

# FUSRAP - St. Louis Information Update



U.S. DEPARTMENT OF ENERGY  
Formerly Utilized Sites Remedial Action Program

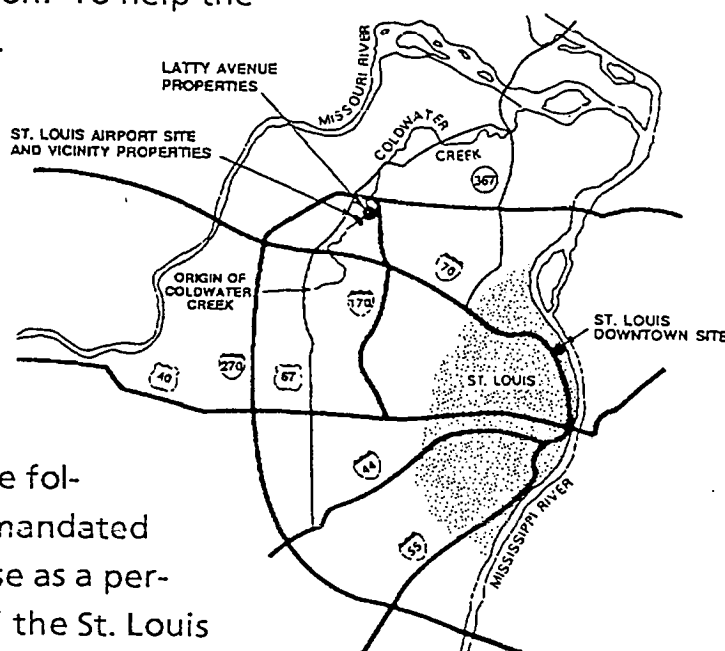
February 1993

*This Information Update has been prepared to address community outreach requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Environmental Policy Act (NEPA). Information Updates are one part of an effort to provide public information on environmental restoration and waste management.*

In 1995, a formal decision will be made regarding the long-term cleanup of the four FUSRAP sites in St. Louis. The public will be involved as we go about the lengthy and complex process of making that decision. To help the public develop informed opinions, the U.S. Department of Energy (DOE) is issuing preliminary information on the process, and will seek input from local residents and officials to ensure that the public's concerns are considered when the final cleanup alternative is selected.

The cleanup alternatives and disposal options being considered are shown on the following pages. In 1985, the U.S. Congress mandated one option, the acquisition of SLAPS for use as a permanent disposal cell for the waste from all the St. Louis sites. When the U.S. Environmental Protection Agency (EPA) placed a portion of the airport site on the National Priorities List, DOE was then allowed to consider a broader range of disposal options. DOE has decided to address all St. Louis sites as a single, large site, with a total volume of waste possibly as much as 730,000 cubic yards of contaminated soil.

All the alternatives (except for the no-action alternative) have as a common trait protectiveness of people and the environment. Also the reader should note that only alternatives 4 and 5 entail construction of a new waste disposal cell. In the discussion of waste excavation, the difference between partial and complete excavation has to do with how accessible the waste is. Finally, none of the options call for waste treatment. Currently no practical way exists of removing radiation from waste (the only advantage of which is reduction of waste volume), so this alternative was screened out early in the

