



HERST & ASSOCIATES, INC.®

**Global Presence  
Personal Attention**

**Submitted via Electronic Mail**

Ms. Jaclynn Drummond  
North Carolina Department of Environment and Natural Resources  
Division of Waste Management - Solid Waste Section  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

December 4, 2012

Dear Ms. Drummond:

**Notification of Appendix II Detections  
Charlotte Motor Speedway, Landfill V, Permit 13-04**

On behalf of the Charlotte Motor Speedway, Landfill V, Herst & Associates, Inc. is submitting notification of Appendix II constituents detected in site groundwater monitoring wells during the Second Semi-Annual 2012 sampling event. This notification is in accordance with NCDENR Requirements for Municipal Solid Waste Landfill Facilities Section .1634(d), which states the following:

*“After obtaining the results from the initial or subsequent sampling events required in Paragraph (b) of this Rule, the owner or operator shall: (1) Within 14 days, submit a report to the Division and place a notice in the operating record identifying the Appendix II constituents that have been detected;”*

Groundwater sampling was completed by Analytical Services, Inc. (ASI) in November 2012. Analytical testing was performed by ASI for the assessment monitoring wells (MW-17, MW-18A, MW-19, MW-19A, MW-20B, and MW-25). Results were received by Herst & Associates, Inc. on November 26, 2012. The attached Table 1 summarizes the Appendix II constituents that were detected above the solid waste section limit (SWSL) in assessment monitoring wells during the First Semi-Annual 2012 event. The inorganic and organic constituents on Table 1 are also on the Appendix I Detection Monitoring list. The attached Table 2 summarizes the Appendix II constituents that were reported at estimated values between the method detection limit (MDL) and the SWSL. The inorganic and organic constituents are also on the Appendix I Detection Monitoring list, with the exception of estimated values of total mercury. The parameters detected above the SWSLs appear to be consistent with past events.

Any analyte detected at a concentration greater than the MDL but less than the SWSL is believed to be present, but the uncertainty in the value is high (i.e. laboratory interferences). As a result, the actual concentration is estimated. The full groundwater report and statistical evaluation will be submitted per Sections .1632 and .1633.

Should you have any questions or concerns, please contact the undersigned at your convenience.

Sincerely,

HERST & ASSOCIATES, INC.



Ward E. Herst  
Managing Partner



Steve Jett  
Senior Hydrogeologist

*Attachment: Table 1 - Appendix II Detections Above the SWSL  
Table 2 - Appendix II Estimated Results Below the SWSL*

*cc: Mike Gurley, Republic Services, Inc. (via electronic mail)*

**Table 1 - Appendix II Detections Above the SWSL  
Second Semi-Annual 2012 Sampling Event  
Charlotte Motor Speedway, Landfill V**

<b>Well</b>	<b>Constituent</b>	<b>Flag</b>	<b>Results</b>	<b>SWSL</b>	<b>MDL</b>	<b>Units</b>
MW-17	Benzene		2.8	1	0.1	ug/L
	cis-1,2-Dichloroethene		5.9	5	0.2	ug/L
	Tetrachloroethene		1.4	1	0.2	ug/L
	Total Barium		151	100	0.49	ug/L
	Trichloroethene		1.5	1	0.2	ug/L
MW-18A	Benzene		1.6	1	0.1	ug/L
	Total Barium		596	100	0.49	ug/L
	Total Zinc		26.9	10	0.27	ug/L
MW-19	Total Barium		242	100	0.49	ug/L
MW-19A	1,4-Dichlorobenzene		1.5	1	0.3	ug/L
	Total Barium		222	100	0.49	ug/L
	Total Zinc		510	10	0.27	ug/L
MW-20B	Total Barium		547	100	0.49	ug/L
	Total Cadmium		1.38	1	0.06	ug/L
	Total Zinc		25.2	10	0.27	ug/L
MW-25	1,4-Dichlorobenzene		12	1	0.3	ug/L
	cis-1,2-Dichloroethene		7.3	5	0.2	ug/L
	Total Barium		115	100	0.49	ug/L
	Total Cobalt		13.5	10	0.17	ug/L
	Vinyl Chloride		1.4	1	0.2	ug/L

*SWSL: Solid Waste Section Limit.*

*MDL: Laboratory Method Detection Limit.*

**Table 2 - Appendix II Estimated Results Below the SWSL  
Second Semi-Annual 2012 Sampling Event  
Charlotte Motor Speedway, Landfill V**

