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**OPERABLE UNIT 3 TREATABILITY STUDY WORK PLAN - ADDENDUM**

12/07/94

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LETTER



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**DEC 07 1994**

DOE-0250-95

Mr. James A. Saric, Remedial Project Director  
U.S. Environmental Protection Agency  
Region V - 5HRE-8J  
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Chicago, Illinois 60604-3590

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

Dear Mr. Saric and Mr. Schneider:

**OPERABLE UNIT 3 TREATABILITY STUDY WORK PLAN - ADDENDUM**

The purpose of this letter is to provide an update on studies which were proposed in the Final Operable Unit 3 (OU3) Treatability Study Work Plan (TSWP), approved by the United States Environmental Protection Agency (U.S. EPA) on April 13, 1994, and to discuss additional studies planned by the OU3 Treatability Program. The Final OU3 TSWP contained four study-specific appendices which provided the test plans for four treatability studies. In addition to the four proposed studies, the OU3 Treatability Program has identified and planned several more studies to be conducted. The text below describes the current status of each of the four proposed studies and also discusses the new studies.

The four studies proposed in the Final OU3 TSWP were: Chemical Conversion of Asbestos-Containing Material; Chemical Leaching; Vitrification of Asbestos-Containing Materials and Glass; and Vitrification of Mixed Waste. Below is a summary of the status of each study proposed.

Chemical Conversion of Asbestos-Containing Material - As indicated in a letter from the Department of Energy, Fernald Area Office (DOE-FN) to the U.S. EPA and Ohio Environmental Protection Agency (OEPA), this study was eliminated from the OU3 TSWP (Reference: Letter Number DOE-1588-94, dated June 01, 1994, from Jack Craig to James Saric and Tom Schneider, "Operable Unit 3 Treatability Study Work Plan - Addendum").

Chemical Leaching - A remedy screening chemical leaching study was performed on scabbled concrete. The final treatability report will be

sent to the U.S. EPA, OEPA, and the Risk Reduction Engineering Laboratory (RREL) Treatability Data Base upon completion. The scheduled completion date for this report is January 1995.

Vitrification of Asbestos-Containing Materials and Glass and Vitrification of Mixed Waste - The funding for these studies have been cancelled to allow the OU3 Treatability Program to refocus resources on immediate OU3 projects as described below.

The immediate OU3 projects requiring treatability studies to be funded in Fiscal Year 1995 support current OU3 Removal Actions, Hazardous Waste Management Unit (HWMU) closures, decontamination and dismantlement activities performed during the interim remedial action, and the United States Department of Energy, Headquarters (DOE-HQ) Technology Program activities. A summary of each of the studies is provided below:

Recycling of Copper - Treatability testing to support Phase II of OU3 Removal Action 15, Scrap Metal Piles, will be performed to determine an effective, least cost method to separate asbestos insulation from 1,400 tons of copper wire for recycle.

Treatment of Thorium Nitrate - This treatability test supports the Resource Conservation and Recovery Act (RCRA) closure of Thorium Nitrate Tank T-2 which is an OU3 HWMU. The treatability test will evaluate treatment options for the stabilization/solidification of the waste and closure of the HWMU.

N-Scan Prompt Gamma Neutron Activation Analysis - This is a United States DOE-HQ, Technology Program Research Development Announcement (PRDA) which is currently scheduled to be conducted at Fernald in February 1994 to evaluate the N-Scan Technology for real time, non-intrusive radiological and chemical characterization of concrete.

Ultrasonic Cleaning - A remedy screening test is currently being performed to evaluate the effectiveness of ultrasonic cleaning as a decontamination technology. Initial tests on stainless steel process piping have shown promising results. Based on the initial testing, additional tests will be performed on flat stainless steel metal.

As study-specific appendices are developed for each of the newly identified treatability studies, copies of the appendices will be forwarded to U.S. EPA and OEPA. Additionally, as studies are completed, a copy of each Final Treatability Report will also be sent to the U.S. EPA, OEPA, and the RREL Treatability Data Base.

If you or your staff have any questions, please contact John Hall at (513) 648-3118.

Sincerely,

*Johnny Rasing*

*for*

Jack R. Craig  
Fernald Remedial Action  
Project Manager

FN:Hall

cc:

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