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**DCR NO. 82 - REVISION TO OPERABLE UNIT 2
TREATABILITY STUDY WORK PLAN**

04-14-92

**DOE-1366-92
DOE-FN/EPA
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LETTER**



Department of Energy
Fernald Environmental Management Project
P.O. Box 398705
Cincinnati, Ohio 45239-8705
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APR 14 1992

DOE-1366-92

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

Mr. Graham E. Mitchell, Project Manager
Ohio Environmental Protection Agency
40 South Main Street
Dayton, Ohio 45402-2086

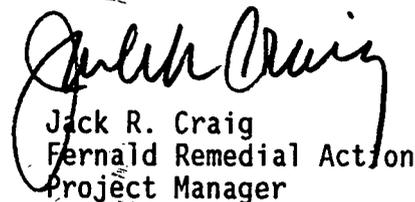
Dear Mr. Saric and Mr. Mitchell:

DCR NO. 82 - REVISION TO OPERABLE UNIT 2 TREATABILITY STUDY WORK PLAN

Enclosed is a copy of the DCR No. 82 which requests a change to the Operable Unit 2 Treatability Study Work Plan. The change provides the ITAS Environmental Technology Development Center flexibility in the performance of treatability tests on stabilized samples with very low activity levels.

If you or your staff have any questions, please contact Johnny Reising at FTS 774-9083 or (513) 738-9083.

Sincerely,


Jack R. Craig
Fernald Remedial Action
Project Manager

FN:JR

Enclosure: As Stated

cc w/enc.:

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J. D. Wood, ASI/IT
J. E. Razor, ASI/IT
AR Coordinator, WEMCO

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DOCUMENT CHANGE REQUEST

This form is used to initiate permanent change to controlled distribution project-specific procedures, such as the QAPP, Work Plan, and Sampling Plan.

REQUEST NO. 82

Issue Date: _____

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REQUESTOR Darrell Drouhard PHONE NO. (615) 690-3211 DATE: 12-31-91
 DOCUMENT TITLE Treatability Study Work Plan for OU 2
 SECTION/PARAGRAPH/PAGE NO.: Appendix C, Pages 6 and 9 DOCUMENT NUMBER: _____
 ISSUE DATE: October 1991 LATEST REVISION DATE: October 1991

JUSTIFICATION: A limited number of environmental containment cubicles are available at the IT Treatability Laboratory (ETDC). The Operable Unit 2 samples have very low concentrations of radioactivity allowing tests with stabilized OU 2 samples to be performed in a hood located outside of an environmental containment cubicle within the ETDC. This modification to the work plan will permit treatability work to progress on OU 2 without schedule impacts.

CONTENT OF CHANGE: The changes affect Operable Unit 2 Treatability Study Work Plan, Appendix C, Sections C.4.3 and C.6.2.1. The change for each section is as follows: "Operations or tests with stabilized OU 2 samples (e.g., UCS, MTCLP preps) may be performed in a geotechnical hood if an environmental containment cubicle is not available."

EFFECTIVE DATE OF CHANGE:

- When all approvals have been obtained _____ Effective Date
- Other (Specify): September 9, 1991

REQUIRED APPROVALS:

<u>John R. [Signature]</u> Project Director	<u>3/3/92</u> Date		
<u>Samuel [Signature]</u> Project QA Officer	<u>3/3/92</u> Date	<u>Donald A. [Signature]</u> WMCO QA Officer	<u>3/6/92</u> Date
<u>John [Signature]</u> Deputy Director/Technical	<u>2/19/92</u> Date	<u>Penny [Signature]</u> DOE CONTR	<u>3/3/92</u> Date

TO BE COMPLETED BY DOE

- A. Prior EPA Notification Required? Yes No
- B. Prior EPA Approval Required? Yes No
- C. Immediate Implementation? Yes No

through air monitoring. Direct skin contact with the corrosives may result in destruction of skin tissue and absorption of other contaminants if in solution.

- | In order to minimize the potential exposure hazards, the majority the operations to be carried out during
- | this project will be performed inside a laboratory exhaust hood, located inside an environmental
- | containment cubicle. These operations include container opening sample preparation, pouring reagents,
- | and packaging for disposal. Operations or tests with stabilized OU 2 samples (e.g., ULS, MTCLP preps)
- | may also be performed in a geotechnical hood if an environmental containment cubicle is not available.
- | Reagents will be prepared and packaged at an off-site location to further minimize on-site handling.

The use of the hood greatly minimizes any potential for exposure to the hazards associated with the samples or the reagents. To minimize the potential for radiation exposure, air monitoring will be conducted to quantify the exposure and to assure that the procedures in use are appropriate.

C.6.0 PERSONAL PROTECTIVE EQUIPMENT AND EXPOSURE REDUCTION

C.6.1 PERSONAL PROTECTIVE EQUIPMENT

C.6.1.1 Respiratory Protection

The need for respiratory protection shall be evaluated, prior to the commencement of activities, by a professional industrial hygienist and health physicist.

C.6.1.2 Eye Protection

Personnel using concentrated acids and bases in the performance of testing shall wear face shields with goggles to protect themselves from splashes. Personnel who work at or in the vicinity of the high temperature furnace shall wear tinted safety shields.

C.6.1.3 Protective Clothing

Personnel who work with concentrated acids and bases shall wear rubber aprons, long-sleeved clothing, and chemical-resistant gloves. Those workers at or in the vicinity of the high temperature furnace shall wear heat-resistant gloves and jackets.

C.6.2 EXPOSURE REDUCTION

C.6.2.1 Engineering Controls

- 1 The operations shall typically be performed under a laboratory exhaust hood in an environmental containment cubicle, under negative ventilation. This cubicle is located in the environmental containment cubicle room, which is also under negative ventilation. A slant manometer or magnehelic gauge shall be utilized to measure and indicate the pressure differential created by the air flow.

The laboratory exhaust hoods will be kept free of materials placed where they could block the vents and reduce air flow.

- 1 Operations or tests with stabilized samples (e.g., ULS, MTCLP preps) may also be performed in a geotechnical hood if an environmental containment cubicle is not available.

C.6.2.2 Administrative Controls

Access Control to Work Area

Access to contamination work areas shall be regulated and limited to authorized personnel. Warning signs shall be affixed in readily visible locations in or near the work area as required by applicable regulations.

The work area shall be divided into the following three zones:

- Exclusion zone - This zone will include the highest potential concentrations of contaminants. This zone has the highest potential for skin contamination and inhalation exposures. The exclusion zone will be the environmental containment cubicle.