

**U.S. Nuclear Regulatory Commission Comments on the
Draft Final Feasibility Study Report for Shallow Land Disposal Area
Armstrong County, Pennsylvania, Department of the Army, March 2006
May 11, 2006**

Comment #1:

Reference:

Department of the Army (DA) Shallow Land Disposal Area (SLDA) Remedial Investigation (RI) Report, Final, October 2005, "Next Steps" section on page xxxii.

The DA states: "Based on the findings identified in this RI report, the Corps [U.S. Army Corps of Engineers (USACE)] is initiating the preparation of an FS [Feasibility Study] and will be evaluating alternatives to address radioactive contamination at the site to ensure safe future use of the site and that the site complies with the 25 mrem [milirem]/year annual dose limit for unrestricted use identified in 10 CFR Part 20.1402." As reflected above, the goal of the Corps Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remediation at the SLDA site has been to achieve compliance with *unrestricted use* criteria for the SLDA site pursuant to 10 CFR Part 20.1402. The description of Alternative 4 in the draft FS report makes it appear that this is no longer the goal. If unrestricted release is no longer the goal, the FS should explain the reasons for the change.

Comment #2: Restricted Use

Reference: Draft FS report, Authority Section, page E-2.

A) If the USACE chooses the 10 CFR Part 20.1403 restricted use criteria as the Applicable or Relevant and Appropriate Requirements (ARAR), the U.S. Nuclear Regulatory Commission (NRC) will require the licensee to submit a Decommissioning Plan. This would result in dual regulation at the site. The scope of the USACE-NRC Formerly Utilized Sites Remedial Action Program (FUSRAP) Memorandum of Understanding (MOU) only addresses coordination of activities and avoidance of dual regulation by USACE and NRC, when the USACE cleanup activities at a FUSRAP site with NRC-licensed facilities are consistent with 10 CFR Part 20.1402, i.e., unrestricted use of the site upon completion of the decommissioning activities.

B) References:

- 1) The MOU Between the U.S. Department of Energy (DOE) and the USACE Regarding Program Administration and Execution of FUSRAP, March 17, 1999.
- 2) Consolidated Office of Nuclear Material Safety and Safeguards Decommissioning Guidance, NUREG 1757, Supplement 1, Draft Report for Comment, September 2005.

If the USACE's ARAR is to be restricted use site clean up under 10 CFR Part 20.1403, the draft FS should, consistent with ref 2.B.1, include a discussion regarding the long-term maintenance of the SLDA site. Will the DOE beginning two years after the USACE CERCLA "response action" and "closeout" activities there, accept responsibility for: surveillance, operation and maintenance, including monitoring and enforcement of any institutional control which have been imposed on the SLDA site; and any other federal responsibilities, including claims and litigation,

not directly arising from USACE FUSRAP response action.

The NRC, for purpose of Restricted Use and Institutional Control at a licensed facility, has published draft guidance on long-term control license and legal agreement/restrictive covenant (LA/RC) options in order to ensure licensees' proposed institutional controls are durable. Independent of USACE-DOE arrangement for long-term institutional control at a FUSRAP site, an NRC-licensee seeking license termination under the NRC-restricted use criteria, is encouraged to follow the NRC's LTC or LA/RC guidance.

C) Reference:

Draft FS report, Introduction section, page E-1.

Statements made:

"Waste from this facility was disposed of in the trenches at the SLDA in accordance with the United States Atomic Energy Commission regulations in effect at the time, 10 CFR Part 20.304 (this regulation was rescinded in 1981)."

The understanding is:

- 1) The waste was shipped from the former Apollo site to the SLDA site; and
- 2) The waste is not native and was not originated at the SLDA site. Thus, the draft FS report should address the applicability of the NRC's requirements in 10 CFR Part 61 - Licensing Requirements For Land Disposal of Radioactive Waste, if the waste is to remain on-site.

Comment #3:

D) Reference:

Draft FS report, Table 4-4; Summary of Estimated Present Worth Costs for Remedial Alternatives, Shallow Land Disposal Area - Feasibility Study, and Appendix C; SLDA Remediation Worker Dose Assessment.

The draft FS identifies Alternative 5 (20.1402) as more expensive and producing more industrial worker exposure during the remedial activities phase as compared to Alternative 4 (20.1403). This appears as the equivalent of an NRC licensee establishing that compliance with 20.1402 "would result in net public or environmental harm." - - See 20.1403(a). If this is the intent, the draft FS should conclude clearly that compliance with 20.1402, rather than 20.1403, would result in net public or environmental harm.

Comment #4:

E) Reference:

Draft FS report, Table 4-4; Summary of Estimated Present Worth Costs for Remedial Alternatives, Shallow Land Disposal Area - Feasibility Study.

The alternatives 4 and 5 overall decommissioning full life cycle costs are estimated as approximately \$15.6 and \$35.7 million, respectively. Please provide the technical basis for each of these alternatives so as to understand the cost comparison. The current cost estimate for the two alternatives appears to be based on preliminary parametric and scoping cost

estimates; however, a more accurate cost estimate comparison among options appears to be when the cost estimates are based on project scope of work in Remedial Design or the Remedial Action phase. Additionally, in the current draft FS it appears that the cost line item for the "remediation activities cost" for Alternative 5 is nearly \$4 million more than the same cost for Alternative 4. Please provide the basis for the difference in the estimate. Also, it appears under Alternative 4 that the disposal cell construction cost, and the operation and maintenance cost are estimated low (approximately \$3.4 million and \$0.98 million respectively) whereas, the off-site waste transportation and disposal cost for Alternative 5 appears to be estimated based on an exceedingly high volume of material to ship and dispose at a very high cost of approximately \$16.7 million. Please clarify the bases for estimates.

Comment# 5:

F) Reference:

40 CFR Part 300.400(vi)(g) - Identification of applicable or relevant requirements.

The draft FS should be amended to discuss how the SLDA site ARARs selection, in particular, selection and notification of the proposed preferred ARAR - 10 CFR Part 20.1403 (i.e., restricted use), complied with the selection notification requirements to other agencies set forth in the regulation. Specifically, a discussion relative to the requirement of the regulation stating: "The lead and support agencies shall identify requirements applicable to the release or remedial action contemplated based upon an objective determination of whether the requirement specifically addresses a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstances found at a CERCLA site," should be included in the FS document.