Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

February 7, 1995

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4029C30075

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

Re: Southeast Landfill, Hillsborough County
Operation Permit Renewal
Pending Permit No.: SO29-256427

Dear Mr. Smith:

This is to acknowledge receipt of the additional information in support of your permit application received January 13, 1995 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.)]:

1. Please provide a comprehensive Leachate Management Plan that addresses all elements of the landfill's design and operation as described in our meeting on January 31, 1995. This plan should include but not be limited to the following items previously discussed:

   a. maximum and normal storage of leachate within the landfill throughout the year, not to exceed one foot of hydraulic head;
   b. methods that will measure leachate depth and hydraulic head;
   c. the projected annual leachate/water balance for the entire site including quantities of leachate to be stored, hauled and sprayed each month for a wet year and dry year;
   d. leachate removal rate, pump rates, and pump control settings;
   e. limiting factors that may affect the performance of any component of the leachate management plan and a contingency plan for corrective actions; and
   f. record keeping and performance evaluations.

2. According to SCS's January 13, 1995 letter, calculations indicate temporary drainage ditches and swales are designed for a maximum flow of 50 cfs with a maximum velocity not greater than 6 ft/sec. Are the designs shown in Exhibit "H" for both the existing and proposed temporary conveyances? Are all existing drainage ditches and swales constructed as shown in Exhibit "H", and are they handling a maximum flow of 50 cfs with a maximum velocity not greater than 6 ft/sec?

3. Please provide revised plans showing the location of future sprinkler heads and anticipated dates for installation. Will the future sprinkler heads be installed and operated in the same manner as the existing sprinkler heads? SCS's January 13, 1995 letter states that "the sprinkler system will be expanded into the inactive areas of Phases III and IV". Sheet C3 does not include such expansion.

4. Please explain how the 3.6 feet head was derived from Ardaman's Figures 12 and 13. Ardaman's reports do not explain how the static pore pressure line was estimated as shown in Figures 12 and 13 or why the leachate level was assumed to be 2 feet rather than the actual depth of leachate observed at the time of testing. Did Ardaman measure and record the actual depth of leachate at each test location? Figures 12 and 13 represent conditions that exist at two specific locations, but neither represents the worst case. Will the proposed equilibrium datum still balance at 3.6 feet in Phase I, where consolidation has significantly reduced pore pressure due to 95 percent consolidation, thus reducing the upward gradient? Will it still balance on the portions of the exterior synthetic sideliner in Phase I and Phase IV that are not in contact with groundwater and are not balanced by an inward gradient? The test location in Phase I has not been reloaded for more than 8 years, has a clay thickness of only 3.5 feet, and represents the existing worst case condition for hydraulic head over the liner. Please provide an additional figure such as Figures 12 and 13 that represents the expected worst case condition for hydraulic head at the test location in Phase I, or explain why this information is not needed. Since loading in Phase I has been delayed for more than the recommended "7 year waiting period", the additional figure is requested to represent conditions that would exist at the latest time of placing an additional lift in Phase I. The additional figure should be supported by the equations used for calculating the hydraulic head over the liner as a result of depth of leachate.

5. Please describe all methods and frequencies of reporting the depth of leachate throughout the landfill, and procedures the County will implement for corrective action to bring the landfill into compliance. Daily logs provided by Waste Management indicate that leachate has been impounded within most of the waste-filled disposal areas since 1990. Recent measurements have shown the depth of leachate to be greater than six feet.

6. Please provide the established minimum and maximum waiting period to ensure sufficient consolidation and a hydraulic head not greater than 12 inches over the liner. SCS states "the lapsed time in Phase I is over 8 years. According to current projections, the time interval between successive lifts should not exceed 7 years again". Ardaman's March 7 and October 25, 1994 reports recommend a "minimum" waiting period for loading Phase I of 7 years. The waiting period can "not exceed 7 years" and be a "minimum" of 7 years.

7. Please describe methods and frequencies of all monitoring for the elevations at the top of clay as it settles and the depth of leachate throughout the landfill to ensure that all leachate is conveyed to points of removal. Ardaman's February 22, 1983 report Figure 6.12 shows the clays are thicker in Phases IV and VI and should settle more than Phase I. SCS's November 18, 1994 report Figure 2 shows that the top of clay is lower in Phase I than Phases IV or VI. FAC Rule 17-701.400(4) requires that the LCRS convey leachate to collection points for removal. Could the top of clay in portions of Phase I settle more than other portions of the landfill and prevent some leachate from being conveyed for removal? SCS has indicated that HCDSW intends to maintain landfill leachate levels as low as possible. What is the depth to which leachate impounded in the landfill will be removed?

8. Please provide a copy of the long-term agreement with HCPUD for the disposal of leachate at its off-site WWTPs. How many gallons of leachate may be accepted at each WWTP included in the agreement?

9. Please provide a copy of the previously approved designs for each temporary sump in Phase VI, the permanent sump design north of the landfill, a record drawing for the actual construction of each, and current survey to show the elevations of the piping, structure, and top of clay bottom liner at each location. SCS's January 13, 1995 letter explains that the reason for ignoring Waste Management's daily logs that indicated excess leachate over the liner was because "HCDSW and SCS believed the temporary sump had been installed as designed".

10. What were the elevations of the tear and liner toe at top of clay along the anchor trench in Phase II as observed during the recent liner repair?

11. Please explain the condition of Basin "D". Is this basin performing as designed?

12. Please provide your response to Ms. Allison Amram's concerns in her January 25, 1995 memorandum attached. You may contact Ms. Amram 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 reapply as soon as the requested information is available."

You are requested to submit your response to this letter as one complete package. On all future correspondence to the Department, please include Robert Butera on distribution. 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
Robert Gardner, P.E., SCS Engineers
Paul Schipfer, HCEPC
William Kutash, Program Administrator, Waste Management
Robert Butera, P.E., FDEP Tampa
Allison Amram, P.G., FDEP Tampa
Steve Morgan, FDEP Tampa
Richard Tedder, P.E., FDEP Tallahassee

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Memorandum **Environmental Protection**

TO: Kim Ford, P.E.

FROM: Allison Amram, P.G.

DATE: January 25, 1995

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

CC: Bob Butera, P.E.
Steve Morgan

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I have reviewed the January 13, 1995 Southeast Hillsborough Landfill operating permit renewal application responses, submitted by SCS Engineers for the Hillsborough County Department of Solid Waste. This memorandum includes the remaining comments on the water quality monitoring sections of the engineering report.

General Comments

The proposed well construction depth of 31 feet for surficial aquifer monitoring wells TH-57 and TH-58 are acceptable. If field conditions show that the water table elevations are deeper than anticipated, the depth of the well should be adjusted so that the screened portion of the well encounters enough water to collect representative groundwater samples.

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

6.2.1. Groundwater Findings

2. This comment has been adequately addressed.

6.3.1 Proposed Surficial and Floridan Aquifer Monitoring System

2. This comment has been adequately addressed.

3. The response states that wells TH-33, TH-34A and TH-38 are assumed to be abandoned by Camp, Dresser and McKee. Please provide documentation of proper well abandonment (water management district form, field notes).

   Please revise Drawing 1 from Appendix U of the permit application to include all site monitoring wells, piezometers and all other wells, including the location of abandoned wells and piezometers. A survey with these locations would be useful,

but is not required. This will clarify the TH-38 and TH-38A locations, as well as other well designation confusion.

6. This comment has been adequately addressed.

New Item: Monitoring well TH-36

The proposed depth of 48 feet is acceptable for this well. This comment has been adequately addressed.

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.

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