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December 15, 2011

Ms. Jackie 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

**RE: Piedmont Landfill and Recycling Center, Permit No. 34-06
Request to Return MW-9R to Detection Monitoring
JE Project No. 392.1101.12, Task No. 09**

Dear Ms. Drummond:

In accordance with North Carolina Solid Waste Management Regulations (NCSWMR) §.1634.(e), if the concentration of all Appendix II constituents are show to be at or below background levels using the approved statistical procedures for two consecutive sampling events, the owner or operator shall report this information to the Division and the Division may give approval to the owner or operator to return to Detection Monitoring. This letter has been prepared on behalf of Waste Management of Carolinas, Inc. to document that these conditions have been met and to request that Monitoring Well MW-9R at the Piedmont landfill and Recycling Center be returned to Detection Monitoring.

MW-09R is the only monitoring well currently in Assessment Monitoring at the Piedmont Landfill facility. MW-09R was installed in November 1999 as a replacement for MW-09, and it entered Assessment Monitoring after its initial sampling in January 2000, when 1,1-dichloroethane was detected at a concentration of 23 µg/L. The concentration of 1,1-dichloroethane ranged from 7 µg/L to 28 µg/L until September 2009; however, it has not been detected at quantifiable levels since September 2009. The constituent cis-1,2-dichloroethene was detected in MW-09R above the laboratory reporting limit for the first time during the July 2002 event at a concentration of 6.5 µg/L, and has been detected at concentrations ranging from 5 µg/L to 28 µg/L; however, it also has not been detected at quantifiable levels since September 2009.

The presence of organic constituents in MW-09R has been attributed to landfill gas (LFG). The LFG extraction network was expanded in this area in January 2003, and the decrease in concentrations of organic constituents in this well is attributed to the control of LFG.

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The attached Table 1 summarizes all Appendix II constituents detected in MW-9R during the last two sampling events. The only quantified detection in the March 2011 event was for zinc, which was determined to not represent a statistically significant increase above background by the statistical analyses presented as part of the First Semiannual Water Quality Monitoring Report of 2011 (dated May 13, 2011). There were no quantified detections of any Appendix II constituents in the September 2011 sampling event. There were no Appendix I or II constituents detected in any of the other monitoring wells during either of these events. The complete laboratory reports for and statistical analyses reports for the March and September 2011 events were presented to the DENR in the First and Second Semiannual Groundwater Reports of 2011 (dated May 2011 and November 2011, respectively).

Based on the data discussed above, the conditions of NCSWMR §.1634.(e) have been met, and we therefore request that MW-9R revert to Detection Monitoring effective before the next sampling event, tentatively scheduled for March 2012. Please feel free to contact me or Steve Cowie at (336) 323-0092 if you have any questions regarding this request.

Sincerely,

JOYCE ENGINEERING



Van Burbach, Ph.D., P.G.
Technical Consultant

Attachment: Table 1

Copy: Al Lacsamana, Waste Management of Carolinas, Inc.
Seth Ramaley, Waste Management of Carolinas, Inc.

Table 1: 2011 Detected Constituents in MW-9R

Detected Appendix I and Appendix II Constituents in 1st Semiannual Sampling Event of 2011

WELL ID #	PARAMETER	RESULT	UNITS	QUALIFIER	METHOD	MDL	MRL	SWSL	COLLECT DATE
3406-MW09R	Barium, Total Recoverable	13	µg/L	J	SW846 6010C	0.58	100	100	03/15/2011
3406-MW09R	Nickel, Total Recoverable	3	µg/L	J	SW846 6010C	1.3	50	50	03/15/2011
3406-MW09R	Vanadium, Total Recoverable	9.6	µg/L	J	SW846 6010C	1.1	25	25	03/15/2011
3406-MW09R	Cadmium, Total Recoverable	0.29	µg/L	J	SW846 6020A	0.04	1	1	03/15/2011
3406-MW09R	Copper, Total Recoverable	3.7	µg/L	J	SW846 6020A	0.56	10	10	03/15/2011
3406-MW09R	Thallium, Total Recoverable	0.025	µg/L	J	SW846 6020A	0.02	5.5	5.5	03/15/2011
3406-MW09R	Zinc, Total Recoverable	28	µg/L		SW846 6020A	2	10	10	03/15/2011
3406-MW09R	1,1-Dichloroethane	2.3	µg/L	J	SW846 8260B	0.22	5	5	03/15/2011
3406-MW09R	Acetone	1.9	µg/L	J B	SW846 8260B	1.9	100	100	03/15/2011

Detected Appendix I and Appendix II Constituents in 2nd Semiannual Sampling Event of 2011

WELL ID #	PARAMETER	RESULT	UNITS	QUALIFIER	METHOD	MDL	MRL	SWSL	COLLECT DATE
3406-MW09R	Barium, Total Recoverable	15	µg/L	J	SW846 6010C	0.58	100	100	09/14/2011
3406-MW09R	Nickel, Total Recoverable	3	µg/L	J	SW846 6010C	1.3	50	50	09/14/2011
3406-MW09R	Vanadium, Total Recoverable	9.5	µg/L	J	SW846 6010C	1.1	25	25	09/14/2011
3406-MW09R	Cadmium, Total Recoverable	0.08	µg/L	J	SW846 6020A	0.04	1	1	09/14/2011
3406-MW09R	Copper, Total Recoverable	5.7	µg/L	J	SW846 6020A	0.56	10	10	09/14/2011
3406-MW09R	Zinc, Total Recoverable	5.1	µg/L	J	SW846 6020A	2	10	10	09/14/2011
3406-MW09R	1,1-Dichloroethane	2.8	µg/L	J	SW846 8260B	0.22	5	5	09/14/2011
3406-MW09R	cis-1,2-Dichloroethene	0.19	µg/L	J	SW846 8260B	0.15	5	5	09/14/2011

MDL = Method Detection Limit

MRL = Method Reporting Limit

SWSL = NC Solid Waste Section Limit

µg/L = micrograms per liter = parts per billion

J = Estimated concentration above the MDL but below the MRL or SWSL.

B = Blank-qualified detection (Constituent was detected in one or more blanks at similar concentrations).