



**Environmental  
Protection Agency**

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korteski, Director

Re: Residual Waste Landfill  
Groundwater

October 12, 2010

Mr. Andy Cvitkovich, Engineering Manager  
United States Gypsum Company  
Gypsum, Ohio 43433

Dear Mr. Cvitkovich:

The U.S. Gypsum Landfill is a class III closed residual waste landfill that is located in Portage Township, Ottawa County, Ohio. The solid waste identification number is 62-00-07. The company is required to close the facility according to the requirements of OAC 3745-30, an approved Closure Plan, and the Director's Findings and Orders dated October 12, 1994. The Ohio Environmental Protection Agency (Ohio EPA) reviewed the "Sampling and Analysis Results for Semi-annual Sampling Event" received August 23, 2010.

The facility is conducting detection monitoring for wells MW1-3, 6, 9 and 10, and assessment monitoring for wells MW4, 5, 11, 12, 13, and 14. The owner/operator should also be conducting assessment monitoring for wells MW 7 and MW 8. The owner/operator was cited in violation for not conducting semiannual assessment monitoring of the ground water in wells MW7 and MW 8.

A ground water quality assessment plan was submitted to Ohio EPA on April 6, 2007, due to the statistically significant increases for chloride and pH in well MW4 and chloride in well MW5 above background concentrations for two consecutive sampling events. Ohio EPA comments concerning the assessment plan were sent to the owner/operator on July 10, 2007.

It has been determined in the past that radial or multi-directional ground water flow exists at the site. The water level data collected during the sampling events starting with the November 2008 sampling event appear to indicate the flow is not radial. This will continue to be watched in future sampling events to see if this is a permanent change.

### COMMENTS

### VIOLATIONS

1. **U.S. Gypsum Company continues to be in violation of Ohio Administrative Code (OAC) Rule 3745-30-08(E)(4) requiring the assessment wells to be analyzed semiannually for Appendix III and parameters determined to be released. The owner/operator needs to sample wells MW7 and MW8 as required by the rule.**

According to the Groundwater Quality Assessment Plan dated April 2007, page 19, "Nickel was reported just slightly above the PQL in groundwater samples collected from MW-7 and MW-8 at 0.0196 mg/L and 0.026 mg/L. Statistical significances have not

been identified for indicator parameters analyzed in these monitoring wells." According to Tables 4, 6 and 9 the background concentration for nickel is <0.01 mg/L.

The concentration of nickel in wells MW7 (19.6 ug/L) and MW8 (26.0 ug/L) was at least double the concentration of the background wells (<10 ug/L). The background wells were reported as being less than the detection limit for nickel. Nickel was determined to be above background (> 10 ug/L) in wells MW7 and MW8. Therefore, wells MW7 and MW8 should be in assessment. Wells determined to be in assessment are required to be sampled semiannually according to OAC Rule 3745-30-08(E)(4). In order to return to compliance the owner/operator needs to sample wells MW7 and MW8 according to OAC Rule 3745-30-08(E)(4) as soon as possible and continue to be sampled on a semiannual basis.

2. **U.S. Gypsum Company is in violation of OAC Rule 3745-30-08(E)(2) requiring the determination of the rate and extent of migration of the waste-derived constituents in the ground water in the time frame specified in the submitted ground water quality assessment plan. The owner/operator did not submit the determination by December 2009 as detailed on Table 15 of the ground water quality assessment plan. The owner/operator needs to submit a report containing the determination of the rate and extent of migration of the waste-derived constituents in the ground water in order to return to compliance with OAC Rule 3745-30-08(E)(2).**

According to the Groundwater Quality Assessment Plan (GWQAP) dated April 2007, page 20, Section 6.0, "...The first determination of the concentrations and the rate and extent of migration of waste-derived constituents in the groundwater will be made within the time frame specified on the Estimated Schedule of Assessment Activities presented on Table 15...". Ohio EPA's letter dated February 12, 2010, contained this reminder for the owner/operator, "**This is a reminder that, according to the Groundwater Quality Assessment Plan dated April 2007, Table 15, the first determination of rate, extent and concentrations of the waste derived constituents was estimated to be completed by December 2009.** According to Kelly Bensman, Hull and Associates would like to have a technical meeting to discuss new developments with the assessment monitoring." A report has not been received by Ohio EPA and no meeting was ever scheduled as of the date of this letter.

#### **More Information Needed to Determine Compliance**

3. **Compliance with Ohio Administrative Code (OAC) Rule 3745-30-08(C)(1), requiring consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality, cannot be determined at this time. The owner/operator needs to provide to the Ohio EPA the case narrative included with the results for the October/December 2009 sampling events.**

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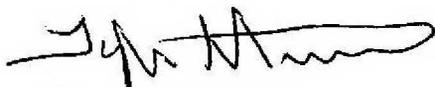
According to page 15 of 15, under Certification Summary, "... shall be documented on the Chain of Custody and/or Case Narrative included with this report." The Ohio EPA needs to review the case narrative to insure the data are representative of the ground water quality. This comment was included in Ohio EPA's letter dated November 5, 2009, concerning the review of the May 2009 sampling data, and the letter dated February 12, 2010, concerning the review.

4. **Compliance with Ohio Administrative Code (OAC) Rule 3745-30-08(E)(6), requiring the owner/operator to continue to determine the rate, extent and concentrations of the waste derived constituents semiannually, cannot be determined at this time. The owner/operator needs to explain how the report submitted to Ohio EPA meets this requirement, and needs to submit maps showing the extent and concentrations of the waste derived constituents with every semiannual report including this report.**

The report does not contain maps of the extent and concentrations of the assessment parameters. The narrative portion of the report does not describe the extent and concentrations of the assessment parameters. This comment was included in Ohio EPA's letter dated November 5, 2009, concerning the review of the May 2009 sampling data. According to Kelly Bensman of Hull and Associates, Inc., the response to the November 5, 2009, letter was to be submitted the week of January 18, 2010. Ohio EPA has not received the response.

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

Sincerely,



Tyler Madeker, R.S.  
Environmental Specialist  
Division of Solid and Infectious Waste Management

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pc: Jack Leow, DDAGW-NWDO  
William Petruzzi, Hull & Associates, Inc.  
~~File: Ottawa County, US Gypsum, groundwater~~

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