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095227



## Department of Energy

Field Office, Oak Ridge  
P.O. Box 2001  
Oak Ridge, Tennessee 37831— 8723

October 5, 1992

Mr. Greg McCabe  
U. S. Environmental Protection Agency  
Region VII  
726 Minnesota Avenue  
Kansas City, Kansas 66101

Mr. Greg McCabe:

### DRAFT INITIAL SCREENING OF ALTERNATIVES

Enclosed is a revised version of the Initial Screening of Alternatives document. The document has been revised, as appropriate, to incorporate your comments on the most recent draft. Also enclosed is a comment resolution summary which provides responses to each of your comments on the previous draft. Please feel free to call me at (615) 576-9634 with any questions you may have concerning this document.

Sincerely,

A handwritten signature in black ink, appearing to read "David G. Adler", is written over the word "Sincerely,".

David G. Adler, Site Manager  
Former Sites Restoration Division

Enclosures

cc: D. Bedan

Initial Screening of Alternatives Report for the St. Louis Site  
Final, July 1992  
Response to Comments by SAIC  
October 2, 1992

Page 1

COMMENT	DISPOSITION
<u>Gregory D. McCabe (EPA Region VII):</u>  1. General Comment 3 - In its response, DOE states that the drains and sewers at SLAPS will be addressed "under an observational approach". Exactly what does this mean?	The drains and sewers referred to in the comment are located at SLDS. The information currently being obtained from the data gap sampling activities will augment existing data to the maximum extent practicable, however, some data gaps will still remain. Unfortunately there is no practical method for fully delineating all contamination present in all subsurface drainlines. As a consequence, there is no practical alternative to an "observational approach" to iteratively remediating and characterizing during the remedial phase of the cleanup effort. As the drains and sewers become accessible a more sufficient characterization will take place and removal action will be performed where necessary.

095227

COMMENT	DISPOSITION
<p>2. General Comment 6 - In its response on page 2-8, DOE correctly quotes the NCP which states that "EPA expects to use institutional controls...such as deed restrictions <u>to supplement</u> engineering controls...". However, in its response to comments DOE appears to imply that institutional controls can be used to substitute for active response measures. Such substitution is contrary to the regulations found in the NCP. Any remedy proposed by DOE which relies solely on institutional controls will not be acceptable to EPA.</p>	<p>Comment noted. The FS-EIS is addressing a broad range of remedial alternatives for the St. Louis Site, all of which rely on institutional controls, to some extent, to ensure protectiveness. None of these alternatives is believed to be contrary to the NCP.</p>
<p>3. General Comment 13 - We could find no additional text in Appendix A which provides a clarifying discussion of transportation requirements for low level radioactive waste of the type found at the St. Louis site.</p>	<p>Additional text is being added to the front of Appendix A to discuss Federal regulations regarding transportation.</p>
<p>4. p. 1-22 - It appears that the error in calculating the Coldwater Creek drainage area may actually have been made larger. Previous reports indicate the size of the Coldwater Creek drainage area to be approximately 46 square miles, suggesting that 32 km<sup>2</sup> was the erroneous number in the draft ISA and should have been discarded.</p>	<p>The correct drainage area is 46 square miles which converts to 119 square kilometers. The text has been revised.</p>

COMMENT	DISPOSITION
5. p 1-25 - The text should include uranium-235 in the list of contaminants of concern. The Baseline Risk Assessment included U-235, and the decay products actinium-227 and protactinium-231, in its list of contaminants of concern.	The primary contaminants of concern for the St. Louis Site include U-238, Th-232, Th-230, and Ra-226. As noted in your comment, it is true that there is approximately 0.72% by weight of U-235 in natural uranium along with trace amounts of decay products. This type of detail is critical for the Baseline Risk Assessment, but is not needed for the purposes of the ISA.
6. p. 1-27 - Typo: The-230	Typo corrected.
7. p. 1-32; 1-33 - We note that Figures 1-9 and 1-10 are identified as "draft".	Reference to "draft" removed.
8. p. 2-13 - Ocean disposal as an alternative for offsite disposal of soil/sediment has been removed from the text but not from Table 2-1.	Ocean disposal has been removed from Table 2-1.
9. Table 2-4 - The new phrase "immobility to ensure integrity" has been added. This wording was not present in the draft version, and its meaning is unclear. Should "immobility" be changed to "inability"? Please clarify.	Text has been clarified.

095227

COMMENT	DISPOSITION
<p>10. Table 2-4 - It is our understanding that a soil washing technique based on particle size distribution has been used with success at the New Jersey sites. However, soil washing has been eliminated from further consideration here. Has DOE considered the recent New Jersey results in its decision that soil washing is an inappropriate technique for the St. Louis site? If so, what is the technical rationale which supports that decision?</p>	<p>Soil washing was retained in Table 2-4 on page 2-30 in the July, 1992 revision.</p>

095227

COMMENT	DISPOSITION
<p>11. p. 2-36 - The text here states that the applicability of chemical extraction technologies to the St. Louis site "is currently being evaluated through extensive laboratory and pilot scale testing". The response to our comment on page 4-1 states (without addressing our question as to when the treatability studies will be conducted and how they will be coordinated with the completion of the FS) that treatability studies will be conducted "as needed". Page 4-2 also states that "Some treatability testing on solid from the St. Louis has been performed to test the effectiveness of volume reduction technologies". As specified in the EPA guidance, treatability studies are performed as part of the RI/FS process. Section X.D. of the FFA requires that all treatability studies be forwarded for EPA review as secondary documents. To date, we have not received for review any plans for, or results of, treatability studies which appear to be ongoing at the St. Louis site.</p>	<p>At this time, no treatability studies for Missouri soils are budgeted. Based on completed literature reviews and review of existing geotechnical data for Missouri soils, DOE concludes that no currently available treatment technology can provide cost-effective volume reduction for this waste matrix. While FUSRAP staff continue to stay abreast of developments in this area (and in fact are considering a modest research and development effort to further explore treatment options), the remedy selection process is proceeding on the assumption that treatment will not be a part of the proposed plan for the St. Louis Sites.</p> <p>Should rapid advances in treatment technology develop which provide attractive options for the St Louis site, we assume that the remedy selection process can allow for incorporation of such new developments.</p>
<p>p. 2-38 - We have not yet received a copy of the AWC report concerning the removal of radioactive contaminants from Hazelwood soils.</p>	<p>A copy of the report is being forwarded to you.</p>

095227

COMMENT	DISPOSITION
13. p. 2-44 - The heading "Vertical Barriers (Continued)" appears to be in error.	Text has been clarified.
14. p. 2-76 - Mine closure disposal was added to Table 2-9, but was removed as an option from Table 2-4 and the text on page 2-13.	Mine closure has been removed from Table 2-9.

095227

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# ADMINISTRATIVE RECORD

for the St. Louis Site, Missouri

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