



State of Ohio Environmental Protection Agency

**Northwest District Office**

347 North Dunbridge Road  
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468  
www.epa.state.oh.us

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

Re: Ground Water Sampling Event  
Unitcast Landfill, Lucas County

September 26, 2008

Mr. Timothy Murphy  
Environmental Services Division  
City of Toledo  
348 South Erie Street  
Toledo, Ohio 43604

Dear Mr. Murphy:

On August 2, 2008, the Ohio Environmental Protection Agency (Ohio EPA) Northwest District Office (NWDO) received a compliance report, dated August 2, 2008, concerning the Unitcast Landfill in Lucas County. Ohio EPA reviewed the groundwater sampling data portion of the report to determine compliance with Ohio Administrative Code (OAC) Rule 3745-30-08 and Director's Final Finding and Orders dated May 2, 2007. Below are Ohio EPA's comments regarding the review.

**COMMENTS**

**Violations**

1. **The owner/operator is in violation of OAC Rule 3745-30-08(A), which requires the City to use the methods documented in the ground water monitoring program plan (GWMPP); and of Order 1 b, which requires the City to comply with the Groundwater Monitoring Plan and continue to sample the monitoring wells. In order to prevent violations for future sampling events, the City needs to analyze volatile organic compound (VOC) samples for all of the parameters in Table 1 and submit the results to the Ohio EPA.**

Trichlorotrifluoromethane is included in the list of parameters to be analyzed for the quarterly sampling events on Table 1, page 2-5 in the GWMPP. The City collected VOC samples, but did not submit the results for trichlorotrifluoromethane.

2. **The owner/operator is violation of OAC Rule 3745-30-08(A), which requires the City to use the methods documented GWMPP.**

Lucas Co Unitcast GW

**In order to prevent violations for future sampling events, the City needs to include the following information on the Field Data sheets: names of the personnel present, climatic conditions including air temperature, static water level, well coordinates, top of casing elevations, type of casing, screened interval, field observations and notes, and any evidence of tampering or damage to the well or lock.**

According to the GWMPP, pages 2-14 to 2-15, the above listed items need to be included on the field data sheets. The Jones & Henry Labs Field Data sheets do not include the items listed above in bold.

- 3. The owner/operator is violation of OAC Rule 3745-30-08(A), which requires the City to use the methods documented in the GWMPP. In order to prevent violations for future sampling events, the City needs to include the laboratory sample identification number and the project number on the Chain of Custody Record.**

According to the GWMPP, page 2-15, the above listed items need to be included on the Chain of Custody Record. The Jones & Henry Labs Chain of Custody Record for the July 2008 sampling event does not include the items listed above in bold.

- 4. The owner/operator is violation of OAC Rule 3745-30-08(A), which requires the City to use the methods documented in the GWMPP. In order to prevent violations for future sampling events, the City needs include a ground water surface evaluation table and/or map with the each report of the laboratory analytical data.**

According to the GWMPP, page 4-1, section 4.2, "Groundwater surface elevation tables and/or maps will be prepared and submitted with each report of laboratory analytical data." Ground water surface elevation tables and/or maps were not submitted with the report.

#### **More Information Needed To Determine Compliance**

- 5. Compliance with OAC Rule 3745-30-08(C)(1), which requires the ground water monitoring program to include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells, cannot be determined at this time. In order to remain in compliance with OAC Rule 3745-27-08(C)(1) the City needs to ensure that the information written on the Field Data sheets is legible.**

The copies of the field data sheets that are included in the report are very hard to read. Many of the numbers are partially missing.

6. **Compliance with OAC Rule 3745-30-08(C)(1), which requires the ground water monitoring program to include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells, cannot be determined at this time. The City needs to explain how the collection of turbid samples from the wells provides results which are representative of the ground water quality of the site. The City also needs to insure that low turbidity samples are collected from the wells at the site. The wells need further development in order to lower the turbidity.**

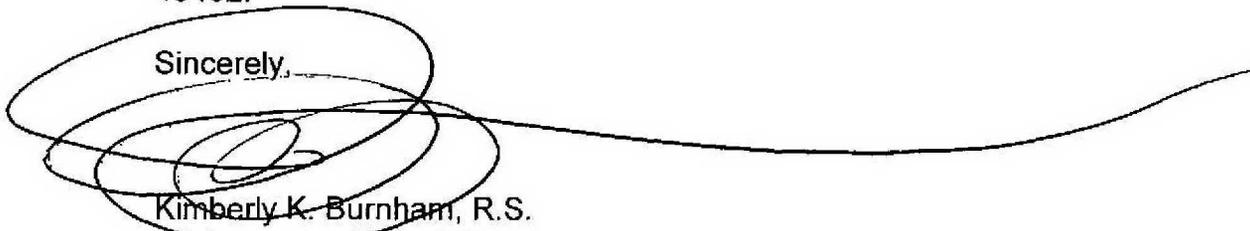
Turbidity continues to be a problem in the wells at the landfill. The wells had laboratory turbidity values of 90 and 94 NTUs. Excessive turbidity can adversely impact parameter concentrations producing results which are not representative of the ground water quality at the site. Ideally, turbidity should be less than 10 NTU. It does not appear that the wells have been developed sufficiently.

#### Statements

7. **The report did not include the results for gross alpha and gross beta. The City has until October 1, 2008 to submit the data in order to avoid receiving a violation for not submitting the data within 75 days of sampling in accordance with OAC Rule 3745-30-08(C)(8).**

If you have any questions, please contact Jack Leow at the Ohio EPA Northwest District Office at (419) 352-8461. Any written correspondence should be sent to the attention of Kimberly Burnham, Division of Solid and Infectious Waste Management, Ohio EPA Northwest District Office, 347 N. Dunbridge Road, Bowling Green, Ohio 43402.

Sincerely,



Kimberly K. Burnham, R.S.  
Environmental Specialist  
Division of Solid and Infectious Waste Management

/llr

pc: Jack Leow, DDAGW, NWDO  
[DSIWM-NWDO File: Lucas County, Unitcast Landfill, Ground Water >  
ec: Mike Reiser, DSIWM, NWDO  
id: 5-7946