MANATEE COUNTY GOVERNMENT
Public Works Department

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SOUTHWEST DISTRICT
TAMPA

Mr. Kim Ford
Florida Dept. of Environmental Regulation
4520 Oak Fair Blvd.
Tampa, FL 33610-7347

Subject: Permit Renewal for Manatee County Solid Waste Facility at Lena Road, Permit No. S041-211176, WT41-211178 S041-211517 & SF41-211177

Dear Mr. Ford:

As promised in my letter of May 23, 1992, I am pleased to supply part of the information requested in your letter of April 29th, 1992 (For item number, refer to numbered paragraphs in your letter of April 29th, 1992.)

Item #1 Proof of publication of notice is attached.

Item #2 Approved Comprehensive Quality Assurance Plan is attached.

Item #3 This was mailed to you with our May 20, 1992 response.

Item #4 Volume calculations, pages LR-1 through LR-19 are attached.

Item #5 The Revised Groundwater Monitoring Plan for Lena Road Class 1 Sanitary Landfill (prepared by Ardaman and Assoc.) was submitted and approved in 1990. However, we are enclosing six further copies of the plan for your use.

The remainder of Item #5 consists of responses to the April 29th Mary Yeargan memorandum and are numbered using the prefix "MY".

MY1 Monitoring well construction details and lithology logs are contained in the Ardaman and Assoc. report "Completion Report for Monitoring Wells Installed at Lena Road Landfill" and "Installation of Superficial Aquifer Piezometers at Lena Road Landfill". Geological cross-sections are shown on Ardaman and Associates sheets which are labeled "Boring Profiles". The "Boring Location Plans" are either shown on the same sheet as the profiles or are attached to the profile. Six copies of these reports are attached.

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P.O. Box 25010, Bradenton, Florida 34206

MY2
MY4 Enclosed are six copies of "Data for Lena Road Landfill Monitoring Wells and Piezometer Wells" prepared by this office.

MY3 Enclosed are six copies of "Potentiometric Surface of the Upper Floridian Aquifer for West Central Florida, May, 1991".

MY5 See drawing No. 2 of the attached six copies of drawings numbered 1 through 10A & 10B for surrounding land use information. See sheets labeled "Water Supply Well Inventory" and "Monitoring Well Locations".

MY6 See attached drawings 10A & 10B for the comprehensive site plan information.

MY7
MY8 Lena Road Landfill - Slurry Walls and Leachate Collection System

Stage I of the landfill, which is currently active, was determined by FDER as a pollution source to groundwater to adjacent landowners in the early 1980's. After engineering and geotechnical studies were completed, it was recommended that a slurry wall be placed around the existing perimeter. The bottom of the proposed slurry wall is keyed into the impermeable clay layer approximately 38 to 50 feet below grade. A leachate collection system consisting of underdrain piping, manholes and two leachate pump stations is designed to collect and pump leachate from inside the landfill to a holding pond prior to treatment.

The engineer for the project was Briley, Wild and Associates, Inc. and the slurry wall was constructed by ICOS Corp. of America, Englewood, NJ in 1985-86. The leachate collection system was constructed by County forces.

Originally, leachate was utilized to irrigate grass on the side slopes and recycled (disposal via evaporation losses), now however, leachate is pumped to the Southeast Wastewater Treatment Plant for treatment and disposal.

Stage III of the landfill (Gun Club site) had been an active landfill prior to the County purchasing the land. In order to prevent groundwater pollution, the Board authorized geotechnical investigations and construction of a slurry wall and leachate collection system for both Stages II and III.

The slurry walls and leachate collection system were designed by the MCPWD Engineering Division, Utility Design Section in 1989. The Contractor for the two slurry walls and Stage III leachate collection system, pump station and force main was Ground Improvement Techniques, Inc., Kissimmee, FL. The project was completed in 1990. The slurry walls and leachate collection system were inspected by Ardaman and Associates and MCPWD Inspection Services Dept., respectively.

The Stage II leachate collection system including pump station No. 4 and force main were designed by MCPWD Engineering Division and inspected by Inspection Services. The system was constructed by Westra Construction in 1991 and was operational in the Fall of 1991. FDER has stringent monitoring and testing requirements for the landfill which included construction of monitoring wells both inside and outside the slurry walls to insure a positive groundwater gradient (inward) for all three stages.

All leachate pump stations are metered and the transfer pump station (to SEWWTP) is operating satisfactorily.

All collection systems for the three stages are operating as designed and show no evidence of surcharging or blockage. Results of monitoring well observations indicate that all systems are operating effectively as designed.

MY9 Attached are six copies of our "Approved Quality Assurance Plan".

MY10 MY11 Documents prepared under the writers direction are signed and sealed accordingly. These include the following:

Drawings 1 through 10A & 10B.

Volume calculations pages LR-1 through LR-19.

"Data for Lena Road Landfill Monitoring Wells & Piezometers".

This letter.

Documents signed and sealed by Ardaman & Associates include:

"Revised Groundwater Monitoring Plan"

"Completion Report for Monitoring Wells"

"Installation of Piezometer Wells"

"Soil Boring Locations"

"Monitoring Well Locations"

"Water Supply Well Inventory"

Item 11 This item consists of responses to Mr. Robert Butera's March 25, 1992 letter and are numbered using the prefix RB.

RB1 RB2 Based on the comparison of mean elevations (Groundwater Comparison Table in "Data for Lena Road Landfill Monitoring Wells & Piezometers) between the piezometers on the inside and the wells on the outside of the slurry wall around all three stages, there is no doubt as to the efficiency of the leachate collection system. The system was designed with the high rise operational plan in mind.

RB3 The existing "Revised Groundwater Monitoring Plan for Lena Road Class 1 Sanitary Landfill" does indeed address operations in all three stages.

RB4 Financial responsibility cost estimates were submitted with the writers May 20, 1992 letter.

RB5 The comprehensive operational and closure plan is included in Section 5 of our previously submitted application.

I trust these responses are satisfactory and expect to be mailing the balance of the requested information on or before July 24, 1992.

Sincerely,

Robert T. Hall, P.E.
Utility Engineer

RTH:dwa

cc: Gus DiFonzo
Greg Yekaitis

6/26/92