St. Louis Airport Site

Closing Ceremony
A formal closing ceremony took place on May 30, 2007 to commemorate the completion of the cleanup at the St. Louis Airport Site (SLAPS). Over 600,000 cubic yards (cy) of radiologically contaminated material was removed from the site over a 9-year period.

Representatives from the U.S. Army Corps of Engineers (USACE), the U.S. Environmental Protection Agency (EPA), the Missouri Department of Natural Resources (MDNR), the St. Louis Oversight Committee, and other concerned citizens attended the ceremony. The main address was given by Brigadier General Robert Crear, Commander, Mississippi Valley Division, USACE. Colonel Lewis Setliff, Commander, St. Louis District, USACE opened the ceremony. Other speakers included Sharon Cotner, the Formerly Utilized Sites Remedial Action Program (FUSRAP) Program Manager, Richard Cavanagh, Chairman of the St. Louis Oversight Committee, and Dan Schuette, Director of the Division of Environmental Quality, MDNR. All agreed that the commitment of the citizens of Missouri, federal, state, and local agencies together achieved this milestone.

The SLAPS is a 21-acre site just north of the St. Louis Airport that was used during the nation’s early atomic weapons program for storage of radioactive process residues/by-products and other material from the downtown site. On October 4, 1989, SLAPS was added to the EPA’s National Priorities List. The USACE remediated SLAPS between 1998 and 2007.

In October 1997, under the Energy and Water Development Appropriations Act, Congress transferred management of FUSRAP from the U.S. Department of Energy to the USACE.

North St. Louis County Sites

Since spring 2007, the USACE has completed remediation of three different North County sites. 15,075 cy of contaminated material was removed from the Federal Mogul property (VP-01L) and the 10K530087 parcel. Restoration was completed and the property was released to the property owner. In addition, three cy of contaminated material was removed from the Graham Manufacturing Property (VP-04L) and a total of 5,735 cy of contaminated material was removed from VP 8C. Both properties were restored and released to the property owners. Contaminated materials removed from these sites were shipped to an out-of-state licensed, permitted disposal facility.

Remediation activities continue at the VP-40A East Parcel. So far the USACE has removed and shipped over 14,400 cy of contaminated material to an out-of-state licensed, permitted disposal facility. Though restoration of the IA-12 property continues, excavation of the property was completed with the removal of 8,450 cy of contaminated material.

USACE remediation activities scheduled to begin in 2008 include the IA-13 and VP-2L properties. Work on IA-13 will begin in June. The area to be remediated and restored starts on the south side of Banshee Road and extends to the St. Louis Airport property. VP-2L is a Latty Avenue property adjacent to the Hazelwood Interim Storage Site. Remediation on VP-2L will begin in the fall.
St. Louis Downtown Site

River Sampling
The USACE St. Louis District has developed a plan to investigate a portion of the Mississippi River to determine if elevated levels of radiological activity exist from nearby historical Manhattan Engineer District/Atomic Energy Commission (MED/AEC) operations. From the 1940’s through the 1950’s, the MED/AEC conducted uranium processing operations at the nearby Mallinckrodt Chemical Works. During the years that MED/AEC operations were being conducted at Mallinckrodt, and prior to sewage treatment upgrades, plant sewer effluent containing some residual radioactivity was discharged directly to the River.

Some elevated activity was detected in riverbed sediment samples collected in an area slightly downstream of the sewer outfall during an investigation in the 1990’s, but these results could not be duplicated in a subsequent investigation of the riverbed. To address this issue, the Record of Decision (ROD) for the St. Louis Downtown Site (SLDS) stipulated that the area of the riverbed where radiological contamination was detected would be revisited and characterized. The recent USACE plan describes the sampling to fulfill the ROD requirement.

In December 2007, river levels were low enough for samples to be collected from the dry riverbed using hand equipment. Based on the findings of the riverbed samples, the USACE will determine if any further actions are needed.

Inaccessible Soils
In the spring of 2007, the USACE began investigative activities ultimately leading to an Inaccessible Areas (IA) ROD for SLDS. The 1998 ROD addresses MED/AEC contamination in accessible soils at the SLDS. The future IA ROD will address inaccessible MED/AEC contaminated soils under buildings, structures, roads, and active rail lines. While the IA ROD is in development, the USACE will continue remediation of MED/AEC contaminated soils in accessible areas at the SLDS in agreement with the present ROD.

A Remedial Investigation (RI) and Feasibility Study (FS) will be conducted to characterize the MED/AEC contaminated inaccessible soils at the SLDS. The RI/FS will assess the risk for the public and the environment and develop and evaluate the remedial alternatives and costs.

After completion of the RI/FS, a proposed plan (PP) will be prepared. The PP will inform the public of all the alternatives considered to remediate the site including the preferred remedy. The PP will be made available for public inspection in the administrative record file. A 30-day public comment period will be held.

After the public comment period ends, a remedy will be selected and documented in the Record of Decision. The selected remedy will be based on the PP, comments received from the public, the regulators, and the lead agency.

