



State of Ohio Environmental Protection Agency

**Northwest District Office**

347 North Dunbridge Rd.  
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468  
www.epa.ohio.gov

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

Re: Erie County  
Erie County Landfill- Active  
Ground Water

January 15, 2010

Erie County Board of Commissioners  
2900 South Columbus Avenue  
Sandusky, Ohio 44870

Dear Board of Commissioners:

The Ohio Environmental Protection Agency (Ohio EPA), Northwest District Office (NWDO), reviewed the Report of Groundwater Quality for the Fall 2009 Semi-Annual Detection Monitoring Event dated December 14, 2009, (report) for the Erie County Landfill Active Site (facility).

Erie County currently conducts sampling at the landfill according to a detection monitoring plan as required by Ohio Administrative Code (OAC) Rule 3745-27-10(D). Based on Ohio EPA's evaluation, the facility is operating under the correct ground water monitoring phases and the well system is adequate. The Ohio EPA reviewed the report for compliance with OAC Rule 3745-27-10.

**COMMENTS**

**VIOLATIONS**

- 1. The owner/operator is in violation of OAC Rule 3745-27-10(C)(1), requiring the owner/operator to collect ground water samples that provide an accurate representation of ground water quality at the background and downgradient wells. In order to return to be in compliance with OAC Rule 3745-27-10 (C)(1), the owner/operator needs to collect representative samples from well MW10DR or replace the well for future sampling events.**

It appears that natural gas is entering well MW10DR at a very high rate when the well is purged and sampled. In a telephone conversation on November 3, 2009, Tom Covrette said that Bob Sennish explained the gas situation at the well. When one well volume was removed the turbidity was 2402 NTUs and the water gushed/exploded out of the well. The lowest turbidity reading that could be obtained during the fall sampling event was 296.8 NTU. Samples collected with turbidity above 160 NTU are not considered to be representative.

According to page 4, last paragraph, "Erie County has discussed the need for a replacement monitoring well for MW-10DR and intends to complete installation, development and survey activities prior to the Spring 2010 semi-annual event."

The Ohio EPA requests that Erie County contact Jack Leow two weeks prior to installation of the well.

2. **The owner/operator is in violation of OAC Rule 3745-27-10(C)(1)(a), requiring the owner/operator to use the procedures in the sampling and analysis plan (SAP). In order to return to be in compliance with OAC Rule 3745-27-10 (C)(1)(a) in future sampling events, the owner/operator needs to purge the monitoring wells until stability is achieved over three successive well volumes.**

According to the Groundwater Monitoring Program Plan for the Active Erie County Landfill revised October 2006, page 16, paragraph 1, "After three volumes, if the variation between the last three measurements is greater than ...  $\pm 3\%$  for conductivity ... additional water will be purged until the field parameters stabilize."

According to the Erie County Groundwater Sampling Field Data sheet for well MW41D in the December 14, 2009 report, the last three measurements for conductivity were 593, 622, and 653. The variation is greater than 9 %.

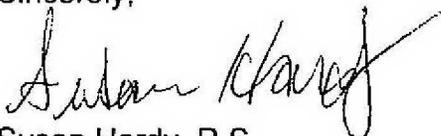
## **STATEMENTS**

3. **According to the report, page 6, section 4.0, paragraph 2, lines 6-8, "The approximate groundwater elevation of 618 msl at former monitoring well MW14DR2 will continue to be used to develop future potentiometric surface maps for the UAS as long as the direction of groundwater flow in the southeast portion of the facility is toward the northeast." Ohio EPA agrees with this statement as long as the elevation placed on the map at the location of former well MW14DR2 is always higher than the elevations for downgradient wells MW 10DR, and 11D along the east side of the active landfill.**

Erie County Board of Commissioners  
January 15, 2010  
Page Three

If you have any questions please contact Jack Leow, C.P.G., at Ohio EPA, Northwest District Office, Division of Drinking and Ground Waters, 347 N. Dunbridge Rd., Bowling Green, Ohio 43402. Submit all reports/data to Sue Hardy, Ohio EPA, Northwest District Office, Division of Solid and Infectious Waste Management, 347 N. Dunbridge Rd., Bowling Green, Ohio 43402.

Sincerely,



Susan Hardy, R.S.  
Environmental Specialist  
Division of Solid and Infectious Waste Management

/lb

pc: Fred Dubbert, Erie County Landfill  
Bob Sennish, Erie County Landfill  
Jack Meyers, Erie County Sanitary Engineer  
James Moseley, Mannik and Smith Group  
~~File: Erie County, Erie County Landfill, Ground Water~~

ec: Lindsay Taliaferro, III, DDAGW, CO,  
Jack Leow, DDAGW, NWDO  
Mike Reiser, DSIWM, NWDO  
Ned O'Loughlin, DSIWM, NWDO

ID# 5-9029