

Board of County Commissioners

Agenda Request

Date of Meeting: March 1, 2010

Date Submitted: February 12, 2010

To: Honorable Chairman and Members of the Board

From: Benjamin H. Pingree, County Administrator
Cleve Fleming, Public Works Director

Subject: Request Board Approval of Task Order No. 12 to Jones Edmunds for the 2010 Permit Required Compliance and Evaluation Monitoring at the Lower Bridge Landfill

Statement of Issue:

This agenda item requests Board approval of Task Order No. 12 to Jones Edmunds for the 2010 permit required compliance and evaluation of groundwater and landfill gas monitoring at the Lower Bridge Landfill.

Background:

The Lower Bridge Landfill has two waste areas—the closed Class I Landfill and the Class III Landfill. The Landfills are regulated under the Florida Department of Environmental Protection (FDEP) Permit #0013134, which outlines a plan for the compliance monitoring of the site groundwater, surface water, leachate, and landfill gas. In addition to the compliance monitoring, evaluation monitoring must be conducted as ordered in the FDEP correspondence dated October 21, 2008 in response to elevated concentrations of Arsenic, Iron, and Ammonia Nitrogen in site groundwater wells.

Every two years, a Biennial Groundwater Technical Report that summarizes and interprets the groundwater analytical results and flow patterns is required to be prepared for each landfill in Florida. The next Lower Bridge Biennial Groundwater Technical Report is due to FDEP by April 1, 2010.

The specific monitoring tasks required to be conducted this year at the Lower Bridge Landfill covered under Task Order No. 12 are outlined below:

Conduct FDEP-Permit-Required Compliance Monitoring:

- Jones Edmunds will conduct two semiannual groundwater and surface water monitoring events, which will include the following:
 - Sample nine groundwater monitoring wells—2 detection wells, 4 compliance wells, 1 background well, and 2 assessment wells—semiannually as outlined in Specific Condition #3.6.g of the permit.

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- Sample the retention pond at location SW-1 semiannually as outlined by Specific Condition #3.6.g of the permit.
- Analyze the groundwater samples for the parameters listed in Specific Condition #3.6.h. Analyze the surface water samples for the parameters listed in Specific Condition #3.6.j.
- Measure depth-to-water in a continuous round in the groundwater monitoring wells before sampling activities. The depth-to-water measurements will be used to prepare groundwater potentiometric surface maps.
- Prepare two semiannual compliance reports. The reports will include a summary letter, authorized signature pages, a groundwater contour map, analytical data summary tables of groundwater and surface water results, field data sheets, Parameter Monitoring Report forms, and the laboratory analytical report.
- Submit the semiannual reports to FDEP. Two hardcopies of each report will be provided to the County and two hardcopies of each report will be submitted to FDEP. All data will be submitted to FDEP in EDD format compatible with ADaPT via email.
- Jones Edmunds will conduct one annual leachate sampling event.
 - Sample the two leachate collection wells annually as outlined by Specific Condition #3.6.k of the permit.
 - Analyze the leachate samples for the parameters listed in Specific Condition #3.6.k.
 - Include results of the leachate sampling with the first semiannual groundwater monitoring report as required in Specific Condition #3.6.o.
- Jones Edmunds will conduct four quarterly landfill gas monitoring events.
 - Measure landfill gas (LFG) concentration as percent of the lower explosive limit of Methane quarterly at 23 monitoring locations—13 structures and 10 gas probes.
 - Submit the quarterly reports to FDEP. One hardcopy of each report will be provided to the County.

Conduct FDEP-Required Evaluation Monitoring:

- Jones Edmunds will conduct four quarterly groundwater evaluation monitoring events. The sampling events will be conducted 1st Quarter 2010 through 4th Quarter 2010.
 - Sample six groundwater monitoring wells—MW-10, MW-11, MW-12, MW-22, MW-23, and MW-24—quarterly as required in FDEP correspondence dated October 21, 2008.
 - Analyze the groundwater samples for the parameters listed in FAC 62-701.510(8)(a) and (d).
 - Prepare four quarterly evaluation monitoring reports. The reports will include a summary letter, authorized signature pages, a groundwater contour map, analytical data summary tables of groundwater and surface water results, field data sheets, Parameter Monitoring Report forms, and the laboratory analytical report.
 - Submit the quarterly reports to FDEP. Two hardcopies of each report will be provided to the County. Two hardcopies of each report will be submitted to FDEP. All data will be submitted to FDEP in EDD format compatible with ADaPT via email.

Prepare the Two-Year Technical Groundwater Report (Biennial Report):

- Jones Edmunds will prepare the biennial report which analyzes and interprets the groundwater analytical and elevation data collected over the past 2 years. The report is required by Specific Condition 3.6.v of the permit. The report will include at a minimum all items outlined in Specific Condition 3.6.v of the permit. The report will be submitted to FDEP by April 1, 2010.

Analysis:

The County is required by the FDEP permit to monitor groundwater as part of the long term care program for closed landfills. In addition, this groundwater monitoring is an indicator of any issues with contaminants leaching out of the landfill cells into the aquifer. If a leaching problem is detected early, remedial action plans can be implemented to prevent the polluting of the environment. Jones Edmunds has been conducting the compliance monitoring at the Lower Bridge Landfill since 1996 and has the expertise to continue this work.

Staff is recommending approval of this task order with a total cost of \$75,731.00. A detailed scope of work to be performed by Jones Edmunds as well as cost summary for this task order is attached for your review (Attachment #1). The monitoring program is funded annually out of the Solidwaste fund 440-0100-534-341 over two budget cycles from January 2010 to December 2010.

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Options:

1. Approve Task Order No.12 to Jones Edmunds for the 2010 Permit Required Compliance and Evaluation Monitoring at the Lower Bridge Landfill.
2. Do not approve Task Order No.12 to Jones Edmunds for the 2010 Permit Required Compliance and Evaluation Monitoring at the Lower Bridge Landfill.
3. Board Direction.

Recommendation:

Option #1

Attachments:

1. Task Order No.12, Detailed Scope of Services and Cost Summary.