



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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CHICAGO, IL 60604-3590

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REPLY TO THE ATTENTION OF: LIBRARY

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AUG 20 1999

Mr. Johnny W. Reising  
United States Department of Energy  
Feed Materials Production Center  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705

SRF-5J

RE: Final OU 1 RA Package

Dear Mr. Reising:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the United States Department of Energy's (U.S. DOE) final Operable Unit (OU) 1 Remedial Action (RA) Package and Responses to Comments (RTC).

The RTC adequately addressed U.S. EPA's previous comments and incorporated them into the final RA package. U.S. EPA has attached a few minor comments that require clarification.

Therefore, U.S. EPA approves the final OU 1 RA package. U.S. DOE must submit a response to comments and change pages addressing U.S. EPA's attached comments within thirty (30) days receipt of this letter.

Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,

James A. Saric  
Remedial Project Manager  
Federal Facilities Section  
SFD Remedial Response Branch #2

Enclosure

cc: Tom Schneider, OEPA-SWDO  
Bill Murphie, U.S. DOE-HDQ  
John Bradburne, FERMCO  
Terry Hagen, FERMCO  
Tom Walsh, FERMCO

TECHNICAL REVIEW COMMENTS ON  
"FINAL WASTE PITS REMEDIAL ACTION PROJECT (WPRAP)  
REMEDIAL ACTION PROJECT"

=- 2504

GENERAL COMMENTS

Commenting Organization: U.S. EPA  
Section #: Not applicable (NA)

Commentor: Saric

Page #: NA

Line #: NA

Original General Comment #: 1

Comment: The original comment requests that more consideration of the possibility of enriched uranium and other unexpected events be included in the document. Specifically, contingency plans for analysis of isotopes not currently specified, such as uranium-235 and fission products, should be included for wastewater and stormwater samples. DOE states that the analyses were chosen based upon criticality and meeting the requirements of the National Pollution Discharge Elimination System (NPDES) permits, which are primarily defined as total uranium rather than as isotopic uranium. The basis for the NPDES permit is the potential adverse effects of the discharge on human health and the environment. For radioactive materials, the primary health concern is the radioactivity. Because uranium-235 and fission products cesium-137 and strontium-90 have much higher specific activities (activity per mass) than natural uranium, a release of enriched uranium or of fission products might fall within the letter of the NPDES requirements but be far over the implicit health limits that are the rationale for those requirements. If unexpected materials such as enriched uranium and fission products are encountered during the WPRAP operations, excavation water and other waste streams may be significantly contaminated, especially with relatively soluble elements such as cesium and strontium. These contaminants have a high probability of passing through the water treatment systems and being discharged into the Great Miami River. Contingency plans