Well	Constituent	Flag	Results	SWSL	MDL	Units	
MW-17	1,1-Dichloroethane	J	1.2	5	0.2	ug/L	
	Methylene Chloride	J	0.5	1	0.2	ug/L	
	Total Antimony	J	0.4	6	0.19	ug/L	
	Total Chromium	J	1.47	10	0.71	ug/L	
	Total Cobalt	J	0.54	10	0.17	ug/L	
	Total Copper	B J	0.83	10	0.18	ug/L	
	Total Nickel	J	1.84	50	0.18	ug/L	
	Total Zinc	J	1.41	10	0.27	ug/L	
	trans-1,2-Dichloroethene	J	0.6	5	0.3	ug/L	
	Vinyl Chloride	J	0.7	1	0.2	ug/L	
MW-18A	1,1-Dichloroethane	J	1.1	5	0.2	ug/L	
	Carbon Disulfide	J	5.6	100	1.5	ug/L	
	Chlorobenzene	J	0.9	3	0.3	ug/L	
	cis-1,2-Dichloroethene	J	3.8	5	0.2	ug/L	
	Methylene Chloride	J	0.3	1	0.2	ug/L	
	Total Antimony	J	0.19	6	0.19	ug/L	
	Total Arsenic	J	3.85	10	1.2	ug/L	
	Total Cadmium	J	0.17	1	0.06	ug/L	
	Total Cobalt	J	5.51	10	0.17	ug/L	
	Total Copper	B J	1.34	10	0.18	ug/L	
	Total Lead	J	0.1	10	0.09	ug/L	
	Total Nickel	J	9.43	50	0.18	ug/L	
	Trichloroethene	J	0.3	1	0.2	ug/L	
	Vinyl Chloride	J	0.6	1	0.2	ug/L	
MW-19	1,1-Dichloroethane	J	0.4	5	0.2	ug/L	
	Benzene	J	0.5	1	0.1	ug/L	
	Chlorobenzene	J	0.5	3	0.3	ug/L	
	cis-1,2-Dichloroethene	J	0.5	5	0.2	ug/L	
	Total Arsenic	J	2.17	10	1.2	ug/L	
	Total Cobalt	J	0.93	10	0.17	ug/L	
	Total Copper	B J	1.13	10	0.18	ug/L	
	Total Nickel	J	35.2	50	0.18	ug/L	
	Total Selenium	J	5.08	10	0.54	ug/L	
	Total Zinc	J	0.79	10	0.27	ug/L	
MW-19A	Benzene	J	0.5	1	0.1	ug/L	
	Chlorobenzene	J	0.6	3	0.3	ug/L	
	Total Beryllium	J	0.16	1	0.09	ug/L	
	Total Chromium	J	3.27	10	0.71	ug/L	
	Total Cobalt	J	5.24	10	0.17	ug/L	
	Total Copper	B J	1.81	10	0.18	ug/L	
	Total Lead	J	0.11	10	0.09	ug/L	
	Total Mercury	J	0.084	0.2	0.061	ug/L	
	Total Nickel	J	27.6	50	0.18	ug/L	
	Total Selenium	J	2.55	10	0.54	ug/L	
	Total Vanadium	J	4.68	25	1.7	ug/L	
	MW-20B	1,1-Dichloroethane	J	4.7	5	0.2	ug/L
		1,4-Dichlorobenzene	J	1	1	0.3	ug/L
Benzene		J	0.6	1	0.1	ug/L	
Chlorobenzene		J	0.5	3	0.3	ug/L	
cis-1,2-Dichloroethene		J	3.8	5	0.2	ug/L	
Tetrachloroethene		J	0.2	1	0.2	ug/L	
Total Chromium		J	3.04	10	0.71	ug/L	
Total Cobalt		J	4.03	10	0.17	ug/L	
Total Copper		B J	1.98	10	0.18	ug/L	
Total Lead		J	0.21	10	0.09	ug/L	
Total Mercury		J	0.072	0.2	0.061	ug/L	
Total Nickel		J	31.7	50	0.18	ug/L	
Total Selenium		J	3.78	10	0.54	ug/L	
Total Vanadium		J	2.09	25	1.7	ug/L	
MW-25	Vinyl Chloride	J	0.2	1	0.2	ug/L	
	1,1-Dichloroethane	J	1.5	5	0.2	ug/L	
	Benzene	J	0.6	1	0.1	ug/L	
	Chlorobenzene	J	1.2	3	0.3	ug/L	
	Total Cadmium	J	0.17	1	0.06	ug/L	
	Total Copper	B J	1.59	10	0.18	ug/L	
	Total Nickel	J	23.4	50	0.18	ug/L	
	Total Selenium	J	3.74	10	0.54	ug/L	
	Total Zinc	J	2.85	10	0.27	ug/L	

*B: Denotes detected in a field blank or laboratory method blank.*

*J: Denotes sample result above the MDL but below the SWSL;*

*estimated value; value may not be accurate.*

*SWSL: Solid Waste Section Limit.*

*MDL: Laboratory Method Detection Limit.*