Ohio EPA
40 years and moving forward

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Re: Residual Waste Landfill
Groundwater
Notice of Violation

June 14, 2013

Mr. Andy Cvitkovich, Engineering Manager
United States Gypsum Company
121 South Lake Street
Gypsum, Ohio 43433

Dear Mr. Cvitkovich:

The United States Gypsum Company (owner/operator) has a class III closed residual waste landfill that is located in Portage Township, Ottawa County, Ohio. The owner/operator is currently required to perform ground water detection monitoring and assessment monitoring activities at the facility.

On September 28, 2012, the Ohio Environmental Protection Agency (Ohio EPA) met with the owner/operator and their consultants (Hull & Associates, Inc.) to discuss draft revisions to the facility's ground water quality assessment plan. During this meeting the owner/operator proposed moving forward with an approach to address the assessment areas by entering into a compliance monitoring program or a corrective measures program. Subsequently, on November 1, 2012, Ohio EPA met with Hull & Associates, Inc. (Hull) during a technical meeting to discuss additional geologic information compiled since the September 28, 2012 meeting. Then, on February 19, 2013, Ohio EPA meet with the owner/operator and Hull to discuss ground water flow at the facility and the designation of upgradient/reference wells in order to move the assessment monitoring program forward into a compliance monitoring program or a corrective measures program. At the conclusion of the February 19, 2013, meeting, disagreement with regards to ground water flow still remained and it was apparent that continued discussions with the facility would be needed in order to move the facility forward and address the outstanding violations.

On January 22, 2013, Ohio EPA Northwest District office received a document titled *Statistical Report of Groundwater Quality* for the November 2012 sampling event (dated January 2013), from Hull & Associates, Inc., on behalf of the owner/operator. The submittal provides data and information relating to the 2012 annual detection and semi-annual assessment sampling events conducted November 7-10, 2012. The submittal was reviewed to determine compliance with OAC Rule 3745-30, an approved Closure Plan, and the Director's Findings and Orders (dated October 12, 1994). Below are Ohio EPA's findings from the review.

COMMENTS

Evaluation of Owner/Operator's Response to Previously Cited Violations

1. **In a letter dated October 12, 2010, the Ohio EPA initially cited the owner/operator in violation of Ohio Administrative Code (OAC) Rule 3745-30-08(E)(2) as the first determination of rate, extent and concentration of waste-derived constituents had not been submitted to Ohio EPA in the time frame specified in the submitted ground water quality assessment plan (GWQAP). While this violation of OAC Rule 3745-30-08(E)(2) remains outstanding, Ohio EPA understands that the owner/operator has been in the process of addressing this violation. It is anticipated that this violation will be addressed once discussions with the owner/operator regarding moving the assessment program forward into a compliance monitoring program or a corrective measures program are complete.**

2. **In a letter dated May 23, 2012, the Ohio EPA cited the owner/operator in violation of OAC Rule 3745-30-08(D)(10) as the owner/operator did not sample MW-1 and MW-3 for the parameters listed in Appendix II of OAC Rule 3745-30-08 after determining two consecutive statistically significant increases at each well location. While this violation of OAC Rule 3745-30-08(D)(10) remains outstanding, Ohio EPA understands that the owner/operator is in discussions with Ohio EPA regarding this violation. It is anticipated that this violation will be addressed once discussions with the owner/operator regarding moving the assessment program forward into a compliance monitoring program or a corrective measures program are complete.**

   On February 19, 2013, Ohio EPA met with the owner/operator to discuss ground water flow at the facility and the designation of upgradient/reference well locations. The owner/operator stated they believe that MW-1 and MW-3 are upgradient monitoring wells and that any statistical exceedances identified for ground water in the vicinity of these monitoring wells are not attributed to the landfill. Ohio EPA disagreed and maintained that due to the unique hydrogeologic conditions beneath the facility (extensive mining and connection to Sandusky Bay), the historical ground water flow directions beneath the facility have varied, and MW-1 and MW-3 have been downgradient from the limits of waste placement periodically. Ohio EPA also maintains that due to the extremely flat hydraulic gradient across the facility, the owner/operator may be misinterpreting ground water flow in the vicinity of MW-1, MW-2, and MW-3. These well locations may be downgradient of the limits of waste placement. Therefore, any statistically significant increases observed at these wells may be due to a release from the facility.

