



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

January 24, 2013

**RE: ZOLLINGER C&DD LANDFILL
NOTICE OF VIOLATION
GROUND WATER
WAYNE COUNTY**

Mr. Rudy Zollinger
Zollinger C&DD Landfill
11899 Easton Road
Rittman, Ohio 44270

Dear Mr. Zollinger:

On September 14, 2012, the Ohio Environmental Protection Agency (Ohio EPA), Division of Materials and Waste Management (DMWM), Northeast District Office (NEDO) received a document entitled *2013 License Application*, dated August 30, 2012 for Zollinger Construction and Demolition Debris Landfill (Zollinger C&D) located at 11899 Easton Road, Rittman, Chippewa and Milton Townships, Wayne County. A portion of the *2013 License Application* was submitted under separate cover on October 1, 2012 to Ohio EPA, DMWM, NEDO and was entitled *2012 Annual Ground Water Sampling and Analysis Results* and was dated September 29, 2012. The *2012 Annual Ground Water Sampling and Analysis Results* was submitted as partial fulfillment of Ohio Administrative Code (OAC) Rule 3745-400-09 and 10 and was submitted by GMM on behalf of Zollinger C&D.

The *2012 Annual Ground Water Sampling and Analysis Results* contains analytical summary tables, Ground Water Monitoring Network Map, Ground Water Flow Map, resultant analytical laboratory data, field information forms, a discussion of results, and QA/QC information and data for the July 2012 sampling and analysis of leachate and ground water.

Zollinger C&D Landfill is regulated by the construction and demolition debris (C&DD) regulations, effective August 31, 2002. Ohio EPA reviewed the 2012 ground water monitoring results to determine whether or not the ground water monitoring system continues to meet the requirements of OAC 3745-400-10, and that the required 2012 annual ground water sampling and analysis activities were properly conducted and reported. Upon review, Ohio EPA has identified the following violation:

1. **OAC Rule 3745-400-10(A)(1)**: *"The ground water monitoring well system shall include a sufficient number of background and downgradient monitoring wells,*

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installed at appropriate locations and depth, to yield ground water samples from the first continuous significant zone of saturation underlying the facility.”

Upgradient Monitoring Well

Zollinger C&D has not collected a ground water sample from an upgradient ground water monitoring well within the first continuous significant zone of saturation underlying the facility.

Zollinger C&D should revise the Ground Water Monitoring Program Plan to include sampling and analysis of a minimum of one upgradient ground water monitoring well installed to the sand and gravel hydrostratigraphic unit underlying the facility. Beginning with the annual sampling event in 2013, Zollinger should implement sampling of the upgradient well(s).

Upon review of the document, the following deficiency has been identified:

1. **OAC Rule 3745-400-(B)(1)**: *“The ground water quality data required by paragraph (C) of this rule displayed using tables, trilinear diagrams, stiff diagrams, time vs concentration plots or any other format deemed appropriate by the qualified ground water scientist. The report shall describe any significant ground water quality changes over time and differences between upgradient and downgradient wells.”*

Zollinger C&D discusses relative maximum concentrations of parameters from the current sampling event to previous sampling events and historical concentrations. This is insufficient to adequately describe ground water quality changes over the monitoring period.

Zollinger C&D should revise the Ground Water Monitoring Program Plan to indicate that in addition to tables and narrative discussion, Zollinger C&D will utilize piper trilinear diagrams, stiff diagrams, and time series plots or another format which is capable of adequately describing the resultant analytical laboratory data and ground water quality changes over the monitoring period.

Upon review of the document, it has been determined that more information is needed to determine compliance with the following:

1. **OAC Rule 3745-400-10(A)(1)**: *“The ground water monitoring well system shall include a sufficient number of background and downgradient monitoring wells,*

installed at appropriate locations and depth, to yield ground water samples from the first continuous significant zone of saturation underlying the facility.”

Potentiometric Surface Map

Due to significant differences in the potentiometric surface map submitted with the *Site Characterization Report* and the potentiometric surface map submitted with the *2012 License Renewal Application*, periodic pumping of significant quantities of ground water from several excavations, and the low gradient between identified downgradient ground water monitoring wells MW-1, MW-2, and MW-3 of ≤ 0.01 ft/ft, it is unclear as to the ability of the potentiometric surface map to demonstrate that the ground water monitoring system complies with **OAC Rule 3745-400-01(A)(1)**.

Zollinger C&D should revise the Ground Water Monitoring Program Plan to indicate that ground water elevation measurements will be obtained from all of the currently installed ground water monitoring wells installed into the sand and gravel hydrostratigraphic unit underlying the facility. These additional ground water elevation measurements should then be utilized to develop a more precise and accurate potentiometric surface map to be submitted with the annual license renewal application. Upon development of a more detailed potentiometric surface map, Ohio EPA will be capable of determining the facility's compliance status with **OAC Rule 3745-400-01(A)(1)**.

2. **OAC Rule 3745-400-10(A)(1)**: *“The ground water monitoring well system shall include a sufficient number of background and downgradient monitoring wells, installed at appropriate locations and depth, to yield ground water samples from the first continuous significant zone of saturation underlying the facility.”*

Integrity of MW-3

As discussed above, the current Ground Water Monitoring Program Plan is not currently utilizing a sufficient number of ground water monitoring wells at appropriate locations to determine the quality of water up and downgradient of the facility.

Therefore, it is unclear as to whether the elevated concentrations of Alkalinity, COD, Sodium, Chloride, and Sulfate at ground water monitoring well MW-3 are due to a release from the facility or that the integrity of MW-3 has been compromised.

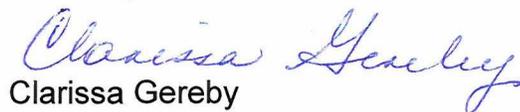
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Zollinger C&D should develop and implement a plan to evaluate the integrity of ground water monitoring well MW-3.

Please respond within 45 days of receipt of this correspondence. Please contact Jeffrey Rizzo at (330) 963-1115 if you have any technical questions regarding this review. Otherwise, please submit all correspondence to Clarissa Gereby, Division of Materials and Waste Management, Northeast District Office, Ohio EPA, 2110 East Aurora Road, Twinsburg, Ohio 44087.

Nothing in this letter shall be construed to authorize any waiver from the requirements of any other applicable federal or state laws or regulations except as specified herein. This letter shall not be interpreted to release the owner or operator from responsibility under Ohio Revised Code (ORC) Chapters 3704, 3714, 3734, or 6111; under the Federal Clean Water Act, the Resource Conservation and Recovery Act, or the Comprehensive Environmental Response, Compensation, and Liability Act; or from other applicable requirements for remedying conditions resulting from any release of contaminants to the environment.

Sincerely,



Clarissa Gereby
Environmental Specialist
Division of Materials and Waste Management

CG/cl

cc: John Hujar, DMWM, NEDO
Jeff Rizzo, DDAGW, NEDO
Ken Eng, Wayne County Health Department
File:[Singh/CONS/Zollinger C&DD Landfill/ GRO/85]
DMWM # 4683