

## SCS ENGINEERS

October 31, 2017  
File No. 23212007.05

Ms. Tracy Buchanan  
Ohio EPA Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402-2911

*Submitted Electronically*

Subject: Village of St. Bernard Landfill  
MP-10 Contingency Probe Monitoring Results, October 31, 2017

Dear Ms. Buchanan:

Enclosed please find the results of the contingency gas monitoring at MP-10 performed on behalf of the Village of St. Bernard at the closed St. Bernard Landfill on October 31, 2017.

MP-10 had a sustained reading of 14.4 percent combustible gas. The verification reading had a sustained reading of 14.0 percent. Contingency monitoring will therefore continue to be implemented for MP-10.

Following the initial and verification sampling for this contingency monitoring event, MP-10 was pumped for 30 minutes, at a rate of approximately 550 cc/min., using the GEM 5000. Approximately 25 casing volumes were removed from MP-10 and the combustible gas concentration was 0.5 percent. The falling methane concentration during the 30 minute purge indicates that the elevated concentration of methane is present in a small area, i.e. only a small volume of soil gas with an elevated concentration of methane is present.

Per our discussion on October 12, 2017, we agreed to perform a bar punch to demonstrate that the exceedance at MP-10 is localized, does not extend towards 437 Bank Avenue (the Kistner residence), and therefore does not present a risk to the occupied structure(s) in the vicinity of MP-10. A bar punch reading was performed at BP-1, located in the southwest corner of 437 Bank Avenue. No combustible gas was detected at BP-1.

Should you have any questions or comments, please contact the undersigned.

Sincerely,



Randall C. Mills, P.G.  
Senior Project Professional  
**SCS ENGINEERS**



James J. Walsh, P.E.  
Principal  
**SCS ENGINEERS**

cc: Chuck DeJonckheere, Hamilton County Public Health  
Nick Schapman, GHD  
John Estep, Mayor, Village of St. Bernard

Enclosures

## Compliance Probe Monitoring Form for St. Bernard Landfill

Date: <u>10/31/17</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 5000</u>	Weather: <u>partly cloudy, light breeze</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>46</u>
Calibration Gas: <u>CH<sub>4</sub> 15%, CO<sub>2</sub> 15%, O<sub>2</sub> 4%</u>	Barometric Pressure (in Hg): <u>30.24</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>54</u>

Probe ID	Start Time	Stop Time	Gas Pressure (inches water)	Initial CH <sub>4</sub> (% by Volume)	Sustained CH <sub>4</sub> (% by Volume)	Depth to Water Level (feet below ground surface)	Depth to Top of Screen (feet below ground surface)	Open Screen* (feet)
MP-1							not known	
MP-7E							3	
MP-7H							2	
MP-8F							4	
MP-9							2	
MP-10 first reading	13:43	13:44	0	14.2	14.4	4.50	2	2.5
MP-16							2	
MP-17							2	
MP-10 verification	13:46	13:47	-1.30	14.2	14.0	--	--	--
MP-10 purge	13:49	14:19	-0.22	10.8	0.5	--	--	--
BP-1	14:31	14:31	--	0	0			

Notes:

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Signature: *Randall C. Mills*

\* A zero or negative value indicates that the probe is watered in.