

July 13, 2020
File No. 23212007.08

Ms. Maria Lammers
Ohio EPA Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911

Submitted Electronically

Subject: St. Bernard Landfill, Blower Shutdown Test Monitoring Report, Week 1

Dear Ms. Lammers:

This letter presents the results of first week of monitoring for the blower shutdown test. The following activities were performed last week:

- Monday - A baseline round of monitoring of the compliance probes was performed and the blower was turned off.
- Tuesday through Friday – daily rounds of post shutdown monitoring of the compliance probes were performed.

The monitoring forms are attached. No combustible gas concentrations at or above 5 percent were recorded. On Tuesday, two probes, MP-7E and MP-9, were watered in following heavy rain Monday afternoon and evening. By Wednesday, the water levels had fallen below the tops of the screens at these wells, so that they were no longer watered in.

Weekly monitoring of the compliance probes will commence Friday, July 17th.

Please contact the undersigned if you have any questions.

Sincerely,



Randall C. Mills, P.G.
Senior Project Scientist
SCS Engineers



James J. Walsh, P.E.
Project Director
SCS Engineers

RCM/JJW

cc Jonathan Stuchell, Mayor, Village of St. Bernard
Tom Paul, Service Director, Village of St. Bernard
Nick Schapman, GHD
Chuck DeJonckheere, Hamilton County Health Dept.



Compliance Probe Monitoring Form for St. Bernard Landfill

Date: <u>07/06/20</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 5000</u>	Weather: <u>partly cloudy, calm</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>95</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>29.52</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>57</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	14:59	15:00	0	0	0	9.25	not known	
MP-7E	14:24	14:25	0.03	0	0.3	5.34	2	3.3
MP-7H	14:18	14:19	-0.01	0	0	3.72	2	1.7
MP-8F	14:30	14:31	-0.02	0	0	7.34	2	5.3
MP-9	14:39	14:40	-0.21	0	0	6.66	2	4.7
MP-16	14:53	14:54	0	0	0	6.20	2	4.2
MP-17	14:46	14:47	0.01	0	0	11.67	2	9.7

Notes:

Signature: *Randall C. Mills*

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

Compliance Probe Monitoring Form for St. Bernard Landfill

Date:	<u>07/07/20</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>84</u>
Calibration Gas:	<u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg):	<u>29.46</u>
Recalibration:	<u>No</u>	Relative Humidity (%):	<u>68</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	9:00	9:01	0.01	0	0	9.23	not known	
MP-7E	8:22	8:23	-1.99	0	0	1.48	2	-0.5
MP-7H	8:16	8:17	0.02	0	0	31.05	2	29.1
MP-8F	8:29	8:30	-0.01	0	0	6.68	2	4.7
MP-9	8:36	8:37	3.71	0	0	1.00	2	-1.0
MP-16	8:56	8:57	0.02	0	0	4.78	2	2.8
MP-17	8:50	8:51	0.01	0	0	11.44	2	9.7

Notes:

Signature: *Randall C. Mills*

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

Compliance Probe Monitoring Form for St. Bernard Landfill

Date: <u>07/08/20</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 2000</u>	Weather: <u>clear, calm</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>94</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>29.44</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>64</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	10:43	10:44	0.01	0	0	8.38	not known	
MP-7E	10:01	10:02	0.01	0	0	3.69	2	1.7
MP-7H	9:53	9:54	0.01	0	0	3.46	2	1.5
MP-8F	10:06	10:07	-0.02	0	0	7.02	2	5.0
MP-9	10:14	10:15	-0.01	0	0	4.95	2	3.0
MP-16	10:37	10:38	-0.01	0	0	4.98	2	3.0
MP-17	10:30	10:31	0.02	0	0	11.47	2	9.7

Notes:

Signature: *Randall C. Mills*

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

Compliance Probe Monitoring Form for St. Bernard Landfill

Date: <u>07/09/20</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 2000</u>	Weather: <u>clear, calm</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>85</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>29.93</u>
Recalibration: <u>No</u>	Relative Humidity (%): <u>70</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	9:51	9:52	0.03	0	0	9.26	not known	
MP-7E	9:27	9:28	0.02	0	0	4.80	2	2.8
MP-7H	9:22	9:23	0	0	0	3.55	2	1.6
MP-8F	9:32	9:33	0	0	0	7.16	2	5.2
MP-9	9:37	9:38	-0.03	0	0	6.05	2	4.1
MP-16	9:47	9:48	0.01	0	0	5.11	2	3.1
MP-17	9:42	9:43	-0.01	0	0	11.54	2	9.7

Notes:

Signature: *Randall C. Mills*

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

Compliance Probe Monitoring Form for St. Bernard Landfill

Date: <u>07/10/20</u>	Sampler: <u>Randall Mills</u>
Instrument: <u>GEM 5000</u>	Weather: <u>partly cloudy, calm</u>
Calibration Prior to Sampling: <u>Yes</u>	Ambient Air Temperature (°F): <u>82</u>
Calibration Gas: <u>CH₄ 15%, CO₂ 15%, O₂ 4%</u>	Barometric Pressure (in Hg): <u>29.85</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	8:37	8:38	0	0	0	9.25	not known	
MP-7E	8:06	8:07	0.05	0	0	5.07	2	3.1
MP-7H	8:16	8:17	0.01	0	0	3.62	2	1.6
MP-8F	8:11	8:12	0.01	0	0	7.20	2	5.2
MP-9	8:21	8:22	0	0	0	6.35	2	4.4
MP-16	8:32	8:33	0	0	0	5.15	2	3.2
MP-17	8:26	8:27	0	0	0	11.49	2	9.7

Notes:

Signature: *Randall C. Mills*

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