



State of Ohio Environmental Protection Agency

Southeast District Office

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Ted Strickland, Governor
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Chris Korleski, Director

September 10, 2007

**RE: LAWRENCE COUNTY
FAC - HANGING ROCK LANDFILL
I.D. 44-00-02**

Mr. Timothy M. Dickens, Manager
Hanging Rock Landfill Co., Inc.
P.O. Box 100
Ironton, Ohio 45638-0100

Dear Mr. Dickens:

RE: Annual Detection Monitoring Statistical Evaluation Report for the May 2007 Sampling Event; May 2007 MW-6 Compliance Monitoring Report, for the Hanging Rock Landfill Complex (Exempt Waste Site & Industrial Waste Monofill), ID# 44-00-02, Lawrence County, Ohio.

Ohio EPA has completed a review of the Ground Water Detection Monitoring Statistical Evaluation Report for 2007 at the Hanging Rock Landfill Complex in Lawrence County. Ohio EPA also reviewed the Ground Water Compliance Monitoring Report for MW-6. Both reports were received by Ohio EPA on July 30, 2007. The reports were prepared by R. Bruce Bowers of EScience in Parkville, MO., on behalf of Timothy M. Dickens, Manager of the Hanging Rock Landfill Company, Inc.

The ground water monitoring system at the Hanging Rock Landfill Complex currently consists of six down gradient detection monitoring wells installed into the Lower Kittanning Sandstone and one valley seep. Hanging Rock recently received approval from Ohio EPA (June 12, 2007) to change the frequency of their Ground Water Detection Monitoring Program from semi-annual to annual. The submission of their most recent Detection Monitoring Statistical Evaluation Report was the first "annual" report received following this approval. Based on Hanging Rock's second revision to its First Determination Report (December 2004), Ohio EPA concluded that waste-derived constituents entered ground water in the vicinity of the regulated disposal cell adjacent to MW-6. Hanging Rock requested, in lieu of entering the Corrective Measures Program, that it enter the Compliance Monitoring Program as allowed by Ohio Administrative Code (OAC) 3745-30-08 (E)(7). Further review of the Compliance Monitoring Plan is taking place following a review of the most recent ground water monitoring data received from Hanging Rock.

Annual Statistical Evaluation Report for the May 2007 Sampling Event

Hanging Rock is in violation of **(OAC)3745-30-08(D)(8)**, **Hanging Rock failed to notify the agency of the statistically significant determination for chloride at monitoring well MW-4. Hanging Rock must now comply with the requirements of 3745-30-08(D)(8) through (D)(12) as per the schedules stated in the rule.**

OAC 3745-30-08(D)(8) If at any monitoring well, the owner or operator determines, for two consecutive semi-annual statistical determination periods, that there has been a statistically significant increase (or change in the case of ph) from background values for one or more of the applicable indicator parameters specified in Appendix III of this rule according to the statistical

method specified by the owner or operator pursuant to paragraphs (5), (6), and (d)(9) of this rule, the owner or operator shall notify Ohio EPA not later than fifteen days after receiving the second period's statistical or analytical results which indicate a statistically significant change. The notification must indicate which parameters have shown a statistically significant change from background levels.

As in past discussions with Hanging Rock regarding the interpretation of ground water data, Ohio EPA does not fully accept the false positive natural variation explanations offered by EScience for increasing chloride levels at MW-4.

May 2007 Compliance Monitoring Report for MW-6

A Compliance Monitoring Plan for MW-6 at Hanging Rock Landfill was submitted to Ohio EPA in April, 2007; however, the plan has not yet been approved for this site. Therefore, the MW-6 results submitted by Hanging Rock in its May 2007 Compliance Monitoring Report were analyzed and reported according to an unapproved plan.

This is a violation of OAC 3745-30-08(C)(1) & (C)(8), which requires owners and operators of landfill facilities to use the methods documented in their sampling and analysis plans, and then report that ground water data in the appropriate form as specified by the director. Since Hanging Rock collected all the necessary ground water data during their May 2007 sampling event, no additional data collection is required. However, **Hanging Rock must re-submit to Ohio EPA Table 1 and Table 2 of its Semiannual Statistical Evaluation Report. The revised Tables 1 & 2 should include the interwell and intrawell statistical analysis of MW-6 data as per past semiannual reports submitted by Hanging Rock.**

RECOMMENDATIONS

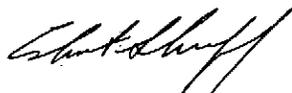
1. Ohio EPA noted that Hanging Rock failed to report historic data for TCE and Ethyl benzene in its unapproved Compliance Monitoring Report. **To avoid a reporting violation in a future Compliance Monitoring Report, complete and accurate data sets for these constituents will be required as per 3745-30-08(C)(8).**
2. The reappearance of ethyl benzene and trichloroethylene (TCE) in MW-6 ground water data during the May 2007 sampling event has resulted in the re-evaluation of the currently proposed Compliance Monitoring Program by Ohio EPA. It is now the agency's recommendation that concentration levels (or groundwater trigger levels [GTLs]) for TCE and ethyl benzene be a part of an acceptable Compliance Monitoring Program for Hanging Rock's monitoring well MW-6. They are currently not included in the proposed plan. **Please revise the currently proposed version of the Compliance Monitoring Plan for MW-6 to include concentration levels equal to the maximum contaminant level for each constituent: TCE (5 ppb) and Ethyl benzene (700 ppb).**
3. With respect to the results at seep 1, Ohio EPA is in agreement with Hanging Rock that this seep is currently functioning as an acceptable down gradient monitoring point for the landfill. No landfill impacts are currently apparent.

Please contact Clint Shuff or Steve Saines at Ohio EPA to discuss options/ideas for an expedited assessment program for MW-4. It may be possible to include MW-4 into the revised Compliance Monitoring Program for MW-6, referenced in comment #6 below.

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Hanging Rock Landfill Complex, Lawrence County
September 10, 2007
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If you have any further questions, feel free to contact me at (740) 380-5246 or Steve Saines at (740) 380-5445.

Sincerely,



Clint Shuff, R.S.
Environmental Specialist
Division of Solid and Infectious Waste Management

CS/jg