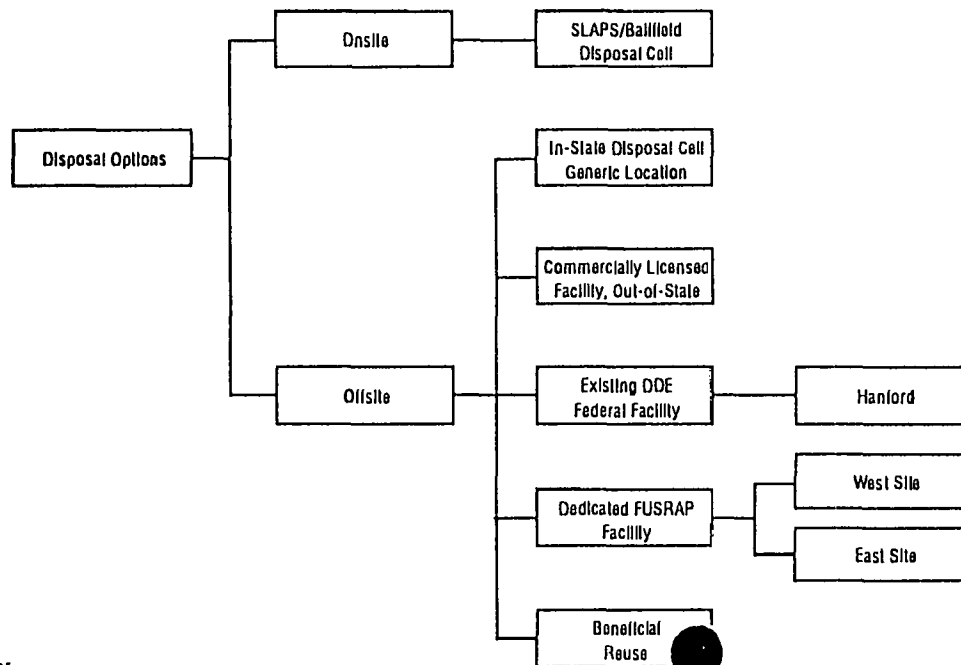


	NO ACTION	INSTITUTIONAL CONTROLS AND SITE MAINTENANCE
Description of Cleanup Option	Included to satisfy CERCLA and NEPA regulations and to provide a baseline with which to compare other alternatives.	Involves the use of deed restrictions and site security measures (e.g., fences), to restrict site access and prevent significant public exposure to the site contaminants.
Implementation Costs	\$2.7 Million	\$16 Million
Implementation Time Frame	N/A	Establishes perpetual surveillance and maintenance requirements
Soil Volume Requiring Excavation	0	Less than 50,000 yd <sup>3</sup>
Special Considerations	<ul style="list-style-type: none"> <li>• Not protective to human health or environment</li> <li>• Required by NEPA/CERCLA</li> <li>• Established to provide baseline for comparison to other alternatives</li> </ul>	<ul style="list-style-type: none"> <li>• Protective</li> <li>• Depends on institutional and legal controls vs. engineering controls on future exposure</li> <li>• Eliminates unrestricted-use option for affected properties; may cause burden on property owners</li> <li>• Low cost</li> <li>• Does not comply with relevant soil cleanup guidelines</li> <li>• Potentially difficult to enforce on privately owned vicinity properties</li> <li>• Minimal waste transportation requirements</li> <li>• Takings clause not costed</li> </ul>

