

# Summary of Activities at the

ST LOUIS NORTH COUNTY SITE PROPOSED PLAN



"Gateway to Excellence"

The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting a cleanup program for the St. Louis North County Site. The Site contains soils primarily contaminated with radium, thorium, and uranium as a result of federal defense activities performed under contract with the Manhattan Engineering District and the Atomic Energy Commission during the nation's early atomic energy program in the 1940s and 50s.

The USACE issued a Proposed Plan detailing its preferred cleanup alternative for cleaning up the North County Site on May 1, 2003. The Plan identifies Alternative 5, **Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures,** as the USACE's preferred remedy for the North County Site. Public comment and regulatory review will help determine the final remedy selected for the site. The USACE will respond to all significant comments in the North County Record of Decision, which will identify the final remedy for the site based in part upon public comments received during the 30-day review period.

> The USACE encourages private citizens to participate fully in the cleanup program.

To learn more about the St. Louis North County Site or to inquire about public involvement opportunities, contact

#### (314) 260-3905

Or write

St. Louis District, Corps of Engineers FUSRAP Project Office 8945 Latty Avenue, Berkeley, MO 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 process byproducts 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, improper 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 County Site.

On October 4, 1989, SLAPS, HISS and Futura were added to the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL). In 1997, Congress directed the U.S. Army Corps of Engineers (USACE) to oversee the cleanup of all areas within the North County Site under the Formerly Utilized Sites Remedial Action Program.

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, the USACE issued a Proposed Plan (PP) describing the preferred remedy for the North County Site. The PP provides background information on the North County Site, summarizes the six alternatives under consideration, and presents the USACE's rationale for its preferred remedy. The Plan also outlines the public's role in final decision-making.

# THE PREFERRED ALTERNATIVE

The six site-wide alternatives are discussed at length in the Feasibility Study (FS) for the North County Site. The Proposed Plan provides a summary of each alternative, identifies the preferred alternative, and provides the rationale for the selection of this alternative. Based on currently available information, the USACE prefers Alternative 5, Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other

# Alternative 1

#### **No Action**

Leave site as is with periodic environmental monitoring.

Cost: \$1.5 million

# Alternative 2

# Partial Excavation and Capping at SLAPS and HISS

Excavate soil from the VPs and dispose out-ofstate. Cap SLAPS and HISS and use institutional controls to limit access to contaminated areas.

Cost: \$205 million

# Alternative 3

#### **Partial Excavation and Treatment**

Excavate impacted soils from VPs and HISS, then consolidate and treat at SLAPS. Use institutional controls to limit access to contaminated areas.

Cost: \$284 million

# Alternative 4

#### Institutional Controls

Use institutional controls such as deed notices, land use restrictions, and zoning restrictions to limit future land use at SLAPS, HISS, and the VPs.

Cost: \$129 million

# Alternative 5

#### Excavation with Institutional Controls Under Roads, Bridges, Railroads, and Other Permanent Structures

Remove contamination to allow unrestricted use at all sites. Control access under roads, bridges, railroads, and other permanent structures.

Cost: \$223 million

# Alternative 6

#### **Excavation at all Properties**

Excavate impacted soils from all locations, regardless of accessibility, for out-of-state disposal.

Cost: \$286 million

**Permanent Structures.** This alternative protects human health and the environment and provides the best balance of effectiveness, cost, and implementability.

Alternative 5 uses a combination of excavation and off site disposal of accessible soils and sediments along with institutional controls (e.g. zoning restrictions) to manage soils under roads, bridges, railroads and other permanent structures. More specifically, Alternative 5 includes the following activities:

- Excavate surface soil (0-6 inches) with radionuclide concentrations above background of 5 pCi/g of Ra-226, 14 pCi/g of Th-230, and 50 pCi/g of U-238 by the sum of the ratios (SOR). Excavate subsurface soil (in subsequent layers) with radionuclide concentrations above background of 15 pCi/g of Ra-226, 15 pCi/g of Th-230, and 50 pCi/g of U-238 by SOR.
- Remove sediment below the mean water gradient of Coldwater Creek with radionuclide concentrations above background of 15 pCi of Ra-226, 43 pCi/g of Th-230, or 150 pCi/g of U-238; sediment above the mean water gradient would be addressed to surface and subsurface soil standard listed above.
- Excavation to these criteria allow unrestricted use at all properties except for inaccessible areas under roads, bridges, railroads, and other permanent structures. Institutional Controls (e.g. land use or zoning restrictions) would be placed on soils under roads, bridges, railroads and other permanent structures to ensure these areas are not excavated without appropriate oversight and safety procedures. A Long Term Stewardship Plan would be developed by USACE, in cooperation with site stakeholders, to address the specifics of the institutional controls.
- Dispose excavated soil and sediment at properly permitted disposal sites out-of-state.

In general, the long-term protectiveness of this alternative is high. The total cost is \$223 million.

# **PUBLIC PARTICIPATION**

The USACE encourages public input to ensure the remedy selected for the St. Louis North County Site meets the needs of the local community and is an effective solution to the problem. Based on available information, the Corps of Engineers' preferred alternative is Alternative 5, Excavation with Institutional Controls Under Roads, Bridges, Railroads and Other Permanent Structures. Although Alternative 5 is preferred at the present time, public comments are welcome on all alternatives.

Written comments may be submitted to the USACE, at any time during the 30day period. Oral comments will be recorded during the May 29, 2003 public meeting. The USACE will respond to all significant comments and will consider these comments when working with the U.S. Environmental Protection Agency (EPA) to select a final remedy. The final remedy will be outlined in the Record of Decision, which will be submitted to EPA later in 2003.