

The St. Louis Sites

Formerly Utilized Sites Remedial Action Program • Fall 1998

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www.mvs.usace.army.mil

St. Louis Downtown Site ROD Issued

The St. Louis District, U.S. Army Corps of Engineers (USACE) is pleased to announce the release of the signed Final Record of Decision (ROD) for the St. Louis Downtown Site (SLDS) in St. Louis, Missouri. In response to the potential risk of radioactive exposure, the USACE and U.S. Environmental Protection Agency (EPA) have selected a final remedial action which is protective of human health and the environment. The selected remedy, Alternative 6, calls for the removal of certain contaminated soils, consisting of radium, thorium, uranium, arsenic, and cadmium, from the site if they are above the criteria.

Under Alternative 6, all accessible contaminated soil that is above the composite criteria outlined in the ROD will be excavated and shipped offsite for disposal. Cleanup activities have been designed so that the site will meet specific threshold levels established to protect human health.

SLDS is located in an industrial area on the eastern border of St. Louis, 300 feet west of the Mississippi River and 11 miles southeast of the Airport area. The site is composed of a large chemical-manufacturing complex owned and operated by Mallinckrodt, Inc. The site also includes adjacent commercial and city-owned properties. Site studies have determined that radiological contamination is present in surface and subsurface soils as well as in buildings. The primary contaminants of concern are radium, thorium, and uranium. The volume of accessible soils contaminated above the cleanup criteria, under Alternative 6, is estimated to be 8,000 cubic yards.

The ROD is a legal document which outlines the selection of the final cleanup method to clean up radiological contamination. It was developed in accordance with

several environmental laws and guidance documents, including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Superfund Amendments and Reauthorization Act (SARA), and the National Contingency Plan (NCP). The ROD was developed after incorporating comments received from the general public and regulatory agencies on the SLDS Feasibility Study and Proposed Plan (FS/PP). With the signing of the ROD, the SLDS Administrative Record was completed. As required by CERCLA, the complete SLDS Administrative Record was released for public review in late October 1998. ■

SLAPS Rail-Loading Facility Completed

In August, the St. Louis District of the U.S. Army Corps of Engineers (USACE) completed the construction and installation of a rail-loading facility at the St. Louis



As a result of the release of the SLDS ROD, remediation of the City Properties is nearing completion.

Inside the Sites

1 SLAPS Rail-Loading Facility Completed

2 Preliminary Site Characterization Activities

3 Community Relations Upcoming Events

4 HISS Railspur under Construction



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Aerial photograph of SLAPS and the North Ditch Area.

Airport Site (SLAPS). Located along the East End of SLAPS, the load-out facility consists of a 1,200-foot rail spur in addition to a major staging area where excavated materials are placed before being loaded into railcars. The USACE shipped contaminated materials to a licensed out-of-state disposal facility.

The SLAPS load-out facility was built to support the removal actions outlined in the Final SLAPS Interim Action Engineering Evaluation/Cost Analysis (EE/CA), September 1997, which also allowed the remediation of the SLAPS West End. This new infrastructure will increase the District's load-out capacity by as much as 167 percent per day over what was possible previously. The SLAPS load-out facility can easily accommodate 10 gondola rail cars at one time and includes a staging area that holds up to 5,000 cubic yards of contaminated material for shipping. The increased load-out capacity has allowed the Corps to accelerate cleanup activities in the North St. Louis County area. Another benefit is that the Corps can take advantage of favorable construction weather without delays from coordinating major shipping campaigns.

Over 3,000 cubic yards of contaminated material were removed to build this larger, more efficient facility. When the facility was completed, the materials excavated from this construction effort were the first to be loaded into gondolas and shipped to a licensed disposal facility from SLAPS. As of November 24, 1998, 302 rail cars of excavated materials had been shipped. ■

Preliminary Site Characterization Activities Begin at the Madison Site

This summer, the St. Louis District, U.S. Army Corps of Engineers (USACE) pursued characterization activities at the Madison Site in Madison, Illinois. The site consists of two buildings owned by a component manufacturer at the corner of College and Weaver Streets in Madison, Illinois.

