



State of Ohio Environmental Protection Agency

**Southeast District Office**

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Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
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August 7, 2007

**HARRISON COUNTY  
HARRISON COUNTY GARAGE  
DHWM/SEDO  
OHD 987 021 177**

Mr. Robert Sterling  
County Engineer  
Harrison County Courthouse  
100 West Market Street  
Cadiz, Ohio 43907

Dear Mr. Sterling:

On February 28, 2007, Ohio EPA SEDO received the document titled "Supplementary Annual Report for 2006 Post Closure Ground Water Monitoring Information" for the Harrison County Garage Storage Yard located in Cadiz, Ohio. The annual report provides a summary of site history, sampling events, and ground water analytical results for 2006. In addition, the report includes ground water elevation contour maps for each of the semi-annual sampling events. A CD containing monitoring well information and ground water quality data was also submitted with the Annual Report.

In summary, Harrison County collected semi-annual ground water samples from 8 monitoring wells on March 30, 2006 and September 19, 2006. The samples were analyzed for volatile organic compounds (VOC) by SW-846 method 8260 by Stark EnviroLabs, Inc located in Canton, Ohio. During 2006, no VOCs were detected in any of the monitoring wells.

Ohio EPA has completed a review of the 2006 Annual Report to determine compliance with Harrison County's Post Closure Plan and final status ground water monitoring requirements in accordance with OAC Rules 3745-54-90 through 3745-54-101.

The following violations of rule and violations of the Compliance Monitoring Sampling Analysis Plan (CMSAP) were noted.

**OAC Rule 3745-54-97 (D) and (E). General Ground Water Monitoring Requirements. (D) The ground water monitoring program must include procedures and techniques for sampling procedures and chain of custody controls. (E) The ground water monitoring program must include sampling**

**and analytical methods that accurately measure constituents. Section 5.0 of the CMSAP states that the annual report will include documentation of field sampling procedures and chain of custody.**

The Annual Report must adequately document field sampling procedures and chain of custody in accordance with these rules and the Compliance Monitoring Sampling and Analysis Plan. Field sampling and chain of custody forms were not provided in the submitted document.

Harrison County submitted this information on June 13, 2007 and returned to compliance for this violation. No further action is required.

### Recommendations

1. Section 5.0 of the CMSAP states that the annual report will include "method detection limit information". Although the lab data sheets do include an MDL for each analyte, this value is actually a reporting limit. It is expected that the laboratory is capable of achieving much lower method detection limits than indicated on the data sheets.

Ohio EPA request that Harrison County instruct Stark EnviroLabs to lower the reporting limits for VOCs to equal Practical Quantification Limits (PQLs).

Harrison County's analytical laboratory, Stark EnviroLabs, Inc., utilizes method 8260 for analysis of volatile organic compounds. The reporting limits (RLs) documented on the lab data sheets for VOCs appear to be elevated above practical quantification limits (PQLs). A PQL is the lowest concentration level that can be reliably achieved within the specified limits of precision and accuracy during routine laboratory operating conditions that are available to the lab.

In addition, Ohio EPA request that the laboratory report estimated values (J qualified) that are between the MDL and the PQL.

2. Ohio EPA requests that the laboratory include a case narrative in the analytical report for VOCs.

A case narrative includes a discussion of general QA/QC procedures and any anomalies, such as QA/QC sample results that did not meet acceptable limits. The client's name, associated sample ID numbers, U.S. EPA SW-846 method numbers, an evaluation of technical holding times and a discussion of potential QA/QC sample concerns should also be included. The narrative needs to be signed by the laboratory's QA Officer or the Laboratory Manager and include certification that all analyses were performed by SW-846 or other approved methods and meet any required standards.

3. HCG has requested to go to Annual sampling, Ohio EPA currently does not recommend annual sampling at this time. Prior to recommending annual sampling, Ohio EPA would like to ensure that the issues identified above are resolved. Ohio EPA would also like to have Steve Williams observe a round or two of ground water sampling, after which, HCG could re-request annual sampling.

Please feel free to contact me at 740-380-5239 should you have any questions.

Sincerely,



Jim Serra  
Division of Hazardous Waste Management

JS/dh

cc: Steve Williams, DDAGW  
Rick Bethel