STATE OF MISSOURI
Mel Carnahan, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176

OCT 14 1998

Mr. Stephen McCracken
Project Manager
Weldon Spring Site Remedial Action Project
7295 Highway 94 South
St. Charles, Missouri 63304

RE: Quarry Residuals Operable Unit (QROU), Record of Decision (ROD)

Dear Mr. McCracken:

The State of Missouri concurs with the selected remedy as described in the draft final Record of Decision transmitted to the United States Environmental Protection Agency (EPA), Region VII, on September 25, 1998. We appreciate your cooperation on the revisions that have been made to the original draft ROD.

The final ROD describes the selected action and specifies that the Department of Energy (DOE) shall:

- Monitor groundwater in the quarry area and well field area to verify that conditions remain protective of human health and the environment.

- Restore the quarry proper by backfilling the quarry to reduce fall hazards, to stabilize the quarry highwalls, to eliminate ponding of surface water, to prevent infiltration of precipitation, and to reduce the risks of external radiation exposure and ingestion of radioactive material. The restoration design shall effectively prevent residual contamination in crack and fissures from mobilizing to the surface and into the groundwater.

- Design and construct an interceptor trench optimally located north of the Femme Osage Slough to extract groundwater in areas with high uranium contamination and sufficiently large to intercept a representative cross section of alluvial material. Additional field tests shall be conducted north of the Femme Osage Slough to provide site-specific estimates of the values and variability of hydrogeological parameters relevant to demonstrating the engineering feasibility and reliability of groundwater remediation in the area north of the Femme Osage Slough.

- The trench will be operated for up to two years during which operational and performance data shall be collected to evaluate the effectiveness of the trench to actively remediate groundwater as compared to a set of performance goals. Those goals are to be presented in the Remedial Design/Remedial Action (RD/RA) Work Plan developed in consultation with the EPA and MDNR. If the performance of the trench exceeds the performance goals, the necessity and effectiveness of further groundwater remediation shall be evaluated. If the

performance of the trench fails to achieve the performance goals, then evaluation of further groundwater remediation will not be necessary.

- The determination of the effectiveness of active groundwater remediation shall include consideration of factors consistent with those considered in EPA's Technical Impracticality process.

- Collect additional samples in the area of the northeast slope and the ditch area of the quarry to sufficiently define the extent of radiological contamination and to assess the risk from that contamination. If response action is necessary, soil cleanup criteria for the Chemical Plant will be applied. The response action would involve contaminated soil removal to an extent protective of human health and the environment, but would not include the relocation of State Route 94.

- Revise the *Well Field Contingency Plan*, which is currently a draft revision to the 1992 plan. DOE shall be responsible for updating and implementing the *Well Field Contingency Plan*.

In addition, we understand that the selected action only addresses the impact of contamination on the quarry groundwater north of the Femme Osage Slough. This groundwater currently has limited usefulness as a source of drinking water. However, if long-term groundwater monitoring identifies a trend or change resulting in increased levels of contaminants south of the slough approaching 30 pCi/L of uranium, the potential impact to the well field and alluvial aquifer will be reevaluated. This reevaluation may reopen the CERCLA process for the area south of the Femme Osage Slough to include a risk evaluation, identification of ARARs (possibly including the groundwater standard in 40 CFR 192), and determination of the necessity of groundwater remediation.

Finally, there are two issues which are as yet unresolved, but which need not prevent the issuance of the QROU ROD or the implementation of the selected action. However, these issues must be addressed in a timely manner. First, institutional controls that will be required to prevent exposure to contaminated groundwater have yet to be determined, although the ROD does specify that DOE will pursue appropriate controls with the landowners. Secondly, assessment and recovery of natural resources damages remains an issue to be fully addressed since cleanup of the aquifer is not implemented.

To reiterate, thank you for the cooperation displayed in bringing closure to the ROD for the Quarry Residuals Operable Unit. We look forward to developing and implementing the interceptor trench and groundwater monitoring to ensure continued protection of the St. Charles Public Water Supply.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Stephen Mahfood
Director

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