



**Department of Energy**

**Ohio Field Office  
Fernald Area Office**

P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



**FEB 17 1998**

**DOE-0403-98**

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

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

**Dear Mr. Gene Jablonowski and Mr. Schneider:**

**RESPONSE TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON  
DRAFT SILOS 1 AND 2 PROOF OF PRINCIPLE TESTING SCOPE OF WORK**

Enclosed is a response to the referenced comments received from the Ohio Environmental Protection Agency (OEPA) January 6, 1998, on the draft Silos 1 and 2 Proof of Principle Testing Scope of Work. The response to the comments reflect the discussions held between the Department of Energy (DOE) and EPA, as well as the stakeholder's input from the Monthly Progress Briefing on January 13, 1998.

If you have any questions, please contact Nina Akgündüz at (513) 648-3110.

Sincerely,

**Johnny W. Reising  
Fernald Remedial Action  
Project Manager**

**FEMP:Akgündüz**

**Enclsoure: As Stated**

cc w/enc:

J. Saric, USEPA-V, SRF-5J  
R. Beaumier, TPSS/DERR, OEPA-Columbus  
M. Schupe, HSI GeoTrans  
R. Vandegrift, ODOH  
F. Barker, Tetra Tech  
S. M. Beckman, FDF/52-4  
T. Hagen, FDF/65-2  
J. Harmon, FDF/90  
D. A. Nixon, FDF/52-4  
D. Paine, FDF/52-4  
AR Coordinator, FDF/78

cc w/o enc:

N. Hallein, EM-42/CLOV  
A. Tanner, DOE-FEMP  
R. Heck, FDF/2  
S. Hinnefeld, FDF/2  
EDC, FDF/52-7

## Response To Comments from The Ohio Environmental Protection Agency (OEPA) On The Draft Silos 1 & 2 Proof Of Principle Testing - Scope Of Work

1) Comment: The Statement of Work document does not provide any information regarding durability testing or testing to assure reduction of radon emanation from the treated product. OEPA requests information be provided to address these concerns including test methods and acceptable limits.

Response: Durability testing and radon emanation studies will be performed at the University of Cincinnati for Silos 1 & 2 waste stabilized by the following technologies: Chemical Stabilization (Cement-based), Chemical Stabilization (Non Cement-based), Polymer-based Encapsulation and Sulphur Polymer Encapsulation. This data along with previous treatability study data will be utilized in the Revised Feasibility Study to perform the Detailed Analysis of Alternatives.

The following text provides information to address the OEPA concerns in regard to the Proof of Principle testing; no change to the Statement of Work is anticipated:

**Durability** - There are currently no regulatory requirements that specify test methods and limits for determining the durability of the treated waste form. The Waste Acceptance Criteria (WAC) for the Nevada Test Site (NTS) requires that the treated waste not exhibit characteristics of or be listed as a hazardous waste. Testing (Toxicity Characteristic Leaching Procedure) will be performed as part of the Proof of Principle program to determine if hazardous constituents are effectively immobilized in the treated surrogate. Compressive strength of the treated surrogate will be measured to insure stability of the waste form. There are however, no current limits or standards for compressive strength imposed by the NTS WAC or other regulatory requirements. Data on the characteristics of the treated waste form, as well as design of the disposal configuration, will be used in preparation of a Performance Assessment to demonstrate that disposal of treated Silos 1 & 2 waste will meet standards for protectiveness.

**Radon Emanation** - As you know, the Proof of Principle testing will be performed utilizing surrogate materials, therefore, measurement of radon emanation will not be possible. However, the scope of work requires the vendor to provide process design details to support the preliminary design basis of a full-scale remediation facility, including those systems and components necessary for containment and control of radon.

**Response To Comments from The Ohio Environmental Protection Agency (OEPA) On The Draft Silos 1 & 2 Proof Of Principle Testing - Scope Of Work**

2) Comment: It has been brought to the attention of the OEPA that during the bid process, a vendor, regardless of their qualifications, will only be allowed to bid for one family of technologies. This approach limits the number of bidders for any given technology family. In order to receive the best bids for a given technology, it would seem optimal for all qualified bidders to participate. Please provide a detailed justification for this process and explain how it is consistent with a competitive bid process.

Response: In response to OEPA concerns, in addition to, public interest expressed at the January 13, 1998 Clean-up Progress Briefing the Proof of Principle Request For Proposal will be modified to allow vendors to submit multiple proposals for those approved technologies in which they are qualified to perform.