## SCS ENGINEERS

October 19, 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, October 19, 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 October 19, 2016.

Combustible gas concentrations above the compliance threshold were detected at MP-10. MP-10 had an initial concentration of 44.3 percent and a sustained concentration of 42.0 percent. The immediate verification sample at MP-10 had an initial concentration of 35.0 percent and a sustained concentration of 46.6 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 could 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. V

Principal

SCS ENGINEERS

cc:

Chuck DeJonckheere, Hamilton County Public Health

Nick Schapman, GHD

Randall ( mills

John Estep, Mayor, Village of St. Bernard

**Enclosures** 

## Compliance Probe Monitoring Form for St. Bernard Landfill

Date: 10/19/16					Sampler:	Randall Mills			
Instrument GEM 5000					Weather:	mostly cloudy, calm			
Calibration Prior to Sampling: Yes					Ambient Air Ter	mperature (°F):		69	
Calibration Gas: CH <sub>4</sub> 1		CH₄ 15%, CO	H <sub>4</sub> 15%, CO <sub>2</sub> 15%, O <sub>2</sub> 4%		Barometric Pressure (in Hg):			30.07	
Recalibration:		No			Relative Humidity (%):			93	
		-				2			
Probe ID	Start Time	Stop Time	Gas Pressure (inches water)	Initial CH₄ (% 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					10.0		2	0.1	
MP-10	8:48	8:49	0.02	44.3	42.0	5.06	2	3.1	
MP-16							2 2		
MP-17					-				
MP-10	8:52	8:53	0.03	35.0	46.6	48			
Notes:									
					¥				
Signature: Rankell C. Mills									

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