

## NORTH COUNTY FEASIBILITY STUDY / PROPOSED PLAN FREQUENTLY ASKED QUESTIONS (FAQS)

### ***1. Where is the St. Louis North County Site and what does it include?***

Generally described, the St. Louis North County Site is bounded by Banshee Road on the south, Lindbergh Boulevard on the west, Pershall Road on the north and Graham/North Hanley on the east. Also included in the site is Coldwater Creek beginning north of Lambert - St. Louis International Airport. (It is important to note that although many of the properties and portions of the roads within this roughly described boundary are impacted, it should not be misconstrued as implying that every property and roadway are impacted.)

More specifically, the St. Louis North County Site includes the following:

- St. Louis Airport Site (SLAPS);
- Latty Avenue Properties - which include the Hazelwood Interim Storage Site (HISS), Futura Coatings, and the Latty Avenue Vicinity Properties; and
- SLAPS Vicinity Properties – which include properties near SLAPS and areas along Coldwater Creek.

(See page 2 of the Proposed Plan for the St. Louis North County Site)

### ***2. What does the St. Louis North County Site Feasibility Study mean when it identifies a remediation goal of 5/14/50 for surface soils, 15/15/50 for subsurface soils, or 15/43/150 for creek sediment?***

“Remediation goals” refer to the final cleanup standards to be achieved at a site. The remediation goal of 5/14/50 means that for any 100 square meter area of land soils exceeding 5 picoCuries per gram (pCi/g) of radium-226, 14 pCi/g of thorium-230 or 50 pCi/g of uranium-238 above background concentrations averaged over the first 15 centimeters (or 6 inches) of soil below the surface must be excavated and disposed. Similarly, the remediation goal of 15/15/50 means that for any 100 square meter area of land soils exceeding 15 picoCuries per gram (pCi/g) of radium-226, 15 pCi/g of thorium-230 or 50 pCi/g of uranium-238 above background concentrations in subsurface soils (or soil more than 6 inches below ground surface) averaged over 15 centimeter (or 6 inch) thick layers of soil must be excavated and disposed. Finally, the remediation goal of 15/43/150 means that soils exceeding 15 picoCuries per gram (pCi/g) of radium-226, 43 pCi/g of thorium-230 or 150 pCi/g of uranium-238 above background concentrations in sediments below the Coldwater Creek mean water gradient (or below the average water level of Coldwater Creek) must be excavated and disposed.

### ***3. Does contaminated material under roads, railroads, bridges and other permanent structures pose a threat?***

The threat posed by contaminated material under roads, railroads, bridges and other permanent structures depends upon the level of contamination and its configuration. High levels of contamination may still pose a threat in spite of the shielding provided by construction materials (such as concrete, asphalt, etc.) However, such high levels have not been found in the North County Site. In North County, people are protected from the radiological contamination present under roads, railroads, bridges and other permanent structures by the limited amount of time spent in these areas and the shielding offered by cover materials (asphalt, gravel, etc). Institutional controls (such as deed notices, land use restrictions and zoning restrictions) could be placed on these areas to maintain their current use and to ensure that the shielding materials remain in place. If for some reason, such as maintenance, the shielding material would be removed, the contamination could pose a threat if the level exceeds the CERCLA risk range. Should that occur, appropriate response measures would be taken to ensure that activities in those areas are conducted in a manner that is fully protective of human health and the environment.

**4. Will all areas of the St. Louis North County Site be monitored after cleanup?**

Whether or not an area will be monitored depends upon the selected remedy. Until a site meets “unlimited use and unrestricted exposure requirements,” CERCLA requires the lead agency to review the action taken at the site no less often than every five years after the initiation of the selected remedial action. The primary purpose of the review is to assure that the response action continues to be protective of human health and the environment.

**5. If an area within the St. Louis North County Site is monitored after cleanup is complete, how long will monitoring continue?**

Once a site is determined to meet “unlimited use and unrestricted exposure requirements”, a determination can then be made to cease monitoring. Any determination to cease monitoring will be documented in the five-year reviews for the St. Louis sites and will be done by the lead agency for the site (USACE or DOE) in close consultation with EPA and MDNR.

**6. What agency will be responsible for monitoring the St. Louis North County Site?**

Under the final *Memorandum of Understanding Between the U. S. Department of Energy (DOE) and the U. S. Army Corps of Engineers (USACE) Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP)*, signed March 17, 1999, execution and administration responsibilities of the USACE and DOE for the lifecycle of the FUSRAP sites are delineated. Per this agreement, responsibility for the St. Louis FUSRAP Sites will transfer to the DOE two years after completion of the remedial action at the site. The Corps is responsible for any five-year reviews to be conducted up to and including the first five-year review after site closeout. (In fact, the Corps is currently conducting the first five-year review for each of the St. Louis FUSRAP sites.) The DOE would be responsible for subsequent five-year reviews after this timeframe.