Violations

3. **The United States Gypsum Company (owner/operator) is in violation of OAC Rule 3745-30-08(C)(7), requiring that the owner/operator determine whether or not there is a statistically significant increase from background values for each parameter required by paragraph (D), (E), or (F) of OAC 3745-30-08, as applicable. The owner/operator failed to determine whether statistically significant increases for specific conductance occurred during the November 2012 detection monitoring sampling event. In order to return to compliance with this rule, the owner/operator needs to provide Ohio EPA the statistical analysis for specific conductance from the November 2012 detection monitoring sampling event.**

   Specific conductivity data was collected during the November 2012 sampling event and was required to be utilized for statistical evaluation with the results being submitted to Ohio EPA.

   The owner/ operator needs to immediately take the necessary measures to return to compliance with Ohio's environmental laws. Within 14 days of receipt of this letter, the owner/operator is requested to provide documentation to this office including the steps taken to abate the violation cited above. Documentation of steps taken to return to compliance includes written correspondence, updated policies, and photographs, as appropriate, and may be submitted via the postal service or electronically to tyler.madeker@epa.ohio.gov.

   Please be advised that violations cited above will continue until the violations have been properly abated. Failure to comply with Chapter 3734 of the Ohio Revised Code and rules promulgated thereunder may result in a civil penalty of up to $10,000 per day for each violation. It is imperative that you return to compliance. If circumstances delay the abatement of violations, the owner/operator is requested to submit written correspondence of the steps that will be taken by date certain to attain compliance.

Statements

4. **Ohio EPA does not agree with the owner/operator's statement that monitoring wells MW-1, MW-2, and MW-3 are located hydraulically upgradient of the landfill and does not agree that notification of statistical significance is not required. Ohio EPA now considers MW-2 an affected monitoring well due to two consecutive statistically significant increases of the indicator parameter temperature.**

The owner/operator depicts MW-1, MW-2, and MW-3 as currently being upgradinet of the limits of waste placement. Ohio EPA maintains that due to unique hydrogeologic conditions beneath the facility (extensive mining operations and connection to Sandusky Bay), the historical ground water flow pattern beneath the facility has varied and that MW-1, MW-2, and MW-3 have been downgradient of the limits of waste placement periodically. Further, Ohio EPA believes that based on the extremely flat hydraulic gradient beneath the facility, there is also a possibility that MW-1, MW-2, and MW-3 are currently downgradient of the limits of waste placement. Therefore, any statistically significant increases observed at monitoring wells MW-1, MW-2, and MW-3 may be due to the landfill.

The owner/operator is reminded that monitoring wells MW-1 and MW-3 have had two consecutive statistically significant increases for the indicators parameters temperature and chloride, respectively, and are considered affected wells in the assessment monitoring program. This issue was brought to the owner/operator's attention in an Ohio EPA letter dated May 23, 2012. As discussed above, Ohio EPA and the owner/operator are working towards moving the assessment program forward into a compliance monitoring program or a corrective measures program. It is anticipated that the above referenced issues will be addressed following discussions with the owner/operator in the near future.

If the owner/operator has any questions, please contact Chad Zajkowski, Division of Drinking and Ground Waters, Northwest District Office, Ohio EPA, at (419) 373-3097. All submittals should be sent to Tyler Madeker, Division of Materials and Waste Management, Northwest District Office, Ohio EPA, 347 North Dunbridge Road, Bowling Green, Ohio, 43402.

Sincerely,

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

/cg

pc: William Petruzzi, Hull & Associates, Inc.
File: DMWM-SW, Ottawa County, US Gypsum, Groundwater
ec: Habib Kaake, DMWM-NWDO
Mike Reiser, DMWM-NWDO
Chad Zajkowski, DDAGW-NWDO
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