

From: Amir Kouhestani
To: Bill Lenart (USACE); Frothingham, David G LRB
Date: 07/19/2006 1:32:44 PM
Subject: Re: SLDA - response to Draft Feasibility Study comments

Bill and Dave,

On July 7, during a telephone call with Dave, I was advised Corps June 23 responses to NRC May 11 comments should be regarded as final agency responses for purpose of public availability. USACE responses will be posted on NRC SLDA Docket No.: 70-3085.

vr,
Amir Kouhestani
Project Manager
NMSS/DWMEP/DCD

>>> "Frothingham, David G LRB" <David.G.Frothingham@lrb01.usace.army.mil> 06/23/2006 9:10 AM
>>>

Hi Amir, Attached please find USACE responses to SLDA Draft Feasibility Study comments provided by the NRC. Thank you for taking the time and resources to thoughtfully review this document. Please contact Bill Lenart or me if you have any questions or concerns. Thank you again for your efforts. David <<SLDA FS Responses To NRC comments.pdf>> -----David G. Frothingham U. S. Army Corps of Engineers 1776 Niagara Street Buffalo, NY 14207 (716) 879-4239 (716) 879-4355 (fax) david.g.frothingham@usace.army.mil

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From: Amir Kouhestani

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lrp02.usace.army.mil William.J.Lenart (Bill Lenart)		
nrc.gov OWGWPO04.HQGWDO01 PM AAK BC (Amir Kouhestani)	Delivered	07/19/2006 1:32:44
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usace.army.mil David.G.Frothingham (Frothingham David G LRB)

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COMMENT SHEET**

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Project: Draft Feasibility Study of Remedial Action Alternatives, Shallow Land Disposal Area (SLDA) FUSRAP site, Parks Township, Armstrong County PA

Reviewer/Section: NRC

Date: 22 June 2006

COMMENT NUMBER	SECTION	COMMENT	RESPONSE
1	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 [millirem]/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 <i>unrestricted</i> 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.	In accordance with the NCP, during the RI phase, the site was characterized and all potential ARARs were identified. No ARARs were analyzed or remediation goals set. Those evaluations were properly conducted during the FS phase. During the FS all potential ARARs were analyzed and remedial action objectives were proposed. As a result of that analysis, it was determined that there was more than one regulatory requirement that could be applicable or relevant and appropriate (10 CFR 20.1402 and 10 CFR 20.1403) based on the circumstances at the site. Therefore, since no ARARs were selected or remediation goals set in the RI no change has occurred that requires an explanation in the FS.
2	Draft FS report, Authority Section, page E-2.	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.	If USACE selects 10 CFR Part 20.1403 as the ARAR for the site, it will not result in dual regulation. If, after the remedial action is complete, the site requires continued regulation by the NRC, the NRC, and the state for those activities that they now regulate, will be the only regulatory bodies with authority over the site and the owner of the site would remain as the regulated entity. It is true that if 10 CFR Part 20.1403 is selected as the ARAR, it will be necessary for USACE and the NRC to agree on a process for license abeyance during remediation activities since such a remedial action was not contemplated in the MOU between the agencies pertaining to remediation at NRC licensed FUSRAP sites. In addition, it is expected that administrative difficulties may arise with long-term operation and maintenance requirements due to NRC's potential ongoing regulatory authority and responsibility at

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			the site.
2B	<p>The MOU Between the U.S. Department of Energy (DOE) and the USACE Regarding Program Administration and Execution of FUSRAP, March 17, 1999.</p> <p>And</p> <p>Consolidated Office of Nuclear Material Safety and Safeguards Decommissioning Guidance, NUREG 1757, Supplement 1, Draft Report for Comment, September 2005.</p>	<p>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 CERLCA "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.</p> <p>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.</p>	<p>It should be noted that the ARARs for the site include both 10 CFR 20.1402 and 1403.</p> <p>The long-term maintenance activities to be performed under either of the on-site alternatives are generally described within the FS. However, the long-term maintenance discussions under each of the on-site alternatives will be expanded to emphasize that the DOE would be expected to fulfill their responsibilities for surveillance and O&M activities should a restricted release alternative be selected. These responsibilities are expected to be similar to those performed by the federal government at other FUSRAP sites, and the additional text will clarify the roles of USACE and DOE in this regard.</p>
2C	Draft FS report, Introduction	<p>Statements made: "Waste from this facility was disposed of in the trenches at the</p>	The NRC's requirements in 10 CFR 61 – LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE

