U.S. Army Corps of Engineers
St. Louis District

St. Louis Sites Fact Sheet

NORTH ST. LOUIS SITES
REMEDIAL DESIGN/REMEDIAL ACTION

"Gateway to Excellence"

The U.S. Army Corps of Engineers (USACE), St. Louis District is conducting a cleanup program for the North St. Louis County sites. The sites contain soils primarily contaminated with radium, thorium, and uranium as a result of activities associated with the Manhattan Engineer District/Atomic Energy Commission in the 1940s and 50s.

The U.S. Environmental Protection Agency and USACE have signed the Record of Decision that outlines the final remedy to cleanup the North St. Louis County sites.

The Corps of Engineers encourages private citizens to participate fully in the cleanup program.

To learn more about FUSRAP or to inquire about public involvement opportunities, contact the FUSRAP Project Office at (314) 260-3905 or write to the St. Louis District, Corps of Engineers, FUSRAP Project Office, 8945 Latty Avenue, Berkeley, Missouri 63134

BACKGROUND

Under contracts with the Manhattan Engineer District and Atomic Energy Commission (MED/AEC), the Mallinckrodt Chemical Plant extracted uranium from ore at the St. Louis Downtown Site (SLDS) in St. Louis, Missouri from 1942 to 1957. During this time and until 1967, radioactive by-products from this process were stored at a property adjacent to the Lambert-St. Louis International Airport, which is now referred to as the St. Louis Airport Site (SLAPS). In 1966, the SLAPS wastes were purchased, moved, and stored at a property on Latty Avenue. Part of this property became known as the Hazelwood Interim Storage Site (HISS), while the other part became known as the Futura property. During this move, handling, transport, and storage of the contamination spread the materials along haul routes and to adjacent properties forming the SLAPS and Latty Avenue Vicinity Properties (VPs). Today, these sites, including impacted areas along Coldwater Creek, make up the North St. Louis County sites.

In accordance with the Comprehensive Environmental Response, Compensation and Liability Act, the U.S. Army Corps of Engineers (USACE) developed a Feasibility Study (FS) outlining six alternatives for the final cleanup of the North St. Louis County sites. Based on this study, a Proposed Plan (PP) was also developed. The PP identified the USACE's preferred alternative and rationale for this preference; was also developed. These documents were released for public review and comment.

In May 2003, the USACE held a public meeting to present the FS/PP. A 75-day public comment period (May 1 – July 14, 2003) followed the release of the FS/PP to gain the opinions of citizens, public officials, and agencies. Comments received have been addressed and incorporated into the approved Record of Decision (ROD)–the document that describes the final course of action at the North County sites. Responses to these comments can be found in the Responsiveness Summary, which is an appendix to the ROD.

SELECTED REMEDY

The major components of the selected remedy are:

- excavate all accessible contaminated soil;
- dredge contaminated sediment from Coldwater Creek;
- remove contaminated soils from the surfaces of buildings and structures;
- dispose of soils and sediments at a properly permitted, off-site disposal facility;
- impose institutional controls (or use restrictions) on contaminated soils under roads, active rail lines and other permanent structures; and
- monitor groundwater and surface water.

REMEDIAL DESIGN

The USACE is developing the remedial design for final cleanup activities at the North St. Louis County sites. The design is being developed according to the criteria established in the approved ROD.

Under the remedial design, soils and sediments will be removed to levels that support release of the property for unlimited use/unrestricted exposure. These levels are as follows:

- Accessible surface soils/sediments (0-6 inches) contaminated with radium-226, thorium-230 and uranium-238 will be cleaned up to 5/14/50 picocuries per gram (pCi/g), respectively.
- Subsurface soils (below 6 inches) will be cleaned up to 15/15/50 pCi/g, respectively.
- Sediments below the low average water level of the creek will be cleaned up to 15/43/150 pCi/g, respectively.

Groundwater and surface water will be monitored during the implementation of the remedy. An estimated 230,000 cubic yards of soils and sediments exceeding these goals will be shipped to out-of-state disposal facilities.

On-site structures will be investigated to ensure that they also meet remedial goals. Decontamination technologies such as washing, vacuuming, scraping or other similar processes will be used to remove contaminated soils from the structures.

Areas addressed under previous removal actions will be evaluated to confirm that they are consistent with cleanup goals identified in the ROD. Any areas that do not meet these goals will be further remediated.

LONG-TERM STEWARDSHIP, INSTITUTIONAL CONTROLS AND MONITORING

Soils beneath roads, rail lines, and other permanent structures that exceed cleanup goals will be considered inaccessible. Institutional controls (or use restrictions) will be placed on inaccessible soils exceeding the cleanup criteria. In general, these use restrictions will:

- prohibit the development and use of the properties for housing, schools, child care facilities and playgrounds;
- maintain the physical integrity of the cover (i.e. road, rail line or permanent structure); and
- prevent and/or manage construction or maintenance activities.

Under the ROD, the specific institutional controls needed to implement use restrictions will be identified in the remedial design. An institutional control design and implementation plan (i.e. long-term stewardship plan) will be developed within the next 15 months to ensure the continued effectiveness of the institutional controls. The plan will identify the specific mechanisms necessary to implement the use restrictions described in the ROD and describe the monitoring, maintenance and inspection procedures that will be established for each of the institutional controls. The USACE will work with EPA, the Missouri Department of Natural Resources, landowners, municipalities, utilities, the U.S. Department of Energy, and the St. Louis Oversight Committee to develop this plan.

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Monitoring of the ground water, surface water and sediment will consist of response-action monitoring and long-term monitoring. These types of monitoring will be conducted where contamination remains above remediation goals for unlimited use and unrestricted exposure.