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OhioEPA

State of Ohio Environmental Protection Agency

Southwest District Office

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

November 19, 2009

Bruce Evilsizor
Director of Administration
City of Urbana
205 South Main Street
Urbana Ohio 43078

RE: May/June 2009 Semiannual Ground-Water Sampling Report
City of Urbana Closed Landfill, Champaign County, Ohio
Notice of Violation

Dear Mr. Evilsizor:

At the request of the Division of Solid and Infectious Waste (DSIWM), the Division of Drinking and Ground Water (DDAGW) has reviewed Urbana's *May/June 2009 Semiannual Ground-Water Sampling Report* received by the Ohio EPA Southwest District Office (SWDO) on August 27, 2009. The following violations and comments are a result of that review:

Notice of Violation

1. City of Urbana is in violation of OAC Rule 3745-27-10(C)(10) requiring the owner/operator to submit sample results not later than seventy-five (75) days after sampling the well. The Ohio EPA, SWDO received sample results on August 27, 2009, one hundred eight (108) days after the first well was sampled (May 4, 2009). To prevent further violations the City of Urbana must submit results within 75-days of sample collection.

2. The City of Urbana is in violation of OAC Rule 3745-27-10(C)(2)(g) requiring the owner/operator to comply with the field and laboratory quality assurance and quality controls including the collection of the specified number of duplicates, equipment blanks, and trip blanks according to the Sampling and Analysis Plan (SAP). The May/June 2009 Semi-Annual Groundwater Sampling Event failed to follow several procedures in the SAP and collect the prescribed quantity of quality assurance/quality control (QA/QC) information. To prevent future violations the City of Urbana must follow the Sampling and Analysis Plan (SAP) Revised December 2008.

Recommendations

3. The Spring 2009 sampling event was conducted from May 4 through June 4, 2009. The duration of this sampling event, thirty-one (31) days is not acceptable. Not only does an exceptionally long sampling event makes it difficult to stay in compliance with 75-day reporting requirement of OAC 3745-27-10(C)(10), but also makes it more difficult for the facility to follow and adhere to the Sampling and Analysis Plan (SAP). Specifically, the SAP states one equipment blank will be collected for each three (3) days of sampling for each sampling method. Duplicate samples will be collected for every twenty (20) samples and/or for every three (3) days of sampling. Based on a sampling event taking thirty-one (31) days, ten (10) equipment blanks and ten (10) duplicate samples should have been collected pursuant to the SAP. One (1) duplicate sample, three (3) equipment blanks, and three (3) field blanks were analyzed, far short of the SAP requirement of twenty. Four (4) trip blanks were analyzed while seven (7) separate deliveries were made to the laboratory. This indicated some well samples did not have trip blanks as companions during this event.

   In order to keep the QA/QC samples to a reasonable quantity and prevent further violations, the City of Urbana must keep the sampling event limited to a reasonable duration. It is recommended the City of Urbana have a goal of one week goal for each sample event with contingency plan(s) in place to address any problems for events lasting longer than ten (10) days at this facility.

4. The Ohio EPA understands the City of Urbana has a new point of contact on matters relating to the Landfill - City of Urbana employee; Mr. Bruce Reye. Mr. Reye is encouraged to contact this office at (937) 285 6357, with any questions or concerns that may arise. The City management is encouraged to provide staff with adequate training to allow for in house sampling. Continuing education, specifically sampling training would be beneficial for the field crew.

5. The City of Urbana had indicated problems arose during this sampling event including equipment and vehicle malfunctions. Many of these problems could have been lessened by establishing contingency plan(s) including pre-approved rental agreements for backup equipment including four-wheel drive vehicles, power supply/generators, field meters, and/or sampling equipment when necessary. As demonstrated during this sampling event, especially important is having additional or back-up of the sampling equipment including more than one ground water sampling pump. While it is understood installation of dedicated pumps in select well may be difficult and expensive, non-the-less, it is recommended the facility have a goal to phase-in, and budget for, dedicated and/or backup pumps. The City of Urbana has multiple years of future sampling pursuant to rule, and hopefully will initiate contingency plans to prevent or lessen similar problems from occurring during future sampling events.

The Ohio EPA Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring (TGM), provides the following useful guidance on sampling equipment:
http://www.epa.ohio.gov/portals/28/documents/TGM-10_final0206W.pdf

- ***Operation and Maintenance*** *- The device should be easy to operate and maintain. If personnel are not properly trained, the margin of potential error is greater. The device should be designed for in-field maintenance. Mechanically simple equipment that can be easily repaired with inexpensive, replaceable parts is preferable. If decontamination is necessary, the device should be easy to decontaminate. Devices that are constructed to minimize the surface area contacting ground water samples and that are easy to disassemble and reassemble are best. Use of dedicated or disposable equipment at each well or sampling point eliminates the need for decontamination, saving valuable field time and reducing the potential for cross contamination of samples.*

- ***Device reliability, durability, and portability*** *- The device should operate reliably for extended periods and be able to withstand a variety of chemical and physical environments. Dedicated equipment may need to withstand extended contact with ground water and any existing contamination. Equipment that is transported into locations where access is limited should be sufficiently portable. Excess weight and volume of battery packs, generators, air compressors, tubing, etc. can limit portability.*

- ***Capital, operation, and maintenance costs*** *- These should be considered, however, they should not be overriding factors. Obtaining a sample that is representative of site conditions should be of more importance than cost, particularly when the costs of well installation, chemical analysis, and possible litigation resulting from discrepant analytical results are considered. These costs often far outweigh equipment purchase costs (Nielsen and Yeates, 1985).*

If you have any questions or need additional information please contact Greg Brown or me at (937) 285-6357.

Sincerely,

Jill Olberding

Jill Olberding, R.S.
Environmental Specialist
Division of Solid and Infectious Waste Management

cc: Greg Brown. Ohio EPA/SWDO/DDAGW
ec: Shelia Hiddleson, RN, MS, Champaign County Health District
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