

SCS ENGINEERS

October 26, 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 25, 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 25, 2017.

MP-10 had a sustained reading of 51.6 percent combustible gas. The verification reading had a sustained reading of 51.4 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 5.5 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.

A bar punch reading was performed at BP-1, located in the southwest corner of 437 Bank Avenue property (the Kistner residence.) 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>10/25/17</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 5000</u>	Weather: <u>cloudy, moderate breeze</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>51</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>29.82</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>50</u>

Probe ID	Start Time	Stop Time	Gas Pressure (inches water)	Initial CH ₄ (% by Volume)	Sustained CH ₄ (% 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	15:12	15:13	0.03	50.1	51.6	4.67	2	2.7
MP-16							2	
MP-17							2	
MP-10 verification	15:15	15:16	-0.71	51.8	51.4	--	--	--
MP-10 purge	15:19	15:20	0.03	40.1	5.5	--	--	--
BP-1	16:01	16:02	--	0	0			

Notes:

Signature: *Randall C. Mills*

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