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**ADDITIONAL INFORMATION SUPPORTING PHASE VI REMOVAL
ACTIONS**

02/22/95

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LETTER



Department of Energy
 Fernald Environmental Management Project
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FEB 22 1995

DOE-0453-95

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

Dear Mr. Saric and Mr. Schneider:

ADDITIONAL INFORMATION SUPPORTING PHASE VI REMOVAL ACTIONS

Reference: 1. Letter, DOE-0323-95, J.R. Craig to J.A. Saric and T. Schneider, "Proposed Phase VI Removal Actions," dated December 27, 1994.

The purpose of this letter is to provide (1) additional information and justification for the Department of Energy, Fernald Area Office (DOE-FN) not pursuing an additional removal action in the Southfield to address contamination migrating to the Great Miami Aquifer (GMA) and (2) additional information supporting DOE-FN's proposal that the Facility Utilization Report be replaced by the Prioritization and Sequencing Report.

The above referenced letter outlined Phase VI removal action commitments for calendar year 1995. A new removal action titled "Seepage Control at the South Field and Inactive Flyash Pile" was highlighted as a Phase VI commitment. Also, the rationale of why a removal action in the GMA beneath the Southfield will not be performed was discussed. Based upon verbal comments from Ohio Environmental Protection Agency (OEPA) and United States Environmental Protection Agency (USEPA), it was suggested that the Department of Energy, Fernald Area Office (DOE-FN) provide additional information supporting the decision not to perform a removal action in the GMA beneath the Southfield. In summary, the DOE-FN is continuing to evaluate the benefit of expediting extraction activities in the Southfield area; however, at this time, a removal action does not appear to be the optimal approach for conducting this activity.

Subsequent to EPA's review of the above referenced letter, telephone correspondence between DOE-FN and U. S. EPA and Ohio EPA indicated that both U. S. EPA and Ohio EPA basically concurred with the proposal to replace the Facility Utilization Report with the Prioritization and Sequencing Report, but needed additional information. This letter provides the requested additional information and, also, establishes a commitment by DOE to submit the Prioritization and Sequencing Report in lieu of the Facility Utilization Report.

Contamination in the Southfield and its impact on the GMA

An aggressive effort is currently underway to optimize the Operable Unit 5 (OU5) groundwater remediation strategy. The optimization was initiated in response to general observations made by USEPA consultants during a presentation of the draft Feasibility Study/Proposed Plan (FS/PP). These observations called attention to unrealistic surface water loading input used in model simulations. Additionally, DOE-FN recognized that the unrefined strategy created an excessive hydraulic impact on the GMA. In optimizing the strategy, the DOE-FN also sought to reduce remediation times and costs. The optimization effort is not yet complete. However, available information suggests that a significant portion of the GMA contaminant mass is located beneath the Southfield, and that expedited pumping in this area could reduce overall remediation time and therefore cost. The DOE-FN is prioritizing extraction well installation and the initiating of pumping with consideration of this information. In order to initiate pumping, however, a power source must be supplied to the Southfield area and piping installed to transport water from the extraction wells. Additionally, coordination with the OU2 excavation schedule is required and funding issues must be evaluated. The planning for such a removal action, which would in all likelihood require an Engineering Evaluation/Cost Analysis (EE/CA), would refocus resources currently involved in remedial design. The DOE-FN believes that the best course of action at this time is to continue with the optimization of the remedial design. DOE-FN recognizes that it is in everyone's best interest to initiate pumping in the Southfield area as early as possible; however, DOE-FN believes the most appropriate way to achieve this objective is to complete the GMA remedial design process and initiate ground water remedial action.

Additionally, it should be noted that although a significant portion of the GMA contaminant mass is located beneath the Southfield, there is no immediate threat to human health or the environment. Groundwater beneath the Southfield migrates at a rate of approximately 50 feet per year. The uranium migration rate is approximately 1/12 the rate of groundwater migration. The uranium plume will therefore migrate at a rate of approximately 4.2 feet per year. There is no threat that the Southfield area plume will migrate offsite prior to initiation of remedial action.

The DOE-FN looks forward to discussing the initial results of the optimization study with the U.S.EPA and OEPA on February 23, 1995. The DOE-FN welcomes recommendations and will again consider a removal action in the Southfield area should conditions change.

Prioritization and Sequencing Report

Also discussed in the above referenced letter was DOE-FN's proposal that the yearly Facility Utilization Report, which "is intended to allow for the systematic planning of removal actions in the production area," be replaced with the yearly Operable Unit 3 Prioritization and Sequencing Report.

The Facility Utilization Report discusses three main topics: needed, not-needed, and new facilities. Since there are no new or foreseen removal actions in the production area, and the topics just mentioned will be discussed in the upcoming Prioritization and Sequencing Report, DOE-FN recommends that the publication of the Facility Utilization Report be discontinued, and replaced with the Prioritization and Sequencing report and subsequent annual updates.

DOE-FN requests your concurrence with these recommendations.

If you have any questions, please contact Johnny Reising at (513) 648-3139.

Sincerely,

fa Johnny Reising
 Jack R. Craig
 Fernald Remedial Action
 Project Manager

FN:Nickel

cc:

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