



Review of 2014 1st Semi-annual Groundwater Monitoring Report for J.E.D. Solid Waste Management Facility

Review Date: 8/27/14	Reviewed By: Allen Rainey, Environmental Specialist III	WACS Facility ID #: 89544
Facility Name: J.E.D. Solid Waste Management Facility		
Monitoring Periods: May 2014		
Type: Routine and Evaluation Monitoring	Facility Class Types: Class I, Construction & Demolition Debris	
Report Date: 8/14/14	Received Date: 8/15/14 (upload to WACS)	
Prepared By: Geosyntec Consultants	Submitted By: ----	

Review Details

Summary

Other than the continuation of evaluation monitoring for benzene, there are no actions needed to protect groundwater. The facility's July 2014 Technical Report appropriately evaluated and discussed sodium, chloride, and arsenic exceedance trends.

Parameter Exceedances

- Benzene standard (1 µg/L) exceeded in groundwater wells as follows.

Well ID	Well Type	Concentration (µg/L)
MW-1A	Detection	7.8
MW-3A	Detection	6.5
MW-3B	Detection	1.1
MW-4A	Detection	2.9
MW-5A	Detection	1.2
MW-6A	Detection	2.3
MW-8A	Detection	4.4
MW-9A	Detection	6.6
MW-10A	Detection	7.7
MW-11A	Detection	6.3
MW-12A	Detection	4.3
MW-13A	Detection	1.7

- Arsenic standard (10 µg/L) exceeded in evaluation monitoring well CW-1 at 77.6 µg/L. The well's arsenic concentrations have decreased significantly since its first sampling event in December 2013 (278 µg/L) and the February 2014 sampling event (166 µg/L). (MW-13A had an arsenic concentration of 10.4 µg/L. The Department's policy on rounding considers that concentration to meet the standard. During the November 2013 monitoring period, MW-13A had an arsenic concentration of 10.5 µg/L, which is also close to the standard.)
- Sodium standard (160 mg/L) exceeded in detection well MW-1A at 297 mg/L. That concentration is lower compared to the November 2013 monitoring period and similar to past measurements that were discussed in the July 2014 Technical Report.
- Chloride standard (250 mg/L) exceeded in detection well MW-1A at 544 mg/L. That concentration is lower compared to the November 2013 monitoring period and similar to past measurements that were discussed in the July 2014 Technical Report.
- Ammonia 62-777 GCTL (2.8 mg/L) exceeded in thirteen A-zone groundwater wells and two B-zone groundwater wells. Of the A-zone wells containing ammonia above the GCTL, wells MW-9A, MW-10A and MW-11A contained concentrations below the background of 10 mg/L established in the facility's Monitoring Plan Implementation Schedule for those wells.
- Total dissolved solids standard (500 mg/L) exceeded in five A-zone groundwater wells and eight B-zone groundwater wells.
- Iron standard (0.3 mg/L) exceeded in a majority of groundwater wells, as had occurred during the November 2013 monitoring period.
- Iron standard (1 mg/L) exceeded in both surface water locations.
- pH values in all the wells are below the range of 6.5 – 8.
- Dissolve oxygen values in a majority of the wells are below 1 mg/L.

Notations

- Evaluation monitoring for benzene under Rule 62-701.510(6), F.A.C., shall continue.
- The laboratory exceeded the hold time for nitrate analysis for well MW-7B.
- The facility's July 2014 Technical Report appropriately addresses sodium and chloride exceedances in well MW-1A.
- Based on Department policy, no further investigation for ammonia is necessary.

Purging Completion

Dissolved oxygen > 5 mg/L or ≤ 20% saturation? NO If no, ± 0.2 mg/L or readings are within 10%? NO *	Turbidity ≤ 20 NTUs? NO If no, ± 5 NTUs or readings are within 10%? NO *
Temperature ± 0.2° C? YES	pH ± 0.2 standard units? YES
Specific conductance ± 5% of reading? YES	
* did not achieve optional stabilization criteria for 18 wells for DO & 1 well for turbidity (DO in majority of wells is < 1 mg/L)	
Sampling and Analysis	
Sampling dates: May 6, 8, 9, 13, 14, 15	Last lab analysis date: 5/24/14
# of active groundwater monitoring locations: 36	# of active surface water monitoring locations: 2
Initial sampling device: peristaltic pump	Re-sampling device: N/A
All groundwater and surface water sampling points sampled? YES	All analyses performed? YES
Trip blanks? YES	Field or equipment blanks? YES
Lab certified under National Environmental Laboratory Accreditation Program? YES	
Unionized ammonia analysis? N/A	Phenols analysis? N/A ^x
^x Department approval granted on 5/14/14 to end total phenols analyses	
Monitoring Plan Implementation Schedule Reporting Requirements	
Revision Date: N/A	Effective Date: 1/23/14
Permit: SO49-0199726-022	
Notification made within 14 days of sampling? YES	
Cover letter? YES	
Ground Water Monitoring Report, DEP Form 62-520.900(2) (or equivalent)? YES	Certification Date: 6/18/14
Summary of exceedances & sampling issues? YES	
Groundwater contour maps? YES ^a	Contour maps signed and sealed? YES
Water levels & water elevation table? YES	Water level measurements made within one-day period? YES
Groundwater Sampling Logs, DEP Form FD 9000-24? YES	
Chain of custody forms? YES	
Conclusions and recommendations? YES	
Lab and field EDD files named correctly (89544_201405_swldd.txt & 89544_201405_swfdd.txt)? YES	
Report named correctly (25473_201405_swgwmr.pdf)? YES	
File(s) indicate successful data export? NO	
Report signed and sealed by P.G.? YES	Date signed and sealed: 8/14/14
Report received within 60 days of completing lab analysis? NO	
^a contour map for A-zone wells only	