Like the St. Louis Downtown Site (SLDS), the Madison Site hosts an active business. It consists of a series of large, interconnected buildings of similar design and shape. The Madison Site is the smallest of five that comprise the St. Louis Sites, whose cleanup is managed by the Formerly Utilized Sites Remedial Action Program (FUSRAP).

Uranium was previously processed at the Madison Site for the Manhattan Engineer District/Atomic Energy Commission (MED/AEC). Based on a 1989 survey, the site was added to FUSRAP after radiological contamination was found. The survey report concluded that above-background levels of radiation were present only in the dust located on overhead surfaces of the main building (Buildings 4 & 6). The survey also determined that the residual radioactive contamination found did not pose health risk to workers, current occupants, or nearby neighbors and residents.

(continued on page 3)



The USACE constructed a sedimentation trap to manage runoff north of McDonnell Boulevard.

(continued from page 2)

Scientists are performing current site characterization activities in order to validate previous data. These activities serve to assure the continued safety of production and maintenance personnel throughout daily operations. Characterization information also allows a strategy to be developed for future remediation, if warranted. The Preliminary Site Characterization Report summarizing the results will be issued this winter after researchers complete their analysis of sampling data. ■

SLAPS Site Stabilization Efforts Focus on Coldwater Creek

McDonnell Boulevard motorists may have noticed significant remediation activities underway at the St. Louis Airport Site (SLAPS). This progress is a result of the Corps' commitment to the community and stakeholders to protect human health, wildlife, and the environment. Under the Final SLAPS Interim Action Engineering Evaluation/Cost Analysis (EE/CA), September 1997, and the SLAPS EE/CA, March 1998, the St. Louis District of the U. S. Army Corps of Engineers (USACE) began removal efforts in September to stabilize the migration of radioactive sedimentation into Coldwater Creek.

The USACE designed and constructed a sedimentation basin (sed basin) on SLAPS (just east of last year's excavated area), which will significantly reduce the migration of contaminated material into Coldwater Creek. The purpose of the sedimentation basin is to collect stormwater run-off. While the run-off is collecting it is simultaneously released, at a slow rate, through a pipe in the bottom of the basin. The release flow significantly slows as it travels toward the creek out fall. In this process, any sediments suspended in the water have a chance to settle out. Thus, the sed basin greatly reduces the amount of SLAPS material entering the creek. Monitoring by USACE personnel ensures that water released into the creek is below the published standards.

Community Relations Upcoming Events

Information Releases:

Final Community Relations Plan - December 1998

Winter Newsletter - February 1999

Upcoming Meetings:

Oversight Committee Meeting, FUSRAP Project Offices - December 11, 1998 at 11:30 a.m.

Oversight Committee Meeting, FUSRAP Project Offices - January 08, 1999 at 11:30 a.m.

Oversight Committee Meeting, FUSRAP Project Offices - February 22, 1999 at 11:30 a.m.

An emergency overflow channel prevents the west section of SLAPS from being damaged by high, infrequent flows caused by a 25-year storm. If the sed basin fills with water too quickly to be released through the pipe, water will be released into the creek via the emergency overflow channel. In any such emergency, equipment is in place to measure the overflow. Regular sampling will be performed by USACE in the sedimentation basin and in any instances in which the water may be released via the regular outfall to the creek.

In contrast, a sedimentation trap has been constructed for the ditches north of McDonnell Boulevard while remediation efforts for this particular area are underway. The sedimentation trap is designed to function much like the sedimentation basin. Rather than releasing runoff through a pipe at the bottom of the trap, water collects until it can evaporate or infiltrate the trap's soils. If the sedimentation trap becomes too full, the system pumps water into Coldwater Creek after treatment to sedimentation standards that allow for release.

To prevent SLAPS storm water run-off from entering the ballfields, a plug has been placed in the culverts running between these two areas. Although hard to see, dikes are also around the North Ditch Area. These dikes are in place to prevent contamination from migrating

(continued on page 4)



The HISS rail-loading facility is scheduled for completion and full operation in 1999.

