



Department of Energy

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Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V - SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Thomas Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

USE OF OHIO ENVIRONMENTAL PROTECTION AGENCY INTERPRETATION ON CARBONATE CONTENT OF DRAINAGE LAYER ON-SITE DISPOSAL FACILITY

The Records of Decision for Operable Units 2, 3, and 5 list Ohio Administrative Code (OAC) 3745-27-08(C)(4)(a)(iv) as an applicable or relevant and appropriate requirement (ARAR). This requirement states that the leachate management system of a solid waste disposal facility must include a drainage layer composed of granular material that must not contain carbonate material. Due to the regional geology, it is likely that granular material purchased from a local vendor for use in the Fernald Environmental Management Project (FEMP) On-Site Disposal Facility (OSDF) will contain carbonate.

The Ohio Environmental Protection Agency (OEPA) Division of Solid and Infectious Waste Management (DSIWM) has written an interpretation entitled "Carbonate Content of Drainage Layer" (dated August 18, 1994). In this interpretation, DSIWM presents the following guidelines for carbonate content limits in the leachate collection system drainage layer and the cap system:

- Using the ASTM 3042, at a pH of 4.0, the carbonate content of the granular drainage material used in the leachate collection (bottom) system must be no greater than five percent ($\leq 5\%$) by weight.
- Using the ASTM 3042, at a pH of 4.0, the carbonate content of the granular drainage material used in the cap system must be no greater than ten percent ($\leq 10\%$) by weight.

The granular material used in the construction of the leachate drainage layer for the FEMP OSDF will meet these guidelines for carbonate content. To demonstrate compliance with these requirements, conformance tests (ASTM D 3042) will be performed on the granular drainage material at a frequency of one test per 5,000 yd³ in accordance with the OSDF Construction Quality Assurance Plan. The Department of Energy (DOE) requests the concurrence of the U.S. Environmental Protection Agency (U.S. EPA) and OEPA on this issue.

If you have any questions or comments, please contact Rod Warner at (513) 648-3156.

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Warner

cc:

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