**7. Will the gabion wall at SLAPS be removed in the future?**

Radiological contamination will be addressed according to remediation (i.e. cleanup) goals identified under the final selected remedy.

As indicated in the St. Louis North County Site Feasibility Study, the gabion wall would not be removed under Alternative 1 (No Action) or Alternative 4 (Institutional Controls) since neither allow for the excavation of contaminated material. In contrast, the gabion wall would be removed under Alternatives 2, 3, 5 and 6 since these require the excavation of soils and impacted material exceeding cleanup standards proposed by each. Under these four alternatives, after removal of the contamination, including the gabion wall, the creek reach from the railroad trestle at Banshee Road to the bridge at McDonnell Boulevard would be redesigned, eliminating the steep and eroding banks. Thus, depending on which alternative is ultimately selected, the gabion wall may or may not be removed.

**8. How much sampling has been done along Coldwater Creek?**

Historical (pre-1998) data from the Coldwater Creek flood plain consists of results from about 342 or more sediment samples in the North County area. Sampling included 240 samples between SLAPS and Interstate 270 and 102 samples adjacent to or in the area approximately one mile north of Interstate 270.

USACE has performed significant additional flood plain and sediment sampling. More than 300 samples have been taken pursuant to 1) response actions at the area of the St. Denis Bridge; 2) performance of an ecological risk assessment involving Coldwater Creek; 3) response actions at

Vicinity Property (VP) 56; 4) surveys of VP-1C, VP-4C, VP-5C, VP-8C, VP-56 through VP-59, VP-7 through 12, VP-40a and a Carla Drive property; 5) design of Coldwater Creek adjacent to SLAPS; 6) surveys associated with replacement of the Halls Ferry Bridge; and 7) routine periodic environmental monitoring.

**9. What is meant by the phrase “mean water gradient”?**

The phrase “mean water gradient” refers to the average water level present in Coldwater Creek as it flows downstream.

**10. Why would there be different cleanup criteria for sediment in water versus soil on the ground?**

Cleanup criteria are developed based on applicable or relevant and appropriate requirements (ARARs) and the level of risk posed by the contaminant to human health and the environment.

For example, the proposed cleanup criteria for sediments below the mean water gradient of a creek were developed by considering who uses the creek and how. This allowed the Corps to consider the ways that people could be exposed to contaminants (both in their current state and during dredging activities) and evaluate the risk posed by this potential exposure. It should be noted that, in general, sediment in water poses less of a threat than soil on dry ground. This is because the water absorbs radiation coming off the radioactive material and exposure through the inhalation and ingestion pathways does not exist.

**11. Is any radioactive contamination getting into public drinking water?**

In the St. Louis area, two potential sources of drinking water exist – ground water and surface water (i.e. Missouri or Mississippi Rivers).

Regarding ground water, there are several zones of groundwater that exist under the North County site. Although USACE has identified uranium in the shallow zone of ground water at SLAPS, this water would not be used for drinking water due to the zone’s inability to produce adequate amounts of water and because of the presence of other contaminants from local industries and natural sources. The protected ground water resource under the site lies within the limestone deep below the clay soils. This protected ground-water zone, as determined by sampling is not impacted by FUSRAP contamination. The shallow, contaminated zone of ground water does not connect with the protected (deep) ground water aquifer.

Regarding surface water, in North County, Coldwater Creek flows past SLAPS and HISS and empties into the Missouri River at Missouri River Mile 7. This is twelve miles upstream of the Chain-of-Rocks water works. Concentrations of radionuclides in the Coldwater Creek surface water downstream from the St. Louis North County Site do not exceed naturally occurring background levels. In addition, thorium-230, the main North County contaminant is insoluble and its presence is generally limited to the sediments of the creek. Coldwater Creek is not used as a public drinking water source.

**12. Why is Westlake Landfill not included in the North County Site cleanup?**

The U.S. Congress directs and funds the USACE to cleanup FUSRAP sites. Westlake Landfill has not been designated a FUSRAP site and thus the U. S. Army Corps of Engineers has no authority over the site. The U.S. Environmental Protection Agency, Region VII is the lead agency and the federal government point of contact for actions dealing with the Westlake Landfill. Thus, the final cleanup action for the FUSRAP North County Site does not include Westlake Landfill.

***13. What happens after the end of the public review period for the St. Louis North County Site Feasibility Study and Proposed Plan?***

After the end of the public review period (July 16, 2003), the Corps will compile oral and written comments on the North County Feasibility Study and Proposed Plan. The Corps, as Lead Agency, will respond to all significant comments in the North County Record of Decision and will consider these comments when working with USEPA to select the final remedy. If you are interested in the status of the Record of Decision, check this website ([www.mvs.usace.army.mil/engr/fusrap/home2.htm](http://www.mvs.usace.army.mil/engr/fusrap/home2.htm)) regularly.