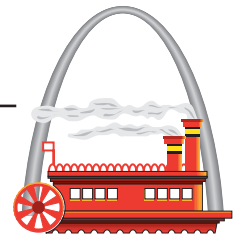




U.S. Army Corps of Engineers  
St. Louis District

## Summary of Activities at the **ST. LOUIS DOWNTOWN SITE OVERVIEW**



"Gateway to Excellence"

The U.S. Army Corps of Engineers (USACE), St. Louis District, is conducting a cleanup program for the St. Louis Downtown Site (SLDS). The Site contains soils contaminated with radium, thorium, and uranium as a result of federal defense activities performed under contracts with the Manhattan Engineer District and the Atomic Energy Commission in the 1940s and 50s.

The USACE has issued a Feasibility Study identifying and evaluating alternatives for cleaning up SLDS as well as a Proposed Plan detailing the preferred cleanup alternative, **Partial Excavation with Off-site Disposal**. Public comment and regulatory review will help determine the remedy selected for the site. Engineering plans, work instructions, health and safety plans, and an environmental compliance plan will be prepared before cleanup begins.

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

To learn more about the St. Louis Downtown Site or to inquire about public involvement opportunities, contact  
(314) 260-3905

or write

St. Louis District, Corps of Engineers  
FUSRAP Project Office  
9170 Latty Avenue  
Berkeley, MO 63134

### Background

From 1942 to 1957, the Mallinckrodt Chemical Plant extracted uranium from ore at the St. Louis Downtown Site (SLDS) in St. Louis, Missouri. This processing of ore, conducted under contracts with the Manhattan Engineer District and the Atomic Energy Commission, resulted in releases of spent ore, process chemicals, radium, thorium, and uranium to the environment. Later disposal and relocation of processing wastes resulted in radioactive contamination at other locations near the St. Louis Airport.

SLDS was formerly part of the U.S. Department of Energy (DOE) Formerly Utilized Sites Remedial Action Program (FUSRAP). In 1990, the U.S. Environmental Protection Agency (EPA) and DOE negotiated a Federal Facilities Agreement (FFA), which described the process that would be used to clean up contaminated soils in St. Louis. The U.S. Army Corps of Engineers (USACE) became responsible for FUSRAP in 1997.

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the USACE, St. Louis District, has based their approach to cleaning up SLDS on data and findings contained within four key documents: the Remedial Investigation, the Baseline Risk Assessment, the Initial Screening of Alternatives, and the Feasibility Study. These documents are available for review in the Administrative Record, which is maintained at both 9170 Latty Avenue in Berkeley, Missouri and the St. Louis Public Library, Government Information Section, at 1306 Olive Street in St. Louis, Missouri. A Proposed Plan detailing USACE's preferred alternative has also been issued and is available for review at both locations. The final cleanup remedy will be outlined in the Record of Decision, which will be submitted to the EPA on July 3, 1998.

### Early Removal Activities

While developing a comprehensive cleanup strategy, the U.S. Department of Energy identified early removal actions that would minimize exposure to contaminated materials and allow for consolidating the impacted materials at temporary on-site storage areas. Four interim actions were performed between 1995 and 1997:

In 1995, 15,043 cubic yards of contaminated soil was excavated from the Mallinckrodt Plant 10 area and shipped off site for disposal at the Enviro-

Six alternatives were evaluated to address contaminated soils at SLDS. The USACE prefers Alternative 4 with a cleanup level of 5/15/50.

### Alternative 1

#### No Action

Leave SLDS in its current state.

(Required for comparison under CERCLA.)

Cost: \$22 million

### Alternative 2

#### Institutional Control and Site Maintenance

Prevent access to contaminated areas. Perform site maintenance to restrict use and monitor area.

Cost: \$29 million

### Alternative 3

#### Consolidation and Capping

Consolidate and cap contaminated soils and waste. Decontaminate or dismantle buildings.

Cost: \$100 million

### Alternative 4

#### Partial Excavation with Off-Site Disposal

Excavate accessible soils to composite criteria\* in the top 2 feet and clean to depth 50/100/150. Excavate Plant 7 area to composite criteria\* to depth.

Cost: \$92 million

### Alternative 5

#### Complete Excavation with Off-Site Disposal

Excavate accessible soils to composite criteria\* depth.

Cost: \$140 million

### Alternative 6

#### Selective Excavation and Disposal

Excavate accessible soils to composite criteria\* to 4-6 feet. Below 4-6 feet, clean to 50/100/150. Excavate Plant 7 area to composite criteria\* to depth.

Cost: \$114 million

\* Composite criteria is 5/5/50 for the top 6 inches and 15/15/50 below 6 inches for radium, thorium, and uranium respectively.

care facility in Utah.

In 1996, 750 cubic yards of contaminated soil was excavated from the City Property, Riverfront Trail area, and shipped off site for disposal at the Envirocare facility in Utah.

In 1996, the 50-series buildings on the Mallinckrodt property were decontaminated and demolished.

In 1997, Plant 6 and 7 Buildings were decontaminated and demolished.

## Public Participation

The USACE encourages public input to ensure the remedy selected for SLDS meets the needs of the local community and is an effective solution to the problem.

Comments on the proposed remedial action will be accepted for 30 days after the Feasibility Study and the Proposed Plan are issued. Verbal comments will be recorded during the April 21, 1998 public meeting and written comments may be submitted at any time during the 30-day comment period. The USACE will respond to all significant comments and will consider these comments when working with EPA to make a final deci-



*Aerial view of the St. Louis Downtown Site in St. Louis, Missouri.*