

SCS ENGINEERS

July 5, 2017
File No. 23212007.05

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

Subject: Village of St. Bernard Landfill
MP-10 Contingency Probe Monitoring Results, June 27 and July 1, 2017

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 June 27 and July 1, 2017.

On June 27th, MP-10 had a sustained reading of 2.2 percent combustible gas. As a result of the reading being below the compliance threshold of 5 percent combustible gas, twice a week monitoring was implemented to document that the criteria for terminating contingency monitoring were met.

On July 1st, MP-10 had a sustained reading of 33.8. The verification reading had a sustained reading of 28.3 percent. Contingency monitoring will therefore continue to be implemented for MP-10.

Following the initial and verification sampling for these contingency monitoring events, 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. 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

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

Enclosures



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

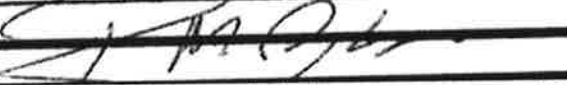
Compliance Probe Monitoring Form for St. Bernard Landfill

Date: <u>06/27/17</u>	Sampler: <u>Mike Broyles</u>
Instrument: <u>GEM 5000</u>	Weather: <u>sunny</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>69</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>30.14</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>46</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	-3.0
MP-7H							2	-2.0
MP-8F							4	-4.0
MP-9							2	-2.0
MP-10	13:14	13:15	-0.02	2.2	2.2	4.44	2	2.4
MP-16							2	-2.0
MP-17							2	-2.0

Notes:

Pumped MP- 10 for 30 minutes .

Signature: 

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

Compliance Probe Monitoring Form for St. Bernard Landfill

Date: <u>07/01/17</u>	Sampler: <u>Mike Broyles</u>
Instrument: <u>GEM 5000</u>	Weather: <u>sunny, scattered clouds</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>73</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>29.97</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>79</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	-3.0
MP-7H							2	-2.0
MP-8F							4	-4.0
MP-9							2	-2.0
MP-10	9:47	9:48	0.09	30.1	33.8	5.03	2	3.0
MP-16							2	-2.0
MP-17							2	-2.0
MP-10 verification	9:49	9:50	0.03	20.0	28.3	--	--	--
MP-10 purge	10:00	10:30	-0.34	28.3	3.8	--	--	--

Notes:

Pumped-MP- 10 for 30 minutes.

Signature: _____

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