

October 19, 2010

# Florida Department of Environmental Protection

South District P.O. Box 2549 Fort Myers, FL 33902-2549 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Mimi A. Drew Secretary

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### VIA ELECTRONIC MAIL

Laura A. Gray, P.E. – Engineering Manager Lee County Solid Waste Division 10500 Buckingham Road Fort Myers, FL 33905 E-mail: <u>LGray@leegov.com</u>

RE: <u>Lee County – SW</u> Lee County Solid Waste Energy Recovery Facility WACS ID No. 93715 Request for Approval of Revisions to the Groundwater Monitoring Plan

Dear Ms. Gray:

We have reviewed your submittal dated August 27, 2010 regarding the above request. We agree with your proposal as out lined in your Attachment 1 of the above referenced letter which is also attached to this letter. This new groundwater monitoring plan will become part of your operation plan for the overall Lee County Solid Waste to Energy Recovery Facility replacing the PA 90-30 revised Groundwater Monitoring Plan (GWMP) of April 1996 and the PA 90-30H GWMP dated March 22, 2010. Future requests for revisions to the Groundwater Monitoring Plan shall be submitted to the Siting Office, with copies to the DEP South District Office, as will be outlined in the Conditions of Certification (PA90-30) through a Department initiated modification.

In addition to Attachment 1, as indicated in your letter, the sandstone aquifer monitoring wells will be maintain/repaired as necessary and they will be sampled for groundwater elevations when the shallow aquifer wells are sampled for their water quality constituents identified in Attachment 1. The sampling events will be twice a year one in February and another in August starting this February 2011.

Also as discussed the biennial technical evaluation report as required in 62-701 for C&D facility's will commence in February 2011 for the 2.5 years data collection period.

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A copy of this letter and Attachment 1 will be placed with the appropriate permitting and groundwater monitoring plan files.

If you have any questions regarding ground water monitoring feel free to contact James Harcourt at <u>James.Harcourt@dep.state.fl.us</u></u>, solid waste permitting issues Albert McLaurin at <u>Albert.McLaurin@dep.state.fl.us</u> or solid waste compliance issues William Krumbholz at <u>William.Krumbholz@dep.state.fl.us</u></u>. If you can't reach any of the above you can always contact me at <u>Charles.Emery@dep.state.fl.us</u></u>. Have a great day.

Sincerely,

Charles Emery III Environmental Administrator

CE/rcd Attachment

 cc: Cindy Mulkey – FDEP (via e-mail <u>Cindy.Mulkey@dep.state.fl.us</u>) Albert McLaurin – FDEP (via e-mail <u>Albert.Mclaurin@dep.state.fl.us</u>) Bill Krumbholz – FDEP (via e-mail <u>Bill.Krumbholz@dep.state.fl.us</u>) James Harcourt – FDEP (via e-mail <u>James.Harcourt@dep.state.fl.us</u>)

# Attachment 1

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Ground Water Monitoring Plan, Lee County Solid Waste Energy Recovery Facility, August 2010 (Proposed)

## Ground Water Monitoring Plan Lee County Solid Waste Energy Recovery Facility

This Ground Water Monitoring Plan (GWMP) was developed by the Lee County Solid Waste Division (SWD) to summarize the ground water monitoring program for the Lee County Solid Waste Energy Recovery Facility (SWERF) as required by the Facility's Conditions of Certification, PA90-30H, dated March 22, 2010.

#### Ground Water Monitoring Well Network

In accordance with Section B., Specific Condition I.H.2.c., of the Facility's Conditions of Certification, the Facility will monitor the quality of the shallow aquifer by sampling ground water monitoring wells WTE-1S, WTE-2S, WTE-3SR, WTE-4S, WTE-5S and WTE-6S. Note that well WTE-3SR replaced well for WTE-3S which had to be moved as it was located in the footprint of the proposed Construction and Demolition Debris Recycling Facility (CDDRF). The Department approved the location proposed for replacement well WTE-3SR in correspondence dated June 18, 2010 which approved the Facility's request to construct and operate a CDDRF at the SWERF. Figure 1, Ground Water Monitoring Well Location Map, shows the approximate locations of the monitoring wells which comprise the SWERF's ground water monitoring well network.

#### Ground Water Sampling and Analyses

Ground water samples will be collected from monitoring wells WTE-1S, WTE-2S, WTE-3SR, WTE-4S, WTE-5S and WTE-6S on a semi-annual frequency and analyzed for the parameters listed in F.A.C. Rule 62-701.730(4)(b) as shown in Table 1.

<b>Field Parameters</b>	Lab Parameters	Lab Parameters	Lab Parameters
pH	Aluminum	Arsenic	Xylenes
Turbidity	Chlorides	Cadmium	The parameters listed
Temperature	Nitrate	Chromium	in EPA Methods
Specific Conductivity	Sulfate	Lead	601 & 602
Dissolved Oxygen	TDS	Mercury	
Water Elevations	Iron	Total Ammonia – N	
Colors/Sheens (visual)	Sodium	21	

#### Table 1

Note: Xylenes and the parameters listed in Methods 601 and 602 are all contained in EPA Method 8260

Sampling will be conducted in accordance with the Department's Standard Operating Procedures, DEP-SOP-001/01, and specifically in accordance with FS 2200, Ground Water Sampling. One of the two semi-annual sampling events will be conducted in the dry season and the other in the wet season, approximately 6 months apart. Laboratories selected to perform environmental sampling and analyses required by Department permits or rules will hold a valid certification from the Department of Health's Environmental Lab Certification Program as required by Chapter 62-160, FAC. All field and laboratory records will be made available to the Department.

Ground Water Monitoring Plan Lee County Solid Waste Energy Recovery Facility Page 2 of 2

#### Ground Water Monitoring Reports

Semi-annual water quality monitoring reports will be prepared and submitted to the Department in accordance with Rule 62-701.510, FAC. The semi-annual monitoring reports will include the information listed in Rule 62-701.510 (9)(a), FAC. A technical report which has been prepared and signed by a professional engineer or geologist with experience in hydrogeological investigations, will be submitted to the Department as required by 62-701.510(9)(b), FAC. The report will contain a summary of all water level and water quality data collected in the previous  $2 \frac{1}{2}$  years plus, at a minimum, all information listed in Chapter 62-701.510 (9)(b), FAC.

#### Ground Water Monitoring Well Installation and Abandonment

If a monitoring well becomes damaged, the following procedures will be implemented. The Facility will notify the Department within 30 days of discovery of a damaged well. The Facility will hire a Licensed Well Driller to install a replacement well and to properly abandon the existing, damaged well. The Well Driller will secure the required well construction and abandonment permits prior to performing the work.

Monitoring wells will be installed in general accordance with ASTM D-5092, Standard Practice for Design and Installation of Ground Water Monitoring Wells in Aquifers, and in accordance with the Department's Bureau of Petroleum Storage Systems Petroleum Cleanup Program's Standard Operating Procedures PCS-006 for the Design, Installation and Placement of Monitoring Wells.

New monitoring wells will be fully developed in accordance with procedures outlined in the above-referenced documents. The existing wells will be properly abandoned in accordance with the procedures in the above-referenced documents which generally consist of grouting from the bottom up using a tremie pipe.

A boring log and a Well Construction and Development Log (provided in PCS-006) will be completed for each well installed. A Department Monitor Well Completion Report (DEP Form # 62-522.900(3) will also be completed and submitted for each well installed.

