



April 18, 2013

Mr. Ed Rawski, P.E.
Pennsylvania Department of Environmental Protection
Bureau of Waste Management
909 Elmerton Avenue
Harrisburg, PA 17110-8200

RE: Creswell Landfill GCMP; BWM Permit #100008

Dear Mr. Rawski:

Submitted herein is the data associated with the Gas Control and Monitoring Plan (GCMP) for the above referenced facility for the 1st Quarter 2013.

Attached, and included by reference are the following:

- **Attachment A**

Five (5) sheets containing a total of eleven (11) charts which depict historic results for the peripheral landfill gas monitoring wells and probes. As indicated previously, several of the locations have exceeded historic levels. We are planning to install additional monitoring locations shortly to assist in evaluating this.

- **Attachment B**

Contains quarterly results of the site perimeter locations monitored for percent L.E.L. Note the form has been revised to include the locations deleted or added as part of the Soil Borrow Project.

04/18/13 L:\WPDATA\BKN\WORD\CWLF\CW LFGas Qtly Monitoring Letter_1.doc





Unlocking the Energy of Innovation

Creswell Landfill GCMP; BWM Permit #100008

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In summary:

Field Data

- Samples taken from wells were analyzed for methane, carbon dioxide, oxygen, and "balance" (usually inferred to mean nitrogen) gases. "Balance" results, as always, are reported as a calculation based upon the measured values of the three (3) other landfill gas constituents.

We will continue quarterly GCMP monitoring and reporting with our next monitoring event (2nd Quarter 2013) currently scheduled to be completed through June. Feel free to call if you have any questions or comments.

Sincerely,

A handwritten signature in cursive script that reads "Brooks K. Norris".

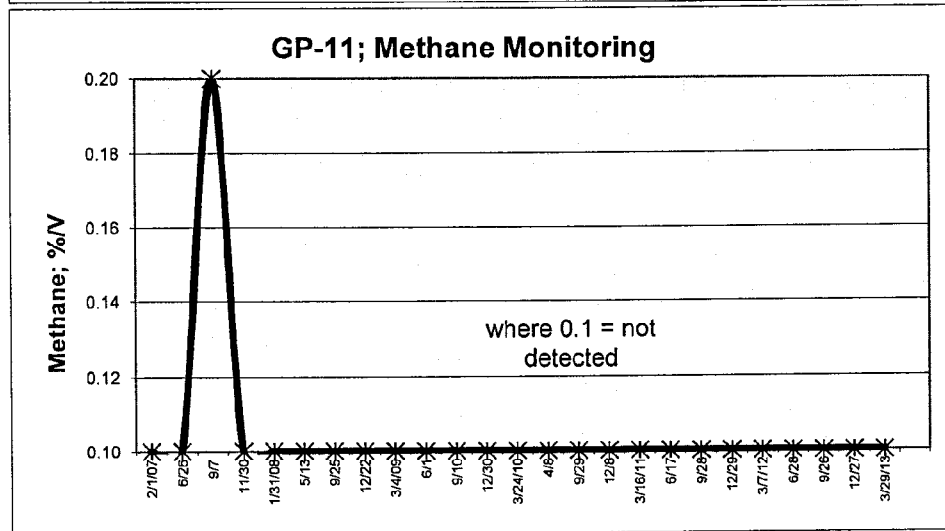
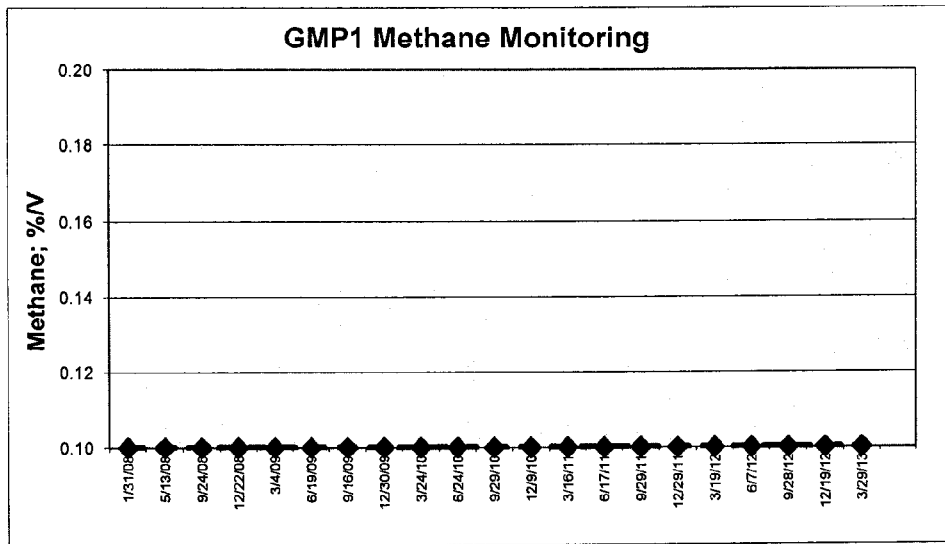
Brooks K. Norris
Senior Manager; Technical Services

