UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAY 29 2001

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

SRF-5J

RE: Aquifer Remediation Design for the Waste Storage Area

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) design for remediation of the Great Miami aquifer in the waste storage area and Plant 6 area.

The document provides the design for groundwater remediation in the waste storage area and a rationale for continued monitoring in the Plant 6 area.

U.S. EPA finds the document acceptable and concurs with U.S. DOE's conclusions regarding the Plant 6 area. However, U.S. EPA has attached a few minor comments that must be addressed.

Therefore, U.S. EPA approves the design for aquifer remediation in the waste storage area pending receipt of adequate responses to U.S. EPA's attached comments and their incorporation into the document. U.S. DOE must submit responses to 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
Kim Chaney, U.S. DOE-HDQ
John Bradburne, Fluor Fernald
Terry Hagen, Fluor Fernald
Tim Poff, Fluor Fernald

TECHNICAL REVIEW COMMENTS ON "DESIGN FOR REMEDIATION OF THE GREAT MIAMI AQUIFER IN THE WASTE STORAGE AND PLANT 6 AREAS"

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

GENERAL COMMENT

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Not applicable (NA) Page #: NA Line #: NA
Original General Comment #: 1
Comment: The document includes plans for installing five groundwater extraction wells in Phase I and two additional groundwater extraction wells in Phase II to reduce groundwater uranium concentrations in the waste storage area (WSA). The text also states that WSA groundwater is projected to take 5 years longer to remediate than originally stated in the "Baseline Remediation Action Strategy Report" because of higher than anticipated levels of contamination in the WSA-Phase I area. Although installation and use of the proposed extraction wells may be sufficient to reduce groundwater uranium concentrations to the total uranium final remediation level, continued groundwater monitoring and performance evaluations of the groundwater extraction system are required to determine whether additional extraction wells will be needed to remediate groundwater uranium concentrations in the WSA. The text should be revised to address this issue.

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.1 Pages #: 2-3 and 2-4 Line #: NA
Original Specific Comment #: 1
Comment: The text states that the southern, eastern, and northern extent of the uranium plume has been well defined. However, the western extent of the plume has not been completely defined. The text should be revised to provide a rationale for not collecting groundwater samples at geoprobe locations north and west of sampling locations 2108 and 3108 to more fully define the western extent of the plume.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.1 Page #: 3-1 Line #: NA
Original Specific Comment #: 2
Comment: The text refers to extraction well WSA#3 as one of three extraction wells to be installed in the pilot plant drainage ditch. However, Figure 3-1 does not show extraction well WSA#3. The text or figure should be revised to be consistent.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.3.3 Page #: 3-6 Line #: NA
Original Specific Comment #: 3
Comment: The text states that the additional pumping time required in the design presented is due in part to the recently characterized higher levels of contamination in the pilot plant drainage ditch; however, no other rationale for the additional pumping time is stated. The text should be revised to define any additional factors contributing to the additional pumping time.