



FLORIDA DEPARTMENT OF Environmental Protection

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October 16, 2019

Mr. Kirk Willis
Southern Region Engineer
Waste Connections of Osceola County, LLC
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Osceola County – Solid Waste
J.E.D. Solid Waste Management Facility
St. Cloud, Florida
WACS ID: 89544
Review of 7th Technical Report on Water Quality

Dear Mr. Willis:

The Department has reviewed the “**7th Report on Water Quality**” (Report), which was dated and submitted on September 30, 2019 for the **J.E.D. Landfill – (Solid Waste Management Facility) - WACS Facility ID: 89544 – Osceola County**. The Report and EDD files were submitted on your behalf by Geosyntec Consultants. The report is 110 pages long and covers the reporting period of May 2017 through May 2019, (5 semiannual sampling events). We find the report acceptable and the facility is in compliance.

A Site Layout Map is provided in Figure 1-1, and trend analysis charts are provided in Figure 6-1A through Figure 6-9. A total of up to 51 groundwater monitoring wells and two (2) surface water sampling locations were utilized to monitor the groundwater and surface water at the **J.E.D. Landfill** facility during the May 2017 through May 2019 reporting period. The analytes of concern and/or exceedances of the respective Primary Drinking Water Standards (PDWS) (62-550 Florida Administrative Code (F.A.C.)), Secondary Drinking Water Standards (SDWS) (62-550 FAC), or Florida Groundwater Cleanup Target Levels (GCTLs) (62-777 F.A.C.) detected during this reporting period include:

Surface Water – The data provided in Table 5-9 indicates Iron was detected in November 2017 at 1100 micrograms per liter (µg/L) at SW-3 and 1400 µg/L at SW-4. These concentrations are above the Surface Water Criteria of 1000 µg/L. It is noted that the concentrations of Iron have been below this criteria level during subsequent sampling events during this reporting period, when it has been possible to sample surface water.

Groundwater -

Arsenic - This analyte was detected in compliance well CW-1A during each event for this reporting period. The concentrations ranged between 120 and 160 µg/L during this reporting period above the GCTL of 10 µg/L. Arsenic has historically exceeded the GCTL in this well which is located within the

perimeter of the facility. It is stated that this exceedance of Arsenic may be contributable to a utility pole located 20 feet away from CW-1A or may be naturally occurring. We will continue to monitor these concentrations.

Sodium – This analyte was detected in six A- Zone monitoring wells (MW-1A, MW-13A, MW-16AR, MW-23A, CW-2A, and CW-3A) and two B – Zone wells (MW-1B and MW-23B) during this reporting period above the PDWS/GCTL of 160 milligrams per liter (mg/L). An increasing trend has been observed at MW-13A, MW-23A, MW-28A, MW-1B, MW-2B, and MW23B. The Report states that Waste Connections is proposing to install an exposed geomembrane cover over approximately 20 acres of the west facing side slope (covering portions of Cells 4,5,7, 8 and 12) and an estimated 6.5 acres of the lower third of the east facing slope of Cells 6 and 9. All of these wells are located within the perimeter of the facility. We will continue to monitor these concentrations.

Chloride – This analyte was detected above the SDWS/GCTL of 250 milligrams per liter (mg/L) in seven of the A – Zone monitoring wells (MW-1A, MW-13A, MW-16AR, MW-23A, MW-24A, CW-2A, and CW-3A), and three B-zone wells (MW-1B, MW-2B, and MW-23B). An increasing trend is noted for several A - Zone wells on eastern side of the landfill with the highest increasing trend observed in MW-13A. An increasing trend was also observed at MW-1A, MW-24A, MW-28A, MW-1B, MW-2B, MW-9B, and MW-23B. All of these wells are located within the perimeter of the facility. The Report states that Waste Connections is proposing to install an exposed geomembrane cover over approximately 20 acres of the west facing side slope (covering portions of Cells 4,5,7, 8 and 12) and estimated an estimated 6.5 acres of the lower third of the east facing slope of Cells 6 and 9. The projected completion time for these proposed activities is January 2020. We will continue to monitor these concentrations.

Iron – This analyte was detected above the SDWS/GCTL of 300 µg/L in most of the A – Zone and B- Zone wells, and in 2 compliance wells. The highest A-Zone iron concentration was 96,000 µg/L from MW-31A in May 2019, and the highest B-Zone iron concentration was 56,000 µg/L from MW-31B in May 2019. The highest iron concentration in the compliance wells was 19,000 from CW-1A in May 2017. Historical analytical data indicates Iron has exceeded the SDWS in most wells during all of the groundwater monitoring events, including the baseline events. All of these wells are within the perimeter of the facility. We will continue to monitor these concentrations.

Benzene – This analyte was detected above the PDWS/GCTL of 1.0 µg/L in four of the A – Zone monitoring wells (MW-9A, MW-10A, MW-12A, and MW-13A), and one B-zone well (MW-10B), with the highest concentration from MW-9A at 11 µg/L in May 2018. The trend analysis for this analyte has shown an overall stable trend, with a decreasing trend in 9 of the 15 wells during this reporting period. The source of the benzene has been attributed to landfill gas (HDR Engineering, Inc. 2012, Geosyntec, 2013 and 2017). All of these wells are within the perimeter of the landfill. No additional action is warranted at this time. We will continue to monitor these concentrations.

Cadmium - This analyte was detected above the PDWS/GCTL of 5.0 µg/L in one sample collected from MW-17AR in November 2017. This is the only listed exceedance for cadmium during this reporting period. This well is located within the perimeter of the facility.

Please perform the next semiannual groundwater sampling event in **May 2020**. Please notify the Department at DEP_CD@dep.state.fl.us at least **fourteen (14) days** prior to the installation and/or sampling of any monitoring well. [62-701.510(9)(a), Florida Administrative Code (F.A.C.). Please also copy me at Dale.Melton@dep.state.fl.us for field activity notifications and correspondence.

The monitoring report (including ADaPT EDDs) should be emailed to Tallahassee using the following email address: ADaPT.EDDs.and.Reports@dep.state.fl.us. Please copy me on the email. Additionally, if attachments are too large to email, monitoring reports may also be transmitted to the FDEP Solid Waste program in Tallahassee using the following FTP site: ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT/EDDS_and_Reports. Please email us at ADaPT.EDDs.and.Reports@dep.state.fl.us informing us of what files were transmitted via FTP for which facility sampling event.

Please submit the next MPIS Technical Report by March 31, 2022. This Technical Report should cover the five (5) semiannual sampling events for the November 2019 through November 2021 monitoring period. If you have any questions concerning this correspondence, please contact me by telephone at (407) 897-4326, or by email at Dale.Melton@dep.state.fl.us. Please include the **WACS Facility ID: 89544** on all reports and correspondence.

Sincerely,



Dale Melton
Environmental Consultant
Permitting and Waste Cleanup Program

cc:

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