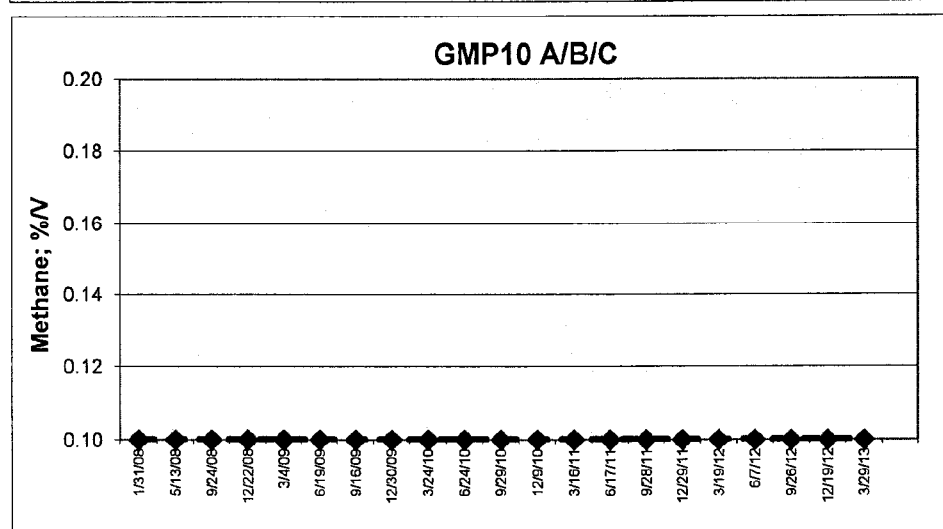
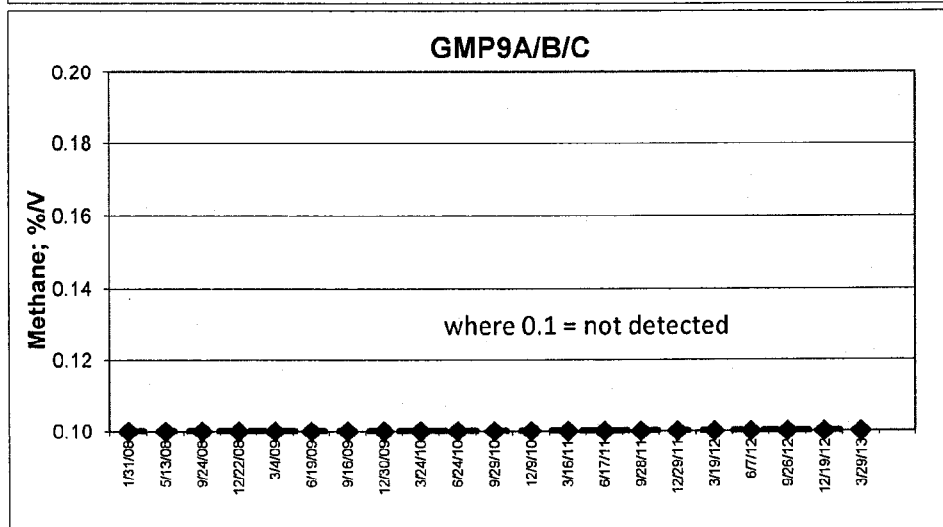
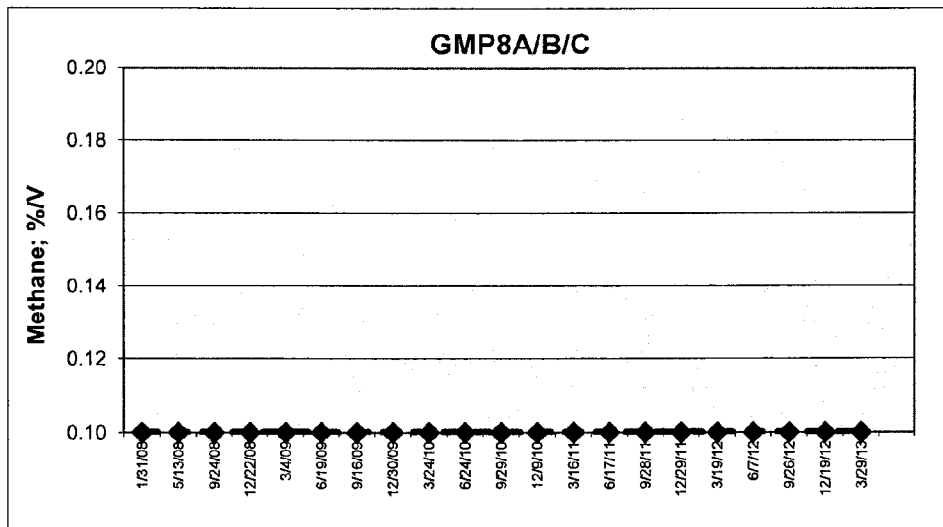
Enclosures

