

## SCS ENGINEERS

September 21, 2016  
File No. 23212007.04

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

Subject: Village of St. Bernard Landfill  
Probe Monitoring Results, September 21, 2016

Dear Ms. Buchanan:

Enclosed please find the results of the contingency gas monitoring performed at MP-10 on behalf of the Village of St. Bernard at the closed St. Bernard Landfill on September 21, 2016.

Combustible gas concentrations above the compliance threshold were detected at MP-10. MP-10 had an initial concentration of 55.8 percent and a sustained concentration of 56.3 percent. The immediate verification sample at MP-10 had an initial concentration of 45.9 percent and a sustained concentration of 49.3 percent. Contingency Monitoring at MP-10 will therefore continue as described in the EGMP.


The absence of pressure at MP-10 indicated that there is no driving force that cause gas migration over any significant distance. The methane detected at MP-10 is likely either a localized concentration or is present due to migration driven only by a concentration gradient/diffusion. At this time, no further remedial actions are proposed.

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>09/21/16</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 5000</u>	Weather: <u>clear, calm</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>80</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>30.2</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>57</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 <sup>#</sup> (feet)
MP-1							not known	
MP-7E							3	
MP-7H							2	
MP-8F							4	
MP-9							2	
MP-10	9:13	9:14	0	55.8	56.3	4.76	2	2.8
MP-16							2	
MP-17							2	
MP-10	9:17	9:18	0.01	45.9	49.3	--	--	--

Notes:

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Signature: *Randall C. Mills*

<sup>#</sup> A zero or negative value indicates that the probe is watered in.