



Jeremiah W. (Jay) Nixon, Governor • Mark N. Templeton, Director

## DEPARTMENT OF NATURAL RESOURCES

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October 8, 2013

Ms. Sharon Cotner  
FUSRAP Program Manager  
U.S. Army Corp of Engineers  
8945 Latty Avenue  
Berkeley, MO 63134

RE: Comments on "Proposed Plan for No Further Action for the Inaccessible Soil Operable Unit Associated with Group 1 Properties at the St. Louis Downtown Site" Draft Final, dated September 23, 2013

Dear Ms. Cotner:

The Missouri Department of Natural Resources (MDNR) and Missouri Department of Health and Senior Services (DHSS) have finished a review of the above-referenced document. MDNR and DHSS had the following comments:

- 1) Section 5, pages 31-45, discusses risk analysis results and makes conclusions regarding properties. Table 5-2 on page 41 (footnote a) and Table 5-3 on page 44 (footnote a) discuss that calculation of risk for particular scenarios was not necessary because a particular receptor was "not likely to be exposed to COCs at the property (i.e., no complete exposure pathways)." Therefore, these risk analysis were not done for all receptors for all pathways.

Our letter dated August 16, 2013 mentioned that we were verifying that the Remedial Investigation / Baseline Risk Assessment demonstrates that the properties meet the standard of release for unlimited use and unrestricted exposure (UU/UE). We discussed that if properties do not meet UU/UE, it is not appropriate to release them for no further action because institutional controls, long term stewardship, and five year reviews would then be required. The subject plan does not discuss or conclude that all (or any) of the Group 1 Properties meet the standard of UU/UE. USEPA's letter dated August 26, 2013 (comment 1) also raised the issue that UU/UE must be demonstrated for each property released for no further action. The department is unable to find any discussion of the UU/UE status of properties in the subject plan. The department strongly objects to this lack standard language stating that each individual included property has been determined to be UU/UE in the subject proposed plan.

Further, in ([http://energy.gov/sites/prod/files/S09273\\_ProgPlan.pdf](http://energy.gov/sites/prod/files/S09273_ProgPlan.pdf), LMS/S09273), pg. 28, USDOE-LM discusses that "In assessing potential site risk, DOE paid particular attention to land-use assumptions and exposure scenarios used for certifying that a given site was suitable for "unrestricted use." Some sites were remediated to a condition that poses no unacceptable health risks to a hypothetical subsistence farmer or resident with a home garden. These sites are considered suitable for UU/UE and no ICs are necessary. This level of protectiveness is not confirmed for all sites, and DOE has imposed surveillance requirements at sites where some land uses should be restricted; ICs are being pursued at some of these sites." If availability for UU/UE is not determined for all impacted and not impacted properties included in the subject plan, USDOE may need to later amend the Group 1 ISOU ROD based on the need to impose land use restrictions and monitor them in the future. Therefore, the UU/UE status of each property should be evaluated consistent with residential gardener or subsistence farmer scenarios to determine they are UU/UE for purposes of no further action being required.

- 2) As discussed in OSWER 9355.7-04 pg. 7, "If the baseline risk assessment evaluates a future use under which exposure is limited, it will not serve the traditional role, evaluating a "no action" scenario. A remedy, i.e. institutional controls to limit future exposure, will be required to protect human health and the environment." OSWER 9355.0-89 pg. 3 discusses that "The evaluation of whether an IC is needed at a site is a site-specific determination. Site managers and site attorneys should consider whether the site would meet unlimited use and unrestricted exposure (UU/UE) as one of the factors in deciding when an IC is appropriate at a site. UU/UE generally is the level of cleanup at which all exposure pathways present an acceptable level of risk for all land uses." OSWER 9355.7-19 pg. 5 recommends that when multiple land use and receptor scenarios seem feasible, risk assessors should "assume future residential land use if it seems possible based on the evaluation of available information." For example, if the site is currently industrial but is located near residential areas in an urban area, future residential land use may be a reasonable possibility." DT-15 and DT-9 Levee were not evaluated for the residential gardener land use and other properties were not evaluated for recreational use; USACE should consider whether future residential and recreational land use on all impacted properties with no land use controls as proposed by the plan meets a standard of "seems possible;" the department contends both the scenarios "seem possible" and should be evaluated to determine if UU/UE is met.

