



**Review of 2013 2nd Semi-annual Groundwater Monitoring Report
for
Tomoka Farms Road Landfill**

Review Date: 2/27/14	Reviewed by: Allen Rainey, Environmental Specialist III	WACS Facility ID #: 27540
Facility Name: Tomoka Farms Road Landfill	County: Volusia	
Monitoring Period: November 2013		
Type: Routine & Contamination Assessment	Facility Class Types: Class I, Class III	
Report Date: 1/27/14	Received Date: 1/28/14	
Prepared By: HDR Engineering, Inc.	Submitted By: -----	

Review Summary

Parameter Exceedances

- Benzene was exceeded at three groundwater wells. There were 10 wells with benzene exceedances during the previous May 2013 monitoring period.

Well ID	Micrograms per Liter (µg/L)
Background well B36	2.3
Compliance well B37-1	7.4
Compliance well B45-1	10.4

- Sulfate was exceeded in background wells B-2 (330 milligrams per liter (mg/L)) and B34-2 (370 mg/L).
- Sodium was exceeded in compliance wells B37-1 (174 mg/L) and 45-1 (217 mg/L).
- Chloride was exceeded in intermediate well B8-2 (262 mg/L).
- Vinyl chloride was exceeded in compliance well B37-1 (2.4 µg/L); it was not present during the previous May 2013 monitoring period.
- Nitrate was exceeded in compliance well B45-2 (166 mg/L).
- Unionized ammonia was detected in surface water location SW-5 at 0.041 mg/L with an “I” qualifier.
- Ammonia was exceeded in background well B2, compliance wells B41-1 and B1-B, and detection wells B61R, B62-1R and B62-R2.
- Iron and 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](#) (“2013-11” tab)

Sampling and Analysis

Sampling Dates: Nov. 5, 7, 9, 11, 12, 15	Last Lab Analysis Date: 11/23/13
# of Active Groundwater Monitoring Locations: 54	# of Active Surface Water Monitoring Locations: 7
Initial Sampling Device: Peristaltic Pumps	Re-sampling Device: N/A
All groundwater and surface water sampling points sampled? YES	All analyses performed? YES
Turbidity < 20 NTUs? YES*	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 4 wells for turbidity & 4 wells for DO	

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: 1/24/14'
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? YES ^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 "Sampling Data" section not complete	
^t Signed form received 2/26/14	