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## SCS ENGINEERS

March 26, 1992 File No. 0990018.42 41193

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MAR 30 1992

Mr. Kim Ford, P.E.

Florida Department of Environmental Regulation

4520 Oak Fair Boulevard—Tampa, Florida 33610-7347

EA, SOLID VA

Subject:

FDER Pending Permit No. SC29-199393
Application for Permit to Construct and Operate a
Leachate Treatment and Reclamation Facility
Southeast County Facility, Hillsborough County, Florida

Dear Kim:

The Hillsborough County Department of Solid Waste (HCDSW) and SCS Engineers (SCS) have reviewed the Florida Department of Environmental Regulation (FDER) notice of intent to issue a construction permit for the Leachate Treatment and Reclamation Facility referenced above. We were surprised by the requirements specified in Special Condition 10 and 12, which impose significant constraints on spray irrigation at the site. We had not been informed previously that these constraints were going to be included in the permit.

We have provided your office the engineering data to support an application rate and schedule, which does not include the constraints listed in Special Condition 10 and 12. The schedule and application rates we have proposed are reasonable and well within established limits. The FDER has not cited any regulatory or technical basis for the constraints listed in Special Condition 10 and 12. We object to these constraints for the following reasons:

- The spray irrigation system is limited to a maximum of 60,000 gallons per day (24 hours) of treated effluent. The facility has been sized to treat a peak flow of 120,000 gallons per day (gpd). While it is not anticipated that this event will occur often, the spray irrigation system must be allowed to irrigate at a rate consistent with the treatment system to prevent overflow in the holding basin.
- It is not possible to guarantee that runoff from the spray irrigated areas will not discharge to adjacent stormwater systems or conveyance ditches, nor should this be a requirement for the spray irrigation system. The treated effluent will meet or exceed all of the Class GII groundwater quality standards under Chapter 17-3, Florida Administrative Code (FAC), with the possible exception of total dissolved solids (TDS). Additionally, the areas to be spray irrigated are within the confines of the Class I landfill and permitted stormwater management system for the Southeast County Facility. Surface water discharges are monitored periodically as required by the site's solid waste facility permit. The data collected during the periodic monitoring can be used to assess the performance and regulatory compliance of the spray irrigation system and landfill operation.

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The requirement in Special Condition 10.d, which would prevent spray irrigation during periods when the drainage ditches are discharging runoff to the stormwater basins, appears to be based on the assumption that the treatment facility will not function as represented in the permit application. We believe that sufficient documentation has been provided to the FDER to give reasonable assurance that the effluent from the treatment process will not adversely impact water quality. As such, we believe Special Condition 10.d is unreasonable and should be removed from the special conditions.

• We estimate, based on a review of rainfall data, that the requirements of Special Condition 10.a., 10.b., and 10.c. could eliminate over 140 days out of the year (or 40 percent of the year) that irrigation could occur. Limiting spray irrigation to days of na rain or at least 24 hours after a day of rainfall of 1/2 inch would eliminate 33 percent of available days of the year for spray irrigation. This would effectively eliminate the spray irrigation system as a viable means of treated effluent disposal. If the FDER does not modify the constraints listed in Special Condition 10 and 12, an alternative disposal strategy such as direct discharge or deep-well injection likely will have to be pursued.

In light of the above, we request that Special Condition 10 and 12 be revised as follows:

10. This permit allows spray irrigation of a maximum 120,000 gallons per day (24 hours) of treated effluent from the associated treatment facility. The spray irrigation system shall be operated to minimize runoff, erosion, and adverse impacts to the cover vegetation. The spray irrigation system shall be operated during non-rainy periods as much as practical. Areas that are spray irrigated shall be inspected daily, including any receiving drainage channels or ditches.

The following shall be recorded daily on the attached <u>Water</u> <u>Balance Report Form</u>:

• Leachate treated gal/day

Treated effluent stored gal/day

Treated effluent sprayed gal/day

Rainfall onsite inches/day & time of day

• Observed runoff influent (yes/no) time of day of to retention area inspection

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> Observations, including any modifications to spray irrigation pattern, erosion, and adverse changes in vegetation characteristics.

12. Spray irrigation of treated effluent shall be conducted within the confines of the lined landfill as indicated in approved plans by SCS Engineers dated March 2, 1992. The attached Water Balance Report Form shall be completed and submitted to FDER, Southwest District Office and the Hillsborough County Environmental Protection Commission by the 15th of the month following the monthly reporting period. This permit may be modified to adjust the operating criteria for spray irrigation if required and approved by the Department.

These modifications will allow the County the flexibility to operate the system on a daily basis and maintain the controls that the FDER desires (i.e., minimize runoff).

Based on our conversations last week, we were under the impression that all substantive issues had been resolved. However, the above comments indicate that this is not the case. We hope these issues can be resolved and revised Special Conditions issued within the 30-day period noted in the Intent to Issue prior to publication.

Very truly yours,

Ken Whitehead, P.E. Senior Project Engineer

Robert B. Gardne

Robert B. Gardner, P.E. Vice President SCS ENGINEERS

KW/RBG:kw

cc: Patricia V. Berry, HCDSW
Richard Garrity, Ph.D, FDER Tampa
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