



State of Ohio Environmental Protection Agency

Northeast District Office

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

May 14, 2008

RE: **BFI CLD/LEWIS LANDFILL  
GROUND WATER  
NOTICE OF VIOLATION**

**CERTIFIED MAIL**

Butch Bradburn  
Site Engineer  
BFIO Carbon Limestone Landfill  
8100 South Stateline Road  
Lowellville, OH 44436

Dear Mr. Bradburn:

The Ohio Environmental Protection Agency (Ohio EPA) has reviewed the following document:

MW-121C Appendix II, MW-121-C Spring and SG-4 Pond Sampling Results, dated January 26, 2008.

The submittal presents assessment investigation sampling results for the BFIO-CLD Lewis Landfill, located in Mahoning County. It is dated January 26, 2008, and was received by Ohio EPA on January 29, 2008. The BFIO-CLD Lewis Landfill ground water monitoring program is regulated by the Solid and Infectious Waste Regulations (OAC 3745-27-10), effective August 15, 2003.

The letter was submitted to notify Ohio EPA of the assessment sampling activities which took place on December 18, 2007, at the BFIO-CLD Lewis Landfill. The additional assessment sampling was performed at monitoring well, MW-121C by the owner/operator as required by OAC Rule 3745-27-10(E)(5)(a)(i).

Two additional areas were sampled during the December 2007 event. These areas are:

1. MW-121C Spring: sampling of an unknown outcropping spring located approximately 300 to 400 feet east of MW-121C for sodium and chloride, and
2. SG-4 Pond: surface water sampling for the evaluation of Appendix I VOC constituents at the northwestern corner of facility.

Ohio EPA has identified the following violations:

- 1. The owner/operator is in violation of OAC Rule 3745-27-10(E)(5)(a)(i) for failing to sample at least one background well in the C-Horizon uppermost aquifer system within either the same flow path as MW-121C, or screened in the same geologic unit.**

Specifically, this rule requires the owner/operator sample the affected well or wells and any background well within the flow path or closest to the affected well and screened in the same geologic unit, for all waste derived constituents including all constituents in Appendix I and II of this rule. The owner/operator only sampled MW-121C, the affected well. The C-Horizon potentiometric ground water flow map from November 2007 revealed the presence of two upgradient piezometers, MW-105C and MW-106C, in the C-Horizon. At a minimum, one of these piezometers should have been sampled for the full Appendix I and II list to comply with this rule.

To return to compliance with this rule, the owner/operator should immediately sample either MW-105C or MW-106C for the full Appendix I and II list of constituents. Ohio EPA recommends the owner/operator sample MW-105C because this well is closest to MW-121C and is closest to the true flow path for this well.

**Because the owner/operator has not complied with OAC Rule 3745-27-10(E)(5)(a)(i), the owner/operator is also in violation of OAC Rule 3745-27-19(B)(6) which requires compliance with the ground water monitoring, assessment, and corrective measures requirements of OAC Rule 3745-27-10.**

**Ohio EPA has the following comments:**

1. Review of the analytical results shows that potential ground water impacts are present at MW-121C and appear to include, at a minimum, the following constituents: calcium (480 mg/L), chloride (47 mg/L), cobalt (31 ug/L), cyanide (j-5.0 ug/L), iron (49 mg/L), lead (8.5 ug/L), magnesium (390 mg/L), manganese (18 mg/L), nickel (23 ug/L), potassium (14 ug/L), sodium (83 mg/L), and total dissolved solids (1500 mg/L).

Until the owner/operator has collected and analyzed ground water samples from the upgradient piezometers MW-105C and/or MW-106C, making a more complete determination of the waste derived constituents at this well is not possible.

2. Review of the limited analytical results from the spring downgradient of MW-121C, potentially shows that impacted ground water is discharging to surface water at this location. The spring is located 300-400 feet east of MW-121C, and

at a minimum, the potential impacts include sodium (27 mg/L) and chloride (62 mg/L).

Until the owner/operator has collected and analyzed samples from this spring for a more complete list of constituents, making a full determination of the waste derived constituents affecting water quality at this location is not possible.

3. Review of the Appendix I VOC results from surface water samples collected at SG-4 indicate that three VOCs are present in surface water approximately 50 feet before this surface water feature drains off the facility property. Specifically, 1,2-dichloroethane (1.3 ug/L), cis-1,2-dichloroethene (15 ug/L), and vinyl chloride (j-0.88 ug/L) were detected in surface water samples collected at SG-4.

Until the owner/operator has collected and analyzed surface water samples from SG-4 for a more complete list of constituents, making a full determination of the waste derived constituents affecting water quality at this location, and further downstream of this location, is not possible.

4. The owner/operator makes the statement that topography defines the horizontal extent of MW-121C SSIs. However, no detailed supporting information (maps, cross sections, more detailed sampling results, etc..) was provided, and the owner/operator is overlooking that plenty of room exists to install an additional horizontal extent well downgradient of MW-121C. It is also not clear if the owner/operator's statement that topography defines the horizontal extent of MW-121C SSIs was intended to be a first determination. If this was intended to be a first determination, then the owner/operator is long past due for submitting a full ground water quality assessment report containing this determination pursuant to OAC Rule 3745-27-10(E)(7). Regardless, until the owner/operator conducts additional investigations, completes more detailed sampling, and submits more detailed information, Ohio EPA cannot adequately evaluate or concur with the owner/operator's statement that, "topography defines the horizontal extent of MW-121C SSIs."

Nothing in this letter shall be construed to authorize any waiver from the requirements of any applicable state or federal laws or regulations. This letter shall not be interpreted to release the Entity from responsibility under Chapters 3704, 3714, 3734, or 6111 of the Ohio Revised Code or under the Federal Clean Water or Comprehensive Environmental Response, Compensation, and Liability Acts for remedying conditions resulting from any release of contaminants to the environment.

Butch Bradburn  
BFIO Carbon Limestone Landfill  
May 14, 2008  
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If you have any questions concerning this letter, please contact me at (330) 963-1257.

Sincerely,



Katharina Snyder  
Division of Solid and Infectious Waste Management

KS:cl

cc: Connie McCambridge, DDAGW-NEDO  
Dave Silbaugh, Silbaugh Hydrogeological Services  
Butch Bradburn  
Mary Helen Smith, Mahoning County Health Department  
File: [Sowers/LAND/CLD/GRO/50] # 1187

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