

SCS ENGINEERS

September 11, 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
Contingency Monitoring at MP-7E

Dear Ms. Buchanan:

As you know from the electronic report of the monitoring results from September 7, 2017, an exceedance of the 5 percent combustible gas compliance threshold occurred at MP-7E. This letter is intended to meet the 7-day reporting requirements contained in OAC 3745-27-12 (E)(5)(g)(i) associated with the exceedance at MP-7E. The steps taken during the first seven days on behalf of the Village of St. Bernard at the closed St. Bernard Landfill to protect human health and the environment include:

- The gas extraction system was checked to confirm it was working properly.
- The vacuum was increased in the EW-4S segment of the gas collection system by decreasing the vacuum applied to the selected other segments. The EW-6S segment is the segment immediately adjacent to MP-7E.

No additional monitors are proposed at this time. All, but one of the adjacent residences are equipped with combustible gas indicators (CGIs) (Mr. Schrenk requested his CGI be removed earlier this year). The existing permanent monitors are sufficiently spaced that additional monitors are not needed.

Enclosed please find a summary of the results of the monitoring performed at MP-7E on September 7, 2017. Combustible gas concentrations above the compliance threshold were detected and verified at MP-7E. The absence of pressure at MP-7E indicated that there is no driving force to cause gas migration over a significant distance. The methane detected at MP-7E is likely either a localized concentration or is present due to migration driven only by a concentration gradient/diffusion.

Following the initial and verification sampling for the quarterly monitoring event, MP-7E 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-7E. 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
Tom Paul, Service Director, Village of St. Bernard

Enclosures

