



**Review of 2013 1st Semi-annual Groundwater Monitoring Report
for
Tomoka Farms Road Landfill**

Review Dates: 12/5/13 & 3/3/14	Reviewed by: Allen Rainey, Environmental Specialist III	WACS Facility ID #: 27540
Facility Name: Tomoka Farms Road Landfill	County: Volusia	
Monitoring Periods: May 2013 & August 2013 Re-sampling		
Type: Routine & Contamination Assessment	Facility Class Types: Class I, Class III	
Report Date: 6/28/13	Received Date: 9/18/13	
Prepared By: HDR Engineering, Inc.	Submitted By: -----	

Review Summary

Parameter Exceedances

- Benzene was exceeded in 10 wells. There were 12 wells with benzene exceedances during the previous November 2012 monitoring period.

<u>Well ID</u>	<u>Micrograms per Liter (µg/L)</u>
Background well B36	2.6
Compliance well B37-1	9.5
Compliance well B45-1	10.7
Contamination Assessment well B81-4	1.6
Contamination Assessment well B79-1	9.4
Contamination Assessment well B76-1	10.5
Contamination Assessment Well B86	12.9
Contamination Assessment Well B79-6	8.5
Contamination Assessment Well B-77	5.7
Contamination Assessment Well B76-6	11.4

- Parameter exceedances occurred that were not present in the following locations during the previous November 2012 monitoring period:
 - Arsenic in compliance well B75 (11.6 µg/L)
 - Sodium in detection well B62-1R (222 mg/L)
 - Chloride in well intermediate B8-2 (288 mg/L)
 - Ammonia in background well B2 (3.1 mg/L) and detection well B62-1R (95.9 mg/L)
 - Unionized ammonia in surface water location SW-5 (0.05 mg/L)
- Iron was exceeded in all the groundwater monitoring wells.
- Total dissolved solids were exceeded in most of the groundwater monitoring wells.

Department Conclusions

- Evaluation monitoring for benzene under Rule 62-510(6), Florida Administrative Code (F.A.C) shall continue. To define the benzene plume, the facility recently installed wells B85-6, B85-F, B87-6 and B87-F and sampled them in November 2013. The Department received those sampling results on 2/27/14.
- The Department ended evaluation monitoring solely for ammonia; however, ammonia and benzene monitoring shall continue in wells that have been monitored for both parameters.

Hyperlink to Exceedance Summary Spreadsheet

[Tomoka GWMR Exceedance Summary.xlsx](#) ("2013-05" tab)

Sampling and Analysis

Sampling Dates: May 6, 7, 8, 9, 10, 13, 14, 16, 17	Last Lab Analysis Date: unknown "
# of Active Groundwater Monitoring Locations: 54	# of Active Surface Water Monitoring Locations: 7
Initial Sampling Device: Peristaltic Pumps	Re-sampling Device: Peristaltic Pump
All groundwater and surface water sampling points sampled? NO [†]	All analyses performed? YES
Turbidity < 20 NTUs? NO*	Unfiltered Samples? YES
Dissolved oxygen > 5 mg/L or ≤ 20% saturation? NO*	pH between 6.5 – 8.5? NO
Analysis for unionized ammonia? YES	
Trip blanks? YES	Field or equipment blanks? YES
Lab certified under National Environmental Laboratory Accreditation Program? YES	

*met stabilization criteria except for 8 wells for turbidity & 18 wells for DO

[†] surface water location SW-3 was dry

^u lab reports not included for Aug. confirmation sampling event

Monitoring Plan Implementation Schedule Reporting Requirements

Revision Date: N/A	Effective Date: 3/23/12	Permit: SF64-0078767-028
Notification made within 14 days of sampling? YES		
Cover letter? NO		
Ground Water Monitoring Report, DEP Form 62-520.900(2) (or equivalent)? YES		Certification Date: 7/1/13
Summary of exceedances & sampling issues? YES		
Groundwater contour maps? YES	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? NO ^a		
Chain of custody forms? YES		
Conclusions and recommendations? YES		
Lab and field EDDs? YES	Lab EDD PDF file signed? YES	
Report signed and sealed by P.G.? YES		
Report received within 60 days of completing lab analysis? YES		
^a logs not included for Aug. confirmation sampling event; "Sampling Data" section not complete		