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	section, page E-1.	<p>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)."</p> <p>The understanding is:</p> <p>1) The waste was shipped from the former Apollo site to the SLDA site; and'</p> <p>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.</p>	<p>WASTE were determined to be not applicable to the SLDA site because (1) the NRC's requirements in 10 CFR 20.1403 – Criteria for License termination under restricted conditions encompass those performance objectives outlined in Part 61, and (2) only requirements that set forth a standard that determines the "degree of cleanup" would be considered ARARs. Furthermore, to be considered an action-specific ARAR, a law or regulation must establish a substantive requirement relating to the hazardous substances or be relevant to the circumstances of their release at the site. They also must establish a remediation goal for the response action. Requirements for general construction not related to a hazardous substance release are not considered ARARs. Should Alternative 4 be selected as the remedy for the site, the criteria given in 10 CFR 61 would be considered in designing an on-site disposal cell as appropriate.</p>
3	<p>Draft FS report, Table 4-4; Summary of Estimated Present Worth Costs for Remedial Alternatives, Shallow Land Disposal Area - Feasibility Study,</p> <p>And</p> <p>Appendix C; SLDA</p>	<p>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.</p>	<p>The comment suggests that Alternative 5 would result in a greater net public environmental harm than Alternative 4. While it is agreed that Alternative 5 is more expensive and produces a greater worker exposure in the short run, impacts to the public from both alternatives were assumed to be negligible during remedial activities. Impacts to the public as a result of off-site waste transportation included in Alternative 5 will be evaluated and placed into the FS for alternative analyses purposes. Table 4-5, Comparison Evaluation of Remedial Alternatives, will be modified to reflect a lesser short-term effectiveness associated with Alternative 5 compared to Alternative 4.</p> <p>It is not correct to conclude, however, that Alternative 5 would</p>

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	Remediation Worker Dose Assessment:		result in greater public or environmental harm, in the long term, than Alternative 4. The SLDA was not selected on the basis of the site suitability criteria given in 10 CFR 61 as they were not available when waste disposal activities occurred. Use of a site selected and developed solely for the purpose of managing these types of wastes would be expected to result in a net benefit to the general public and the environment, given the very long half-lives of the radionuclides present in the SLDA wastes.
4	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.	The current full life cycle cost for Alternative 4 is \$19.6 million. The technical bases for both alternatives are detailed in Attachments 1 and 2 within Appendix B of the FS. Furthermore, the preliminary methodology to each alternative design that provide the foundation for the cost estimates are provided in detail within Section 4.2 of the FS. The approximately \$3.75 million cost difference in the remediation activities between Alternatives 4 and 5 is primarily due to project/excavation efficiency, which directly affects project duration. The duration difference, which is explained in detail in Chapter 4 and evaluated in cost detail in Appendix B, is approximately 9 months. The disposal cell construction and O&M costs are comparable to typical disposal cell/remedial costs for similar projects. Price per acre of disposal cell is often around \$2 million. It is also common for off-site disposal costs to be 60% to 120% greater than an on-site disposal option for the same project. For SLDA, Alternative 5 is approximately 80% greater than Alternative 4. All bases for these estimates are detailed in Appendix B.
5	40 CFR Part 300.400(vi)(g) -	The draft FS should be amended to discuss how the SLDA site ARARs selection, in particular, selection and notification of the	The ARAR discussion presented in the FS, and the ongoing coordination between Federal and State agencies including these

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	Identification of applicable or relevant requirements.	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.	comment responses, suffice to fulfill the stated requirement..