Mallinckrodt and Vicinity Properties Cleanup Moves Forward
Work at the SLDS Mallinckrodt Plant and VPs continues to progress smoothly, with only a few areas remaining to be remediated. Recently completed Mallinckrodt areas include Plant 7 North and South where USACE removed 23,000 cy of contaminated material, Plant 9 Security Gate area where 22 cy of contaminated material were removed, and the Soil Storage and Load-Out facility in Plant 6West Half (6WH) where 8,000 cy of contaminated material were removed. The Plant 6WH load-out area was completed and operational in January 2007. Recently completed VPs include Thomas and Proetz where 1,995 cy of contaminated material were removed, Christiana Court where 47 cy of contaminated material were removed, and Norfolk Southern Railway property.

Excavation activities at Gunther Salt North and South resulted in the removal of 2,826 cy of contaminated material to an out-of-state licensed/permitted disposal facility.
where 243 cy of contaminated material were removed, and Gunter Salt North and South where 2,826 cy of contaminated material were removed. Contaminated materials removed from these remediated properties were shipped to an out-of-state licensed, permitted disposal facility.

5-Year Review

The second 5-year Review for the St. Louis FUSRAP sites will be completed in 2009. CERCLA requires a 5-year Review on remedial actions when “hazardous substances, pollutants, or contaminants will remain on site above levels that allow for unlimited use and unrestricted exposures.” MED/AEC contamination still exists at the SLDS and North County sites. The USACE is currently in the process of remediating these areas.

The 5-year Review activities consist of: a document review to ensure all requirements of the selected remedy have been implemented; data review and analysis; site inspections; and interviews from the state, appropriate representatives of the community, local officials, potential responsible parties, property owners, and the public. The final component of the Review is an overall evaluation to determine whether the selected remedy continues to protect the health and safety of the public and the environment. The results of the community interviews will assist in judging whether the strategies and activities of the selected remedy remain responsive to the needs of the FUSRAP stakeholders. These steps will culminate in a 5-year Report that will be available to the regulators and the stakeholders for review and comment before the 5-year Review is finalized.

The USACE is the lead agency that will be conducting the 5-year Review with support from the EPA, the state, and the community. Activities for the 5-Year Review will begin in spring, 2008 with the community interviews. If you are interested in participating in the Review via an interview, please contact Roy Parks at the USACE, 314-260-3923.

Community Involvement Plan

The Community Relations Plan (CRP) has a new name. It is now the “Community Involvement Plan for the St. Louis FUSRAP Sites (CIP).” Along with the new name, the CIP is in the process of being revised and updated. There have been many changes at the St. Louis FUSRAP sites since the last CRP update in 2003. The first 5-Year Review was completed in 2004, the North County ROD was completed and signed in 2005, SLAPS and other properties were remediated and released back to the property owner at the North County sites and SLDS, and work has started on the second 5-Year Review. All of these changes will be reflected in the revised CIP. Community interviews will be conducted by the USACE in June 2008. After the community interviews, the interview results and comments and revisions from EPA and the regulators will be incorporated into the CIP. CIPs will be sent to EPA, the regulators, and the administrative record file for public review. Copies will be kept at the USACE FUSRAP trailers.

New St. Louis FUSRAP Sites Project Managers

Two new project managers (PM) for the St. Louis FUSRAP sites have been added to the FUSRAP team. Roy Parks is the new PM for the SLDS site. Roy brings seven years of St. Louis FUSRAP experience to the project, having previously been technical manager for contracts providing characterization and verification support. He also worked in the environmental area for 13 years at USACE’s Europe District. Roy may be reached at (314) 260-3923 or by e-mail at roy.e.parks@usace.army.mil.

Jo Anne Wade is the new PM for the North St. Louis County sites. Jo Anne has eight years of experience overseeing the St. Louis FUSRAP Sites working for the State of Missouri and over 15 years experience as an Environmental Chemist. Jo Anne can be reached at (314) 260-3932 or by e-mail at josephine.a.wade@usace.army.mil.
**What is Thorium?**

**Q:** What is Thorium?

**A:** Thorium is a soft, silvery white metal that is a naturally occurring radioactive metal found at very low levels in soil, rock, and water. It has several different isotopes, both natural and man-made, all of which are radioactive. Thorium was discovered in 1828 by the Swedish chemist Jons Jakob Berzelius who named it after the Norse god of thunder and weather, Thor.

Thorium is useful in lantern mantles because when heated, thorium oxide glows bright white. However, alternatives are replacing the use of thorium in lantern mantles. Thorium also has coloring properties that has made it useful in ceramic glazes. It is also used in welding rods and is an alloying agent in certain metals used in the aerospace industry. Scientists today are researching thorium as the next fuel material for nuclear reactors.

Small quantities of thorium are in virtually all rock, soil, water, plants, and animals. People will always be exposed to tiny amounts of thorium through air, food, and water because it is found nearly everywhere on earth. Thorium is excreted from the body within a few days of exposure.