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Mr. Jerry Van Fossen
Deputy Project Manager
U.S. Department of Energy
Weldon Spring Site Remedial
Action Project Office
7295 Highway 94 South
St Charles, Missouri 63304

Dear Mr. Van Fossen:

RE: Southeast Drainage Removal Action

This letter expresses EPA's position on the proposed removal action in the Southeast Drainage based on a review of the draft Engineering Evaluation/Cost Analysis (EE/CA), dated March 1996, and a recent firsthand surveillance of the area.

For the reasons discussed below, we have strong misgivings about the advisability of using conventional construction techniques as described in the EE/CA to accomplish sediment removal in the Southeast Drainage. Comments on the EE/CA itself are followed by comments which help to evaluate this action within the remedy selection framework established by EPA.

1) With some exceptions as noted below, we believe the EE/CA to be technically adequate for purposes of supporting a decision on an appropriate response action. The analytical data and interpretation are generally adequate. There is sufficient presentation of risks for a full range of plausible exposure scenarios using appropriately conservative assumptions. The identified response action alternatives are adequately developed. We would like to see further information addressing the following areas:

The document is lacking in its characterization of the ecological consequences of remediation using conventional construction techniques and in its evaluation of the success of restoration efforts. Please provide an approximation of the acreage which would be cleared or otherwise impacted by construction activities, and evaluate potential erosional damage. Also, we request an assessment of the time frame within which the affected areas could be expected to fully recover their natural state. The assessment should estimate and incorporate the effects of human activities encouraged by the cleared areas remaining after restoration activities.

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The document should evaluate the effectiveness and feasibility of innovative methods for addressing the contaminated sediments that don't require the deployment of heavy construction equipment within the drainage, or methods that otherwise minimize ecological damage to the drainage. As part of this effort, we suggest that DOE consult sources in the field of forest management for methods or technologies that enable access to wooded areas with minimal impact and/or in the mining industry for techniques which would allow recovery of sediments with minimal damage to the surroundings. Perhaps something akin to a sluicing operation by which sediments are slurried to an accessible downhill access point would be an effective and less damaging method of removing sediments from the drainage.

2) The NCP provides the regulatory framework for considering risks and land use in selecting appropriate response actions:

For known or suspected carcinogens, acceptable exposure levels are those that present an excess upper bound lifetime cancer risk to an individual of between 10^{-4} and 10^{-6}. Therefore, excess lifetime risks to an individual greater than 1 in 10,000 will generally trigger the need for a response action, while risks less than 1 in 10,000 will generally not necessitate a response action.

The EPA directives which expand on discussions in the preamble to the NCP provide that the appropriate extent of remediation should be determined on the basis of reasonably anticipated future land use. Assumptions regarding the reasonably anticipated future land use should be developed with input from the affected community and from local land use planning authorities.. While we have not yet taken the step of eliciting comment from the public on this issue, input from the Missouri Department of Conservation clearly indicates that it plans to maintain the Southeast Drainage in its current condition as a recreational resource. Pending input from the community, we believe the current use of the drainage is arguably equivalent to the reasonably anticipated future use of the drainage.

As presented in the EE/CA, the total excess lifetime risk to an individual under the current land use exposure scenario (hunter scenario) is less than 1×10^{-4} in all segments of the drainage and therefore, remediation of the drainage is not necessitated on this basis. The hypothetical future use exposure scenario (modified residential scenario) presents slightly greater risks; however, the risks exceed 1×10^{-4} in only one of the four segments of the drainage. The hypothetical future exposure scenario, therefore, provides only marginal impetus to remediate.

In isolation, the argument for remediation of the Southeast Drainage on the basis of risk is weak. However, the argument for remediation is bolstered by the fact that it must be considered within the context of an established remedial action project addressing a larger site and a cumulation of risks, as opposed to an independent site where it would be more difficult to meet a standard of cost effectiveness.

With the understanding that some further analytical data is forthcoming and that the EE/CA does not contain all of the analysis we would like to see, our position on the proposed removal action may be summarized as follows:

- It is our impression that removal of contaminated sediments from the drainage using conventional construction and excavation techniques as presented would have an overall negative impact on the environment, such that the minimal reductions in human health risk that could be achieved would not be justified.

- It is likely that there are other more innovative techniques that could be used to remove sediments from the drainage with only minimal environmental impacts. We believe it is worthwhile to pursue these options even if it involves sacrificing some efficiency in sediment removal or time needed to implement.

- We believe the potential human health risks are sufficient to support an argument for removal action if an option can be identified that can effectively remove sediments, is not prohibitively expensive, and has only minimal ecological consequences.

Thank you for the opportunity to review this proposal. Please call me at (913) 551-7710 if you have any questions or concerns.

Sincerely,

Daniel R. Wall
Project Manager
Superfund Division

cc: Robert Geller, MDNR
MDNR Field Office
Jim Garr, MDC
Gale Carlson, MDOH