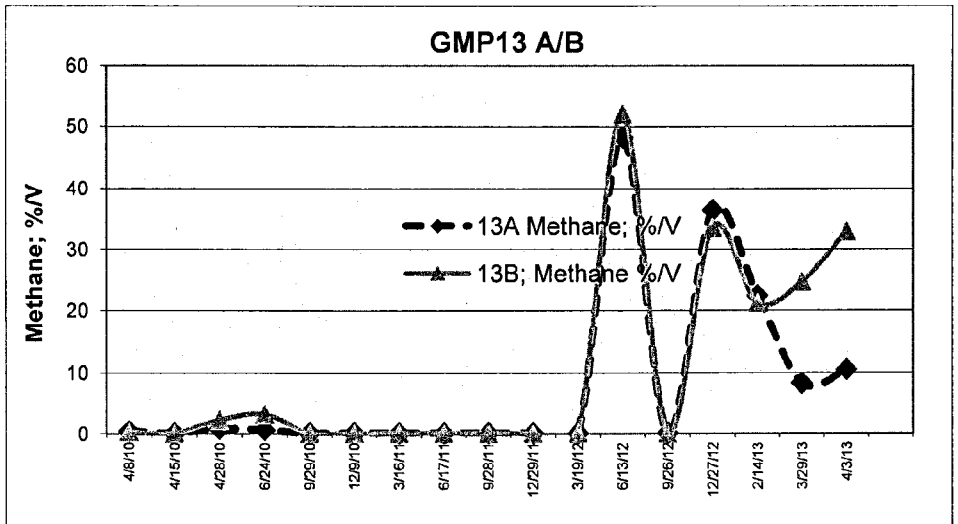
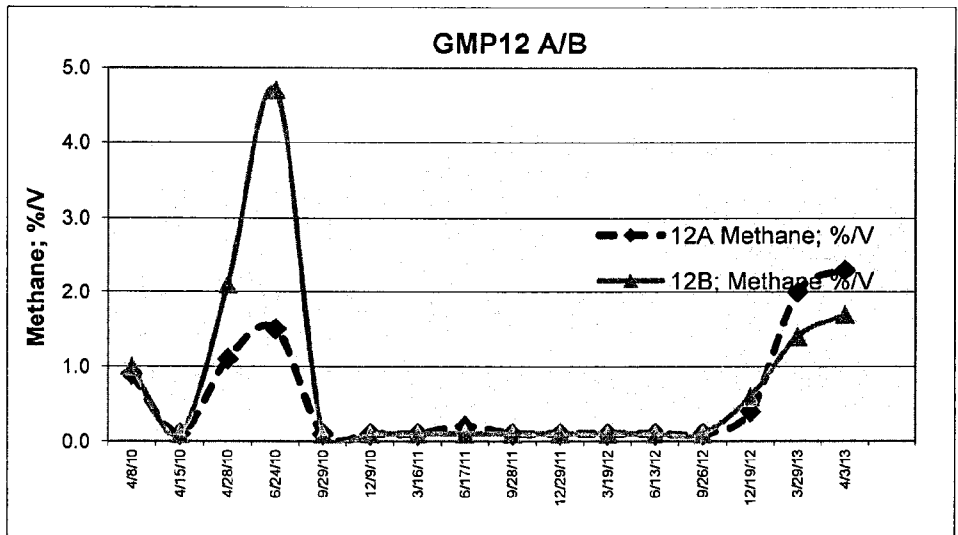
cc: Bob Zorbaugh
Emily Kauffman (w/enc.)
Bob Eshbach (w/enc.)
Jeff Musser (w/enc.)
Randy Weiss (PaDEP-Lancaster)
Anthony Lutkus (PaDEP-Lancaster; w/enc.)