- 3) OSWER 9355.0-30(<http://www.epa.gov/oswer/riskassessment/pdf/baseline.pdf>) discusses that "The preamble to the NCP states that EPA will consider future land use as residential in many cases. In general, residential areas should be assumed to remain residential; and undeveloped areas can be assumed to be residential in the future unless sites are in areas where residential land use is unreasonable." USACE should consider whether a residential gardener or recreational receptor scenarios are "unreasonable" for the properties. The department contends future residential and recreational receptor land use is also "not unreasonable" for impacted Group 1 properties and should be evaluated to determine if UU/UE is met.
- 4) Additionally, the accessible areas proposed plan for SLDS pg. 6 (<http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/SLDS/SLDS%20PP.pdf>) states "Risks associated with potential future exposures under residential conditions exceeded the upper bound of the EPA risk range. As required by EPA BRA guidance, potential future risks were calculated by assuming that no cleanup measures are implemented and that land use remains industrial or shifts towards onsite residential or recreational activities. These results indicate that some level of additional control is needed to prevent the possibility of unacceptable exposure to remaining contamination at the SLDS (DOE 1993)." Page 29 of the accessible areas ROD states that "Although future residential use is plausible, but unlikely, as a conservative measure the baseline risk assessment evaluated this scenario;" page 31 states "Exposure pathways for the resident include external gamma, soil ingestion, dust inhalation, and ground water consumption." Page 67 of the SLDS accessible areas ROD discusses that "Five year reviews will be conducted per the NCP for residual conditions that are unsuitable for unrestricted use" and "Institutional controls may include land use restrictions for those areas having residual concentrations of contaminants unsuitable for unrestricted use."

The subject proposed plan should be made consistent with the previous accessible areas ROD with respect to evaluation of residential risk and UU/UE, additionally, for the same reasons given in the historical accessible areas Proposed Plan and ROD.

- 5) DHSS performed residential gardener scenario analysis for DT-15 and DT-9 Levee using similar RESRAD assumptions to those used by USACE in their analysis of other properties. This analysis found risks as high as 1.8E-03 for DT-15 and 2.0E-03 for DT-9 Levee. These results provide additional evidence that USACE should perform residential risk analyses to make an explicit determination of UU/UE for all impacted properties.

Ms. Sharon Cotner

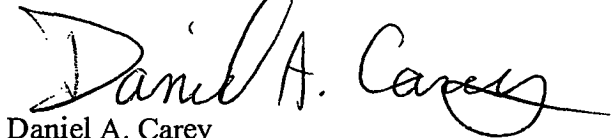
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- 6) The department continues to object to language such as that used on page 16, lines 1-4. MDNR has not changed the position discussed in detail at our comment 5 in <http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/SLDS/SLDS%20ROD%20Final%20-%20Appendix%20A.pdf> page A-29 for the accessible areas ROD, regarding the potential future usability of groundwater as a drinking water source at SLDS. We still disagree with language that implies counting on a city ordinance to remain unchanging to determine that future use of ground water as a potable water supply will not occur; we maintain that ground water at SLDS could become usable and this will need to be considered regarding ground water in the ISOU FS for the remainder of the properties. The language of page 16 lines 1-4 should be changed to remove the implication.
- 7) Processing areas delineated on Figure 1 and Figure 4 of the document do not include Plant 4 or buildings historically designated 50-52 which had MED AEC processing that was remediated by USDOE; the figures should be changed to include these areas.

Thank you for giving us the opportunity to review and comment on this document. If you have any questions or need further clarification, please call me at (314) 877-3047. Address any written correspondence to my attention at P.O. Box 176, Jefferson City, MO, 65102-0176.

Sincerely,

HAZARDOUS WASTE PROGRAM



Daniel A. Carey

Remediation and Radiological Assessment Unit

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