



CITRUS COUNTY

# DEPARTMENT OF TECHNICAL SERVICES

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Reply To:

D.E.R.

FEB - 2 1993

SOUTHWEST DISTRICT  
TAMPA

Division of Solid Waste  
Management  
P. O. Box 440  
Lecanto, FL 34460-0440  
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SO09-187229

February 2, 1993

Robert J. Butera, P.E.  
Solid Waste Manager  
Division of Waste Management  
Dept. of Environmental Regulation  
Southwest District  
3804 Coconut Palm Drive  
Tampa, FL 33619-8318

RE: PENDING MODIFICATION OF CONDITIONS  
PERMIT NO. SO09-187229  
CITRUS COUNTY CENTRAL LANDFILL - CITRUS COUNTY

Dear Mr. Butera:

This letter is sent in response to your January 15, 1993 request for additional information.

### Recirculation System

1. The Department requests rationale for location and arrangement of the sprinkler heads in plan view, Section A-A and Section B-B on Sheet 4. The Department recommends locating the sprayheads 5 ft. to 8 ft. apart to minimize overlap allowing a less dense moisture concentration increasing the potential for increased evaporation. In addition, inform the Department of the spray pattern diameter schematic for rainbird or equal sprayhead delivering at 3 GPM.

The Rainbird dealer estimated the diameter of the spray system to be approximately 10 feet in diameter (5 ft. radius) at 20 PSI delivering a volume of 3 GPM. The sprinkler head separation has been increased to 5 feet to minimize overlap, as you requested. We feel 5 feet separation is adequate because the flow rate of the sprinkler heads is relatively low. In order to continue to use 20 sprinkler heads, two manifolds will be constructed.

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2. Calculations for anticipated leachate evaporation from the proposed system and calculations used in sizing the system.

Calculations for the proposed leachate evaporation system were provided in our letter of January 13, 1993. If additional information is needed, please advise.

#### Groundwater Monitoring

1. Submit a comprehensive anticipated schedule to this Department for the proposed groundwater monitoring system evaluation.

At this time, construction of a new monitoring well has been proposed, but the location of this well has not been resolved. We request a meeting with Mary Yeargan, Kim Ford, and yourself to resolve this issue. A schedule will be submitted once all monitoring issues are resolved.

#### Site Operation

RE: Site Sequencing, Operational and Control Plan dated 12/92  
Project # 89-615.

1. Slope of leachate containment berm detail on Sheet 2 for the perimeter of the active cell shall be delineated. A slope of 2:1 is recommended.

Sheet 2 has been revised to indicate the appropriate slope. A copy of the revised sheet 2 is enclosed.

2. In profile view on Sheet 3 indicate slopes of berms to scale and break views in areas of relatively flat or horizontal lines for clarity of information.

The profile view on Sheet 3 is indicated as horizontally NTS (not to scale). A copy of the revised Sheet 3 is enclosed. The lines have been broken in areas of horizontal lines.

3. Inform the Department for rationale utilizing a 20 mil liner. A 30 mil to 40 mil liner is recommended. Note: The liner in Section A-A should be extended at each end one foot and angled 90 degrees to improve lateral stability of the liner during compaction at adjacent areas.

The material selected for this application is a 3 ply woven PE fabric with excellent tear strength. Because it is more flexible, this material will be more easily installed than single ply 30 mil liner membrane. This liner is used exclusively for erosion protection of the swale. Groundwater

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protection is provided by the landfill liner below. Section A-A has been revised as requested. A copy of the revised Sheet 3 is enclosed.

4. Due to increased treatment of 60,000 gallons per day with the Batch PACT, treated leachate shall be sampled prior to discharge to the percolation pond in accordance with specific condition #13 as modified on April 16, 1992 as a modification of permit number S009-187220. (Please submit these results as soon as possible.) Within the submittal letter for sampling and analysis results, all parameters above maximum containment levels shall be identified by circling those parameters on these reports. Submit a summary report comparing values to values of containment levels when 30,000 gallons were recirculated.

A summary report will be forwarded ASAP.

5. The Department requires that 18" of cover be placed over Phase 1A if the depth of cover can not be verified and to assure all past floating waste is covered adequately

The 18" of cover will be provided as requested.

6. Permeability samples and test results from cover material in Item # 5 is required and shall be submitted to FDER.

The results of permeability tests of cover material were provided in our previous letter of January 13, 1993.

7. The requested volume/time projections submitted for Phase 1A and Phase 1-B have been reviewed and appear reasonable. Please clarify calculations for 1-C and 1-D in profile on Sheet 6.

Clarification of the calculations for 1-C and 1-D were provided in our previous letter of January 13, 1993. Volumes of 1-C and 1-D have been indicated in the profile of Sheet 6. Copies of the revised Sheet 6 are enclosed.

8. The Department requests submittal of the volumes of leachate treated at the batch PACT plant during the last two months.

This information will be included with the summary report as soon as we receive the information.

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9. Submit a schedule for hydroseeding all slopes - be specific to each area

A schedule for hydroseeding of slopes is included as Figure 1.

10. Inform this Department within 3 days after removing all leachate ponding on Phase 1-A.

The requested notification will be provided.

If you have any questions, or if there are further points to be discussed and resolved, please contact me at (904) 746-5000.

Sincerely,

*Michael D Moore*

Michael D. Moore, P.E., Interim Director,  
Division of Solid Waste Management

MDM:cms

cc: James W. Pinkerton, Dir. Dept. Technical Services  
Ralph L. Hedgecoth, Dir. Div. Utilities  
Tom Fears, Engineer III  
Bob Merkel, Utilities Operation Supervisor  
Ronald Donadio, Engineering Technician III  
Larry Scott, Forestry Operations Administrator

