressed.

2. Please provide the water elevations for the May 1994 groundwater sampling; this data was not legible on the Groundwater Reporting Forms in Appendix I.
3. This comment has been adequately addressed.

6.3.1 Proposed Surficial and Floridan Aquifer Monitoring System

1. This comment has been adequately addressed.
2. Please state which wells are in good condition for measuring Floridan aquifer water elevations. Those wells *not* in good condition should be remediated, or abandoned to prevent contaminants from entering these wells, and to prevent mixing of waters from the Floridan and surficial aquifers.
3. The Ardaman & Associates February 1983 report, "Hydrogeological Investigation, Southeast County Landfill" documents the installation of TH-33, TH-34A and TH-38 as surficial aquifer piezometers in Section 3.4 of the report. This report also documents TH-49 as a boring only. Piezometer (well) construction is described in the text of Section 3.4, and the boring log and well screened interval is shown in Figure A.3-8. No mention is made of abandonment of these wells. It appears that wells TH-33, TH-34A and TH-38 were installed, but are no longer present. Were these wells abandoned? If so, please provide documentation of proper well abandonment.

Also, the land surface elevation and total depth for well TH-38 in the Ardaman report are different from well TH-38A given in the permit renewal application. Why are you proposing to change the well designation from TH-38A to TH-38? It appears that TH-38A and TH-38 are two different wells. Please clarify.

4. This comment has been adequately addressed.
5. This comment has been adequately addressed.
6. Please provide the correct surveyed elevation for well TH-36, and revise all water elevation tables and figures to reflect the correct elevation.
7. Leachate samples collected from temporary sump No. 3 located in Phase VI of the landfill shall be analyzed for the leachate parameters listed in F.A.C. Rule 62-701.510(8)(c) and (d).

6.3.2 Proposed Surface Water Monitoring System

1. This comment has been adequately addressed.

New Item: Monitoring well TH-36

As requested in the December 1, 1994 letter from the Hillsborough County Department of Solid Waste, the abandonment of well TH-36 can be included with the permit

Memorandum to Kim Ford
December 14, 1994
Page 3

renewal activities. The installation of a new well should be conducted with the installation of proposed wells TH-57 and TH-58. As stated in the General Comments, well construction is acceptable, but a specific total depth for the well is required prior to approval.

If the permit applicant should have any questions concerning the content of this memorandum, they may contact me directly at 813/744-6100, ext. 336.

aa