

SCS ENGINEERS

October 11, 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 11, 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 11, 2017.

MP-10 had a sustained reading of 42.0 percent combustible gas. The verification reading had a sustained reading of 42.3 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 0.1 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.

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>10/11/17</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 5000</u>	Weather: <u>overcast, moderate breeze</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>65</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>30.06</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>77</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	14:05	14:06	4.49	42.6	42.0	4.31	2	2.3
MP-16							2	
MP-17							2	
MP-10 verification	14:08	14:09	1.96	43.0	42.3	--	--	--
MP-10 purge	14:12	14:42	-0.03	40.5	0.1	--	--	--

Notes:

Signature: *Randall C. Mills*

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