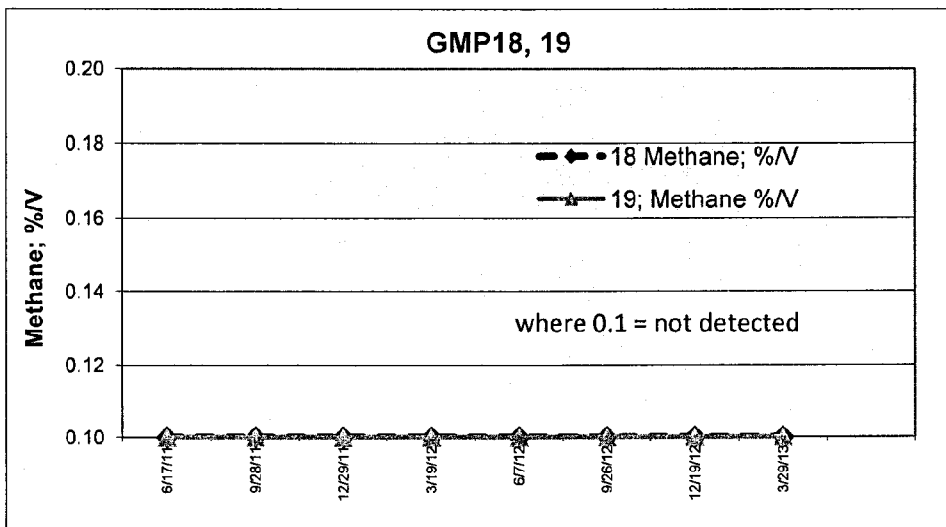
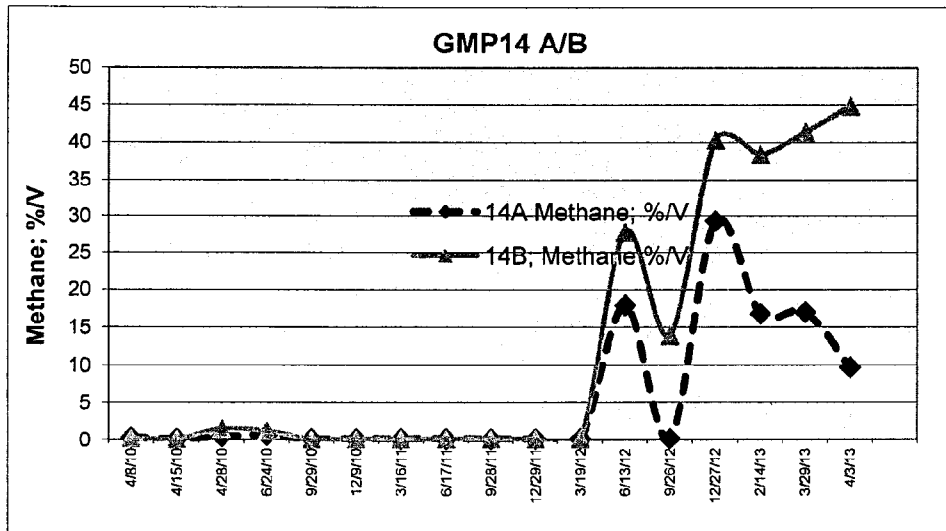
ATTACHMENT A

