



MECKLENBURG COUNTY
Land Use and Environmental Services Agency
Solid Waste Services

January 4, 2011

Ms. Jaclyne Drummond
North Carolina Department of Environment
and Natural Resources
Division of Waste Management
Groundwater Compliance Unit
Mail Service Center 1646
Raleigh, NC 27699-1646

Subject: Water Quality Monitoring Report
Harrisburg Road Landfill, Permit 60-01

Dear Ms. Drummond:

Mecklenburg County conducted semi-annual water quality monitoring at the closed Harrisburg Road Landfill December 6 & 7, 2010 in accordance with the approved revised sample and analysis plan dated May 11, 2004. Samples were collected from seven monitoring wells (HBW12B, HBW14, HBW17B, HBW20, HBW21, HBW22 and background well HBW28), two potable wells (HBW744 and CLUBHS) and, three surface-water sampling locations (HB2006, HB2008 and, HB2010). Laboratory analytical data, field-measured data, and a table of results exceeding water quality standards along with a preliminary explanation of the cause and significance are included on the electronic data deliverable (EDD) submittal on the enclosed CD.

The EDD containing the monitoring data are labeled to reflect the units that are used for reporting. Detection levels and applicable standards have been included for all sampling locations. Surface water standards listed are the water quality standards established for freshwater classification for aquatic life as outlined in 15A NCAC 2B "Classification and Water Quality Standards Applicable to Surface Waters of North Carolina". Groundwater standards listed are the standards outlined in 15A NCAC 2L "Classification of Water Quality Standards applicable to the Groundwaters of North Carolina". If the sample is reported in parts per billion, then the standard is also reported in parts per billion.

Surface-water samples:

No analytes were detected in HB2006, HB2008 and HB2010. Field-measured parameters for surface-water samples were within the range of established standards and are summarized in the table below.

Location	Temperature	PH	Specific Conductivity	Dissolved Oxygen
HB2006	3.6 ° C	7.07	0.210 ms/cm	13.05 mg/l
HB2008	5.1 ° C	6.97	0.202 ms/cm	13.21 mg/l
HB2010	4.1 ° C	7.15	0.241 ms/cm	13.32 mg/l

Groundwater samples:

Cobalt and Vanadium were detected above the 2L standard in several of the samples. This is due to the new published 2L standards for Cobalt and Vanadium as of October 1, 2010. No other metals were detected above the 2L standard. The table below summarizes metals detections in groundwater samples.

Well ID	Ba ug/l	Be ug/l	Cd ug/l	Cr ug/l	Co ug/l	Cu ug/l	Ni ug/l	Pb ug/l	Vn ug/l	Zn ug/l
CLUBHS	-----	-----	-----	-----	-----	2.4	-----	-----	-----	110
HBW744	-----	-----	-----	-----	-----	-----	-----	-----	6.1	-----
HBW12B	-----	-----	-----	-----	-----	-----	-----	-----	5.9	-----
HBW14	110	-----	-----	-----	-----	26	-----	-----	13	-----
HBW17B	-----	-----	-----	-----	19	13	-----	-----	5.0	28
HBW20	-----	-----	-----	-----	-----	4.9	-----	-----	10	-----
HBW21	-----	-----	-----	-----	-----	3.5	-----	-----	6.7	-----
HBW22	-----	-----	-----	8.3	-----	2.7	-----	-----	-----	13
HBW28	-----	-----	-----	-----	100	21	13	-----	8.5	12
2L Std. ug/l	700	4	2	10	1	1,000	100	15	0.3	1,000

Note: Bolded results exceed 2L Standard

The following nine volatile organic compounds (“VOCs”) were detected in the sample collected from well HBW17B:

VOC	Sample Result ug/l	2L Standard ug/l
Benzene	14	1
Methylene Chloride	6	5
Tetrachloroethylene	67	0.7
Trichloroethylene	40	3
1,1-Dichloroethane	13	6
1,2-Dichloropropane	12	0.6
cis-1,2 Dichloroethene	130	70
Vinyl Chloride	7	.03
Xylenes (total)	24	500

Note: Bolded results exceed 2L Standard

No VOC's were detected in any other samples.

In the samples collected from CLUBHS, HBW17B, HBW21 and background monitoring well HBW28, pH was measured to be more acidic than the standard. Field-measured parameters for groundwater samples are summarized in the following table:

Location	Temperature	pH	Conductivity
HBW12B	13.8 °C	6.52	0.315 ms/cm
HBW14	14.4 °C	6.78	0.225 ms/cm
HBW17B	14.1 °C	5.70	0.060 ms/cm
HBW20	15.5 °C	6.52	0.105 ms/cm
HBW21	15.1 °C	6.16	0.457 ms/cm
HBW22	15.2 °C	6.76	0.620 ms/cm
HBW28	16.0 °C	5.93	0.094 ms/cm
HBW744	14.9 °C	6.92	0.148 ms/cm
CLUBHS	14.8 °C	6.44	0.082 ms/cm

Note: Bolded results are outside of the 6.5 to 8.5 S.U. range 2L Standard

Please call me at (704) 432-2478, if you have any questions concerning this report.



Sincerely,

Amber R. Grzymski, P.G.
Project Manager
LUESA Solid Waste Services