FAX

Date 07/31/97

Number of pages including cover sheet 02

TO: Karen Reed
DOE
WSSRAP

Phone 314-441-8978,X7008
Fax Phone 314-447-0739

FROM: Helene Ann Diller
Administrative Assistant
Weldon Spring Citizens Commission
100 North Third Street - Room 107
St. Charles, Mo. 63301

Phone 314-949-7545
Fax Phone 314-949-7532 or 7546

REMARKS: ☐ Urgent ☒ For your review ☐ Reply ASAP ☐ Please Comment

Dear Karen:

These are the questions on the QROU - RI Report for our technical meeting.

Tentative date is still 8/14 unless you can change that to 8/11 (2nd Monday each month) at 10:30 am.

Have a great week-end.

Sincerely,

Helene

Questions on the Quarry Residuals Remedial Investigation Report

1. What are the depths from which groundwater samples were collected in the alluvium?

2. What is the vertical extent of the groundwater contamination, both for Uranium and the nitroaromatics?

3. What is the screened interval of the St. Charles County water supply wells?

4. What is the rate of migration of the groundwater from the Kimmswick/Decorah Formation into the alluvium and the projected time for the plumes to migrate across the Slough?

5. Explain the question marks on Figures 9-2 and 10-2. Is the DOE actively looking for potential preferential pathways for groundwater flow from the Kimmswick/Decorah Formation into the Alluvium? If so, what has been found or how is this being investigated?

6. The Remedial Investigation Report states that geochemical processes within the soils along the northern edge of the Slough are removing Uranium from the groundwater and preventing high levels of Uranium from moving south of the Slough. One would assume, as with any chemical reaction, that eventually the soils would become saturated and lose the capability to remove additional Uranium. Alternative 5 of the Proposed Plan for the Quarry residuals was the construction of a trench with a permeable barrier. The trench would be filled with a material that would sorb the Uranium as the groundwater flows through it. This is essentially a man-made version of what the soils are naturally doing on the northern edge of the Slough, and DOE acknowledged that the media in the trench would have to be replaced due to it reaching capacity over time. Is DOE assessing the capacity of the soils to sorb Uranium along the northern edge of the Slough, and, if so, what is the capacity and anticipated timeframes for this capacity to be reached? Also, what is the risk from concentrating the Uranium in the soils in that area?

7. The Citizens Commission would like a review of the Contingency Plan to be implemented in the event the Uranium levels in the well field reach unacceptable levels. What is the trigger to implement the Contingency Plan and the timeframe for implementation?

8. What is the potentiometric surface in the well field area south of the Slough? This is not shown in the Quarry Residuals Remedial Investigation Report, but a U.S. Geological Survey (USGS) Report titled, Ground-Water Flow and Surface-Water/Ground-Water Interaction at Weldon Spring Quarry Disposal Site, St. Charles County, Missouri, dated May 31, 1996, shows the water table altitudes in the bedrock and alluvial aquifers from August/September 1994 through February 1996. The maps show essentially a "sink" in the area of the well field, where groundwater and Missouri River water converge at a low point. How will this affect Uranium levels and the dispersion of Uranium if the plume reaches the well field?

9. What is the proposed plan for the Quarry Proper, given the yellow cake remaining in the fractures and the sediment with radium levels in excess of target cleanup levels in the bottom of the Quarry?