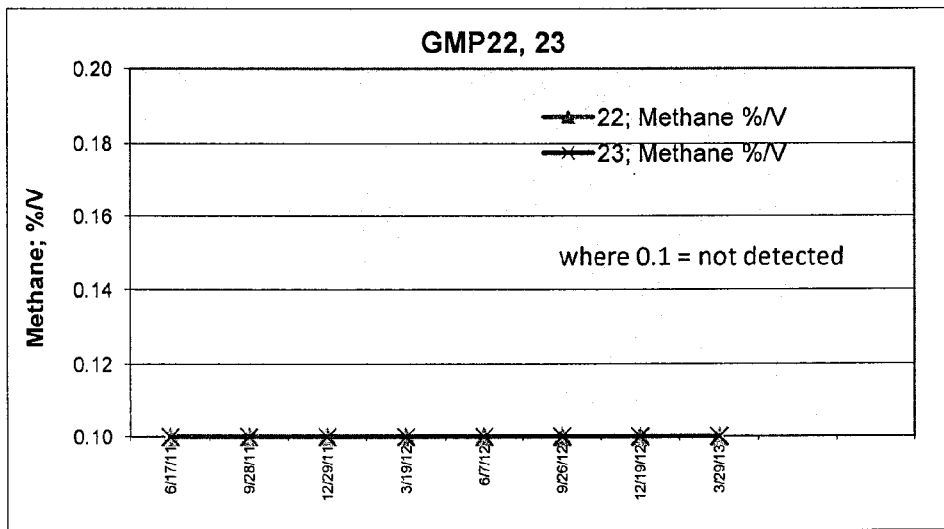
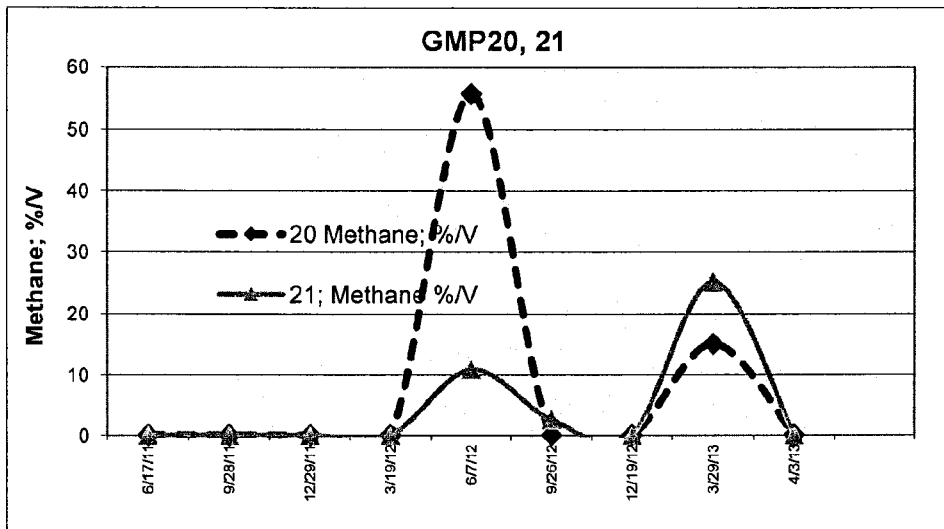
Graphs; Historic Results
Peripheral LFG Monitoring Probes and Wells