(continued from page 3)

westward and re-contaminating cleaned areas when workers remove contaminated material between the dike and the sedimentation trap. After the North Ditches are verified to be clean workers will excavate the sedimentation trap down to clean material and then fill in with clean backfill. These dikes will remain in place until the USACE is certain that cleaned areas no longer risk further contamination. ■

HISS Railspur under Construction

The Hazelwood community and other stakeholders will soon be able to witness implementation of the first phase of the Hazelwood Interim Storage Site (HISS) Engineering Evaluation/ Cost Analysis (EE/CA). In March 1998, a Draft HISS EE/CA, which evaluated three alternatives for site cleanup, was issued to the public for review and comment. The U.S. Army

Corps of Engineers (USACE) then selected the third alternative, which called for the on-site construction of a rail loading facility, the removal of the three storage piles, and the removal of accessible contaminated soils on two Latty Avenue properties.

This summer, the USACE signed an action memorandum describing the selected alternative for cleanup activities at the HISS and Latty Avenue Vicinity Properties. The memorandum is a legal document that outlines the Corps' path forward. It serves as the approval document for interim removal actions to be undertaken at the property while a separate ROD is developed to identify the final remedy.

Construction of the rail loading facility began in late October. It is expected to be fully operational in the second quarter of fiscal year 1999. As this first phase of the EE/CA is implemented, contractors working under the supervision of the USACE will construct the rail from the existing rail line to the HISS piles. Ultimately, this rail
(continued on page 5)



The Madison Site consists of two large, interconnected buildings of similar design and shape.

(continued from page 4)

spur will allow the USACE to ship directly from the site rather than truck material across heavily trafficked roads to the EVA spur.

SLAPS Vicinity Property 56 Cleaned

As a result of additional funding received from District Headquarters in August, the St. Louis District, U. S. Army Corps of Engineers (USACE) added another vicinity property in North County to its list of cleaned properties. Workers removed approximately 1,050 cubic yards of contaminated soils from Vicinity Property 56, which is located along Pershall Boulevard. These soils were loaded into trucks and sent to a licensed out-of-state disposal facility. Restoration activities for the site were completed in mid-November. ■

USACE Supports St. Denis Bridge Updates

Recently the St. Louis District USACE assisted the City of Florissant during their construction efforts to replace the St. Denis Bridge over Coldwater Creek. While contractors for the City of Florissant worked to demolish and then replace the existing structure, a separate contractor under USACE supervision



Erosion controls were used at VP 56 to prevent offsite flow of contaminated materials.

Keeping in Touch

Our office welcomes the opportunity to speak to the community and to hear from our neighbors. We try to provide different ways to keep you informed. Try any of our resources, as desired, including our homepage on the Web.

Mailing Lists - To receive newsletters and other printed communications, sign up for our mailing list anytime, 24 hours a day.

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Public Speaking - If your group, school, or association would like to hear from one of our experts, give us a call. We can speak on a variety of fields, including engineering, the environment, and geology.

Homepage - We've gone online with hundreds of pages of documents, digital photographs, maps, and other resources. Updates are posted regularly. An e-mail link is also available. To reach our site, set your browser to www.mvs.usace.army.mil and click on the FUSRAP icon.

If you have any suggestions, questions, or comments, contact our office anytime.

worked in support of the city to remove radioactive contamination along the banks of Coldwater Creek and ensure the safety of the workers.

Approximately 450 cubic yards of soil and concrete debris were removed from the creek. Restoration was completed in late November. ■

Community Safety Concerns

Protection of human health, wildlife, and the environment is the number one consideration when the USACE conducts its cleanup efforts. For example, orange safety fencing is placed around open excavation areas to restrict access by unauthorized

(continued on page 6)

The St. Louis Downtown Site ROD has been issued. To view this or any document, feel free to visit either of our Administrative Record locations.

St. Louis Public Library
Government Information Section
1301 Olive Street
St. Louis, Missouri 63103
(314) 241-2288

FUSRAP Project Office
9170 Latty Avenue
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individuals. The air and groundwater are continuously monitored at excavation sites and perimeters for possible remedial radiological contaminants. In areas being remediated, workers will dress in coveralls and other protective equipment for added safety, dependent on the level of contamination. The USACE also uses a variety of engineering controls and measures, such as spraying water to keep down dust generated by excavation activities. ■



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