Ohio | Environmental Protection Agency

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

Re: GMPT Landfill, Defiance County
Ground Water

December 22, 2010

Mr. Chuck Renn
Environmental Engineering
General Motors Powertrain
P. O. Box 70
Defiance, Ohio 43512-0070

Dear Mr. Renn:

On November 12, 2010, the Ohio Environmental Protection Agency (Ohio EPA), Division of Solid and Infectious Waste Management (DSIWM), Northwest District Office (NWDO) received a submittal titled "Response to Ohio EPA Comments Dated September 20, 2010". The submittal was dated November 10, 2010, and served as a response to Ohio EPA comments regarding the April 26-28, 2010, semi-annual sampling event. This submittal was reviewed to determine compliance with OAC Rule 3745-30-08.

COMMENTS

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

1. **The issues of Comment No. 1 of the September 20, 2010, letter from Ohio EPA remain outstanding. <u>GMPT-Defiance continues to be in violation of OAC Rules 3745-30-08(C)(6)(f) and (C)(5) regarding its methods of statistical analysis.</u>**

   Comment No. 1 of the September 20, 2010, letter from Ohio EPA stated that *"GMPT-Defiance continues in violation of OAC Rules 3745-30-08(C)(6)(f) and (C)(5) regarding its methods of statistical analysis…"*.

   OAC Rule 3745-30-08(C)(6)(f) requires that the statistical method, if necessary, include procedures to control or correct for spatial variability in the data. OAC Rule 3745-30-08(C)(5) requires that the statistical method ensure protection of human health and safety and the environment and to comply with the performance standards outlined in OAC Rule 3745-30-08(C)(6).

   The violation of these rules has been cited because there appears to be a high degree of spatial variability in the upgradient concentrations of sulfate and TDS, yet the statistical analysis procedures for these constituents have not been revised to control or correct for this spatial variability.

   In response, the submittal states *"GM maintains its position that the RCRA rules (from which OAC 3745-30-08 was derived) never intended that ground water data for naturally occurring constituents be subjected to rigorous statistical rules without regard for the fact that the data reflects naturally occurring inorganic compounds that are expected to vary across a mile wide site. In fact, the RCRA rules envisioned using intra-well comparisons for ground water data only in the case where a background database can be established before the unit is built (Greenfield site). GM specifically disagrees with the use of the terms "high degree of spatial variability" as this is a subjective statement. GM would like to remind the Ohio EPA that GM has responded to and denied this alleged violation several times including in letters dated May 31, 2008, August 28, 2008, October 30, 2008 and April 14, 2010"*.

Ohio EPA offers the following comments regarding GM's response.

1a. While the RCRA rules have had an effect on the writing of the DSIWM rules, the DSIWM rules do not have the same intent as the RCRA rules as they are intended to regulate different types of facilities and processes and accomplish different objectives.

Further, the Federal Register (Vol. 47, No. 143 page 32305) states that the list of constituents to be monitored may include non-hazardous indicator parameters as these constituents assist in providing a reliable indication of potential releases from the landfill to ground water.

For the DSIWM rules, OAC Rule 3745-30-08(D)(4) requires that ground water data for indicator parameters be subjected to statistical analysis. Further, in accordance with Appendix III B of the rule, sulfate and TDS are appropriate indicator parameters for the waste type disposed of at GM.

As discussed with GM at the August 5, 2010, meeting and detailed in Ohio EPA's last correspondence and supported by U.S. EPA Unified Guidance, intra-well statistical comparison methods may be used to address the presence of spatial variability provided it can be demonstrated that the spatial variability is not the result of a release from the regulated waste unit.

To ensure that spatial variability is identified and not mistaken for downgradient contamination, the installation of multiple upgradient wells is encouraged. If spatial variability is identified as supported by upgradient wells, and downgradient wells are within a justifiable natural variability range then intra-well statistical methods may be used to address the spatial variability and to identify future statistical increases in concentration.

The multiple upgradient wells at the facility have identified multiple background populations (termed spatial variability). Data from these multiple upgradient wells with different populations cannot be lumped together as if they represent a single background population. As informed in the August 5, 2010, meeting and earlier correspondence, GM is in violation of OAC Rule 3745-30-08(C)(6)(f) for not employing statistical method procedures to control or correct for spatial variability.

1b. Regarding the statement that GM specifically disagrees with the use of the terms high degree of spatial variability, Ohio EPA reminds GM that the March 19, 2008, letter from GM stated *"Similar to iron, the upgradient wells have also exhibited a high degree of spatial variability with respect to sulfate and TDS concentrations."*.

1c. Ohio EPA realizes that GM has repeatedly denied this alleged violation. However, Ohio EPA continues to maintain that the cited violation stands valid.

Statements

2. **The September 20, 2010, letter from Ohio EPA contained five (5) comments regarding the April 2010 semi-annual sampling event. Comment No. 2 of the September 20, 2010, letter was adequately addressed and Comments No. 3, 4 and 5 of the September 20, 2010, letter did not require a response. However, as detailed in Comment No. 1 above, Comment No. 1 of the September 20, 2010, letter has not been adequately addressed.**

If you have any questions, please feel free to contact Ken Brock at the Ohio EPA Northwest District Office at 419-373-3143. Any written correspondence should be sent to the attention of Brent M. Goetz, Division of Solid and Infectious Waste Management, Ohio EPA Northwest District Office, 347 N. Dunbridge Road, Bowling Green, Ohio 43402.

Sincerely,

Brent M. Goetz, R.S.
Environmental Specialist
Division of Solid and Infectious Waste Management

/cs

pc: Tamara Moorman, Haley & Aldrich
~~NWDO File: Defiance County, GMPT Landfill, Ground Water~~

ec: Jack Leow, DDAGW, NWDO
Ken Brock, DDAGW, NWDO
Mike Reiser, DSIWM, NWDO

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