

**EPA Comments on  
Draft Explanation of Significant Differences  
Land Use Controls to Restrict Use of Groundwater  
For Shepley's Hill Landfill Superfund Site  
Former Fort Devens, MA  
October 2012**

**General Comment:**

1. If the local Board of Health (BOH) regulations will be the primary land use control (LUC) as presented in the Draft ESD, the Army must ensure that the Town's well regulations provide clear requirements to prevent the use and installation of groundwater wells in the NIA. Army and EPA have had initial discussions with the Town of Ayer regarding the Draft ESD and particularly the request for a moratorium on groundwater wells in the LUC area. Town representatives have indicated that they are willing to enact a moratorium, but further discussions and coordination are required to ensure that the Town will agree to partner with the Army and EPA to implement and enforce the proposed moratorium.

As an example, the Town of Mashpee, MA BOH, as a result of off-site groundwater contamination from the Mass Military Reservation, adopted a moratorium on residential wells, restricting any and all uses of groundwater, and defining the areas where well use is prohibited based on the documented groundwater plume areas. The moratorium applies to existing and potential future wells. As another example, the Town of North Smithfield, RI enacted a similar ordinance to prohibit groundwater use within the area impacted by the Stamina Mill Superfund Site. Copies of these moratoriums are attached. This type of moratorium provides for a strong LUC, since the groundwater plume map and specific restrictions for the area are incorporated directly into the well regulations, and as it applies to both existing and new wells. EPA believes that this type of LUC is necessary to address potential gaps in the existing local regulatory controls cited by the Army as LUC layers in the Draft ESD.

If a moratorium is not enacted by the Town, or if the Town's by-laws remain inadequate to prevent exposure to contaminated groundwater from existing or potential future groundwater wells, the ESD as proposed will not meet statutory requirements for protectiveness. Other alternatives, including proprietary controls (for example, easements that restrict groundwater use for each of the affected properties) must then be considered.

2. In order to support the reliance on governmental controls, such as a groundwater use moratorium implemented through the local BOH well regulations, the Army will need to demonstrate that the Town has the ability and capacity to assist with IC implementation, maintenance, and enforcement. A "common understanding" regarding the respective IC roles, responsibilities, and legal authorities of the parties should be memorialized through mechanisms available under state law (e.g., an MOU, Administrative Order on Consent, contract, or enforceable agreement). Refer to Sections 3.8, 6.0, 8.4, and 9.3 of "A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites" for further guidance on establishing a "common understanding" and the use of

governmental controls as ICs. A discussion of the “common understanding” arrangements will need to be discussed in the ESD and detailed in the LUCIP.

3. The Army should add language to the ESD to address the disposition of any groundwater wells found within the LUC area (e.g., if a property owner in the LUC area reports an existing well). The ESD should identify actions that the Army will take to ensure that the well is not used (e.g., Army should provide for the safe and permanent decommissioning of any wells found to exist within the LUC area).

### **Specific Comments:**

1. Page 2, line 69: The CERCLA citation is in error. The correct citation for “Explanation of Significant Differences” is CERCLA § 117(c).
2. Page 2, line 78 and footnote 3: Replace the LUC definition footnote with the most recent EPA Guidance reference for the definition of ICs and LUCs. See Section 2 of EPA’s “A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites.”
3. Page 3, line 93: Revise to read: “The following sections contain a brief history of the site, *an overview of site contamination and risks*, a description of the remedy selected in the ROD, and...”
4. Page 4, line 165: Additional discussion regarding the levels of arsenic found at the site driving the risk of human exposure should be included in this summary.
5. Page 8, line 311: Revise to read: “...enforceable component of the ROD *to address the migration of arsenic contamination from Shepley’s Hill Landfill groundwater to groundwater under public, residential and commercial areas of Ayer and the potential risk of human exposure to that contamination.*”
6. Page 9, line 331: “Groundwater in the NIA ~~would~~ poses an unacceptable risk to human health if used for drinking water...”
7. Page 9, lines 359-361: Omit this sentence: “Since natural sources of arsenic and natural conditions resulting in arsenic mobilization are prevalent throughout the region surrounding SHL, this ESD nor the LUC's implemented, are not by any means intended to infer groundwater outside the restricted area is suitable for any use.” This does not relate to the objectives of this ESD.
8. Page 10, lines 368-373: The ESD does not clearly address how the regulatory citation supports the LUC performance objectives identified in Section 3.1.1 of prohibiting use of groundwater. How does the well application procedure of requiring the applicant to “identify any and all sources of potential contamination within 400 feet of the proposed well site” support prohibiting groundwater wells in the NIA? Where does the applicant obtain the information on potential sources of contamination? Would the applicant obtain information

on the location of SHL and the SHL plume through the process of gathering the information on sources of potential contamination? Would all areas of the plume be considered within the 400 foot designation? Does Ayer BOH prohibit installation of groundwater wells if the location is proposed within 400 feet of a potential source of contamination and, if so, where is that stated? Copies of the regulations should be provided as an Appendix to the ESD. If the regulations only apply to certain areas of the LUC Area, this should be depicted on a figure. The LUC Area depicted in Figure 3 shows that this area extends up to approximately 2000 feet beyond the Fort Devens property boundary.

9. Page 10, lines 375-384: To support the relevance of the cited by-laws, a copy of the Town of Ayer utility plan showing the location of municipal water supply pipelines in the LUC Area should be provided. Further, consistent with Section 6.2 of “A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites,” the Army should have discussions with the Town to address whether any anticipated changes to the ordinance are likely, whether zoning variances are allowed that could compromise the value of these requirements as an IC layer, and whether procedures are in place to assure compliance with the zoning requirements.
10. Page 11, lines 410-412: As noted in the General Comment above, EPA believes a groundwater use moratorium must be implemented for the LUC discussed here. EPA has determined that the existing regulations and proposed education and outreach in the Draft ESD are not capable of meeting the LUC performance objective of prohibiting the withdrawal and/or use of groundwater from the LUC Area without a moratorium.
11. Page 11, lines 421-423: Please revise. Because the LUCs identified on page 10 are governmental controls under State and local authority, Army would not modify or terminate them. Rather, Army should indicate that they will coordinate with local and State authorities, as appropriate, when LUCs are no longer required for protectiveness of the Shepley’s Hill Remedy. At that time, the Town of Ayer may choose to terminate the groundwater use moratorium.