

May 26, 2016

Ms. Jackie Drummond
Compliance Hydrogeologist
NCDEQ/Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

**RE: Notification of Results above Groundwater Protection Standards
First Semiannual Sampling Event of 2016
Burke County – Johns River C&D-over-MSWLF, Permit No. 12-03
JOYCE Project No. 277.1601.12, Task 02**

Dear Jackie:

On behalf of Burke County, Joyce Engineering (JOYCE) is submitting this notification of detections above the North Carolina Groundwater Protection Standards (GPS) at the Burke County the Johns River Solid Waste Management Facility, Permit No. 12-03, in accordance with Title 15A, Chapter 13, Subchapter 13B, Section .1633 (c)(1) and Section .1634 (d)(1) of the North Carolina Solid Waste Management Regulations (NCSWMR). The first semiannual monitoring event of 2016 at the Johns River C&D-over-MSW Landfill took place May 3-4, 2016. Samples were sent to Pace Analytical Services, Inc. of Huntersville, North Carolina. The complete analytical data package for the first semiannual monitoring event was received on May 13, 2016.

Upon reviewing laboratory analytical results from the first semiannual 2016 sampling event, JOYCE determined that the following constituents were detected above their GPS in one or more monitoring wells:

- benzene (MW-10, MW-11, MW-12, MW-13, MW-16S)
- 1,1-dichloroethane (MW-12, MW-13, MW-16S)
- 1,4-dichlorobenzene (MW-11, MW-13, MW-16S)
- methylene chloride (MW-13)
- tetrachloroethylene (MW-13)
- trichloroethylene (MW-13)
- vinyl chloride (MW-16S)

In general, these exceedances are consistent with previous results. In response to the historical exceedances, Burke County has implemented an approved Corrective Action Plan (CAP), as required by Department of Environmental Quality (DEQ). A complete report

Ms. Drummond
May 26, 2016
Page 2 of 2

documenting the activities and results of the first semiannual 2016 compliance monitoring event will be submitted to the DEQ under separate cover. Please refer to the attached table for a summary of the exceedances.

If you have any questions or concerns regarding the results and this notification please contact me or Van Burbach at (336) 323-0092.

Sincerely,
JOYCE ENGINEERING



Daniel Girdner
Staff Consultant

Attachment: Table 1: Exceedances of Groundwater Standards

cc: Chris Hollifield, Burke County

TABLE 1: Exceedances of Groundwater Standards

WELL ID	PARAMETER	RESULT	UNITS	NC2L/ *GWPS	GPS	SWSL	COLLECT DATE
1203-MW10	Benzene	1.8	µg/L	1	1	1	5/3/2016
1203-MW11	Benzene	2.8	µg/L	1	1	1	5/3/2016
1203-MW11	1,4-Dichlorobenzene	14.2	µg/L	6	6	1	5/3/2016
1203-MW12	Benzene	2.9	µg/L	1	1	1	5/3/2016
1203-MW12	1,1-Dichloroethane	23.4	µg/L	1	1	5	5/3/2016
1203-MW13	Benzene	14.1	µg/L	1	1	1	5/3/2016
1203-MW13	1,4-Dichlorobenzene	15	µg/L	6	6	1	5/3/2016
1203-MW13	1,1-Dichloroethane	28.4	µg/L	1	1	5	5/3/2016
1203-MW13	1,2-Dichloroethane	1.3	µg/L	0.4	0.4	1	5/3/2016
1203-MW13	Methylene Chloride	30.5	µg/L	5	5	1	5/3/2016
1203-MW13	Tetrachloroethene	7.6	µg/L	0.7	0.7	1	5/3/2016
1203-MW16S	Benzene	1.5	µg/L	1	1	1	5/3/2016
1203-MW16S	1,4-Dichlorobenzene	6.6	µg/L	6	6	1	5/3/2016
1203-MW16S	1,1-Dichloroethane	14.8	µg/L	1	1	5	5/3/2016
1203-MW16S	Vinyl chloride	1.2	µg/L	0.03	0.03	1	5/3/2016

Notes: µg/L = Micrograms per liter
 NC2L = NC Groundwater Standard from 15A NCAC 2L.0202
 *GWPS = NC Solid Waste Section Groundwater Protection Standard (for constituents with no NC2L)
 GPS = Groundwater Protection Standard as defined by 15A NCAC 13B.1634(g)
 SWSL = NC Solid Waste Section Reporting Limit
 (Laboratory reporting limit used when SWSL has not been established)