ATTACHMENT B

Quarterly Results
Percent L.E.L. Monitoring

CRESWELL METHANE MONITORING PROGRAM
SAMPLE POINT INSPECTION FORM

SAMPLE POINT NUMBER	DESCRIPTION	METHANE LEVEL (as % LEL)			
		DATE 3/13/13	DATE	DATE	DATE
1 to 15	GP WELLS	not included with this monitoring			
16	CONTROL BUILDING LAB	0			
17	CONTROL BUILDING COMPRESSOR ROOM	0			
18	CONTROL BUILDING LOCKER ROOM	0			
19	NTHW PIT	no longer exists			
20	OTHW PIT	0			
21	LTS AERATION PIT AT WEATHER STATION #1	0			
22	LTS AERATION PIT AT WEATHER STATION #2	0			
23	LTS WIRE TRENCH VENTS 1	0			
24	LTS WIRE TRENCH VENTS 2	0			
25	LTS WIRE TRENCH VENTS 3	no longer exists			
26	PUMP HOUSE	0			
27	PUMP HOUSE WET WELL	0			
28	MH #1	305			
29	MH #2	25			
30	INLET; STREAM R PIPE	0			
31	OUTLET; STREAM R PIPE	0			
32	UPPER END; RAVINE LEACHATE COLLECTION C.O.	no longer exists			
33	SEE MAP	0			
34	SEE MAP	0			
35	SEE MAP	0			
36	SEE MAP	0			
37	SEE MAP	0			
38	SEE MAP	0			
39	SEE MAP	0			
40	SEE MAP	0			
41	SEE MAP	0			
42	SEE MAP	0			
43	SEE MAP	0			
44	SEE MAP	0			
45	SEE MAP	0			
46	SEE MAP	0			
47	SEE MAP	0			
48	SEE MAP	0			
49	SEE MAP	0			
50	SEE MAP	0			
	Atmospheric Pressure (in. Hg)	29.33"			
	Air Temperature (Deg. C)	6.9 °C			

Revision Date: June 2011

Revisions: deleted points 62 to 66; added points 81 through 86

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CRESWELL METHANE MONITORING PROGRAM
SAMPLE POINT INSPECTION FORM

SAMPLE POINT NUMBER	DESCRIPTION	METHANE LEVEL (as % LEL)			
		DATE 3/13/13	DATE 1/0/00	DATE 1/0/00	DATE 1/0/00
51	LTS DISCHARGE MH #1	0			
52	LTS DISCHARGE MH #2	0			
53	DRAIN PIPE UNDER RAVINE PHASE II	11			
54	OLD SCALE HOUSE PIT	no longer monitored			
55	NEW SCALE HOUSE PIT	0			
56	LAGOON LINER BALLOON	208			
57	LEACHATE PIPE LOWER END OF RAVINE	capped; no longer monitored			
58	CWOB092W	0			
59	CWOB093A	0			
60	CWOB093B (aka CWMP016W)	0			
61	CWOB080W (formerly CWMP006W)	0			
62	CWGMP002; Gas monitoring probe	abandoned for Soil Borrow Project stockpile			
63	CWGMP04A; Gas monitoring probe				
64	CWGMP04B; Gas monitoring probe				
65	CWGMP06A; Gas monitoring probe				
66	CWGMP06B; Gas monitoring probe				
67	CWGMP08A; Gas monitoring probe	0			
68	CWGMP08B; Gas monitoring probe	0			
69	CWGMP08C; Gas monitoring probe	0			
70	CWGMP10A; Gas monitoring probe	0			
71	CWGMP10B; Gas monitoring probe	0			
72	CWGMP10C; Gas monitoring probe	0			
73	CWO100DW	0			
74	CWO100SW	0			
75	CWGMP12A; Gas Monitoring Probe	40			
76	CWGMP12B; Gas Monitoring Probe	28			
77	CWGMP13A; Gas Monitoring Probe	166			
78	CWGMP13B; Gas Monitoring Probe	492			
79	CWGMP14A; Gas Monitoring Probe	340			
80	CWGMP14B; Gas Monitoring Probe	828			
81	CWGMP018; Gas Monitoring Probe	0			
82	CWGMP019; Gas Monitoring Probe	0			
83	CWGMP020; Gas Monitoring Probe	302			
84	CWGMP021; Gas Monitoring Probe	504			
85	CWGMP022; Gas Monitoring Probe	0			
86	CWGMP023; Gas Monitoring Probe	0			

Revision Date: June 2011

Revisions: deleted points 62 to 66; added points 81 through 86