CONSOLIDATION AND CAPPING	PARTIAL EXCAVATION	PHASED COMPLETE EXCAVATION																					
<p>This alternative, DOE would use the St. Louis Airport Site property and use it for consolidation of accessible soil and building materials from offsite areas. Waste would then be covered using natural materials that prevent water infiltration into the soil, and blocks on releases into the surface environment.</p>	<p>Accessible contaminated soil would be excavated for disposal using one of six disposal options. Institutional controls would be used to prevent future exposure to access-restricted soils.</p>	<p>All contaminated soil would be excavated and disposed of. Excavation of restricted-access soils would be delayed until they are made accessible by property owners.</p>																					
<p>\$115 Million</p>	<table> <tr> <td>SLAPS Onsite</td><td>\$206 Million</td><td>\$217 Million</td></tr> <tr> <td>Hanford Ben. Reuse*</td><td>\$220 Million</td><td>\$233 Million</td></tr> <tr> <td>U.S. East</td><td>\$320 Million</td><td>\$340 Million</td></tr> <tr> <td>In-state</td><td>\$354 Million</td><td>\$378 Million</td></tr> <tr> <td>U.S. West</td><td>\$356 Million</td><td>\$382 Million</td></tr> <tr> <td>Comm. Disposal</td><td>\$542 Million</td><td>\$598 Million</td></tr> <tr> <td>Hanford Current*</td><td>\$889 Million</td><td>\$994 Million</td></tr> </table>	SLAPS Onsite	\$206 Million	\$217 Million	Hanford Ben. Reuse*	\$220 Million	\$233 Million	U.S. East	\$320 Million	\$340 Million	In-state	\$354 Million	\$378 Million	U.S. West	\$356 Million	\$382 Million	Comm. Disposal	\$542 Million	\$598 Million	Hanford Current*	\$889 Million	\$994 Million	
SLAPS Onsite	\$206 Million	\$217 Million																					
Hanford Ben. Reuse*	\$220 Million	\$233 Million																					
U.S. East	\$320 Million	\$340 Million																					
In-state	\$354 Million	\$378 Million																					
U.S. West	\$356 Million	\$382 Million																					
Comm. Disposal	\$542 Million	\$598 Million																					
Hanford Current*	\$889 Million	\$994 Million																					
<p>14 years</p>	<p>14-36 years</p>	<p>14-40 years</p>																					
<p>490,000 yd<sup>3</sup></p>	<p>740,000 yd<sup>3</sup></p>	<p>840,000 yd<sup>3</sup></p>																					
<p>• Protective</p> <p>• Complies with Congressional directive</p> <p>• Requires restrictions of groundwater use beneath the liner</p> <p>• Involves no engineered liner beneath waste; dependent on natural geology and groundwater monitoring to ensure protection of drinking water</p> <p>• DOE have successfully used this at other large sites</p> <p>• Restricts use of groundwater</p> <p>• Complies with soil cleanup guidelines</p> <p>• Substantial volume of waste to be transported</p>	<p>• Protective</p> <p>• Considered highly effective in reducing long-term exposure</p> <p>• Complies with soil cleanup guidelines</p> <p>• Minimizes disruption of businesses activities and transportation routes at affected properties</p> <p>• Significant volume of waste to be transported</p> <p>* "Not Tested" with State of Washington.</p>	<p>• Protective</p> <p>• Highest degree of permanence and effectiveness to reduce long-term exposure</p> <p>• Complies with soil cleanup guidelines</p> <p>• Dependent upon continuously accessible disposal capacity</p> <p>• Requires longest time to complete</p> <p>• Substantial volume of waste to be transported</p>																					

	ONSITE DISPOSAL		OFFSITE DISPOSAL				
	CAPPING	ENCAPSULATION	IN-STATE	OUT-OF-STATE	OUT-OF-STATE AT DOE FACILITY	OUT-OF-STATE AT COMMERCIAL FACILITY	BENEFICIAL REUSE
Description	St. Louis waste consolidated at SLAPS and a barrier constructed over all waste.	SLAPS waste excavated and set aside; liner placed, and all St. Louis waste placed and covered at SLAPS.	Construction of a new disposal facility in Missouri on land acquired by DOE.	Construction of a new disposal facility on federal land in the eastern or western U.S.	Shipping waste to a DOE facility capable of accepting FUSRAP waste.	Shipping waste to an existing commercial facility.	Excavation of contaminated soil for use as backfill for roads, airport runway, or certain disposal facilities.
Relevant Comments	Requires use of _____ acres at SLAPS.  Directed by Congress in 1985 Energy and Water Development Appropriations Act; CERCLA/NEPA now requires broader considerations.	Requires use of _____ acres at SLAPS.	Needs site suitability study.  Considerable delays would result from need to site a new facility.	Needs site suitability study.  Considerable delays would result from need to site a new facility.	Hanford, WA, is such a facility.  Requires acceptance by receiving state.	Two such facilities are expected to be licensed.  Very high transportation and disposal costs.	Relatively low cost; dependent on identification of suitable end-use.

Another way of looking at the disposal options is illustrated on the right.



The DOE site manager would be pleased to receive your comments or questions about the proposed options for long-term cleanup of the St. Louis sites. You may write or call him at the DOE Public Information Center or through the toll-free public access line, 1-800-253-9759.

For more information or to request documents or other printed materials about the St. Louis sites, please call or visit the DOE Public Information Center at 9200 Latty Avenue, Hazelwood, Missouri 63042; telephone (314)524-4083.