

# The St. Louis Sites

Formerly Utilized Sites Remedial Action Program • Summer 2013

(314) 260-3905

[www.mvs.usace.army.mil](http://www.mvs.usace.army.mil)

## St. Louis Downtown Site

### Recent RA Construction Activities at SLDS

Remedial action (RA) construction activities at the St. Louis Downtown Site (SLDS) currently include excavation beneath the footprint of the Mallinckrodt Plant 6 Building 101, on City Property east of the Mississippi River area flood protection levee, and on the Kiesel Hall Street Property.

The U.S. Army Corps of Engineers (USACE) completed demolition of the superstructure of Plant 6 Building 101 (Mallinckrodt's former Bulk Shipping Center) in October 2012. Excavation of the concrete slab foundation and contaminated soil beneath the building continues. The excavation includes removal of abandoned concrete foundations from historic Manhattan Engineer District and Atomic Energy Commission (MED/AEC) era buildings at the Destrehan Street plant. USACE has removed approximately 25 percent of the contaminated soil. This effort is scheduled for completion in the third quarter of 2015.

Recent high Mississippi River levels flooded the area and temporarily delayed excavation at the City Property. In August 2012, the USACE completed the removal of abandoned 15-inch and 30-inch sewer outfall structures from the river. Excavation will resume when river conditions allow for access. The USACE has removed about 50 percent of the contaminated soil. Excavation of this area is scheduled for completion in the third quarter of 2016.

The USACE began RA of the Kiesel Hall Street Property in May 2013. This remediation will require removing a total of about 3,000 cubic yards in seven excavation areas. This RA is scheduled for completion in August 2013.

## SLDS - Inaccessible Soils Operable Unit Proposed Plan

The USACE is currently developing a Proposed Plan (PP) recommending no further action for selected properties associated with the Inaccessible Soil Operable Unit at the SLDS. The properties included in this PP are those that do not pose an unacceptable risk to the public and require no further action for the protection of human health and the environment. The PP and other supporting documents will be available on the St. Louis District Formerly Utilized Sites Remedial Action Program (FUSRAP) website and in the Administrative Record File locations during the public review period. A public meeting will likely occur this summer to present the proposed remedy as well as to accept public comments regarding the PP.

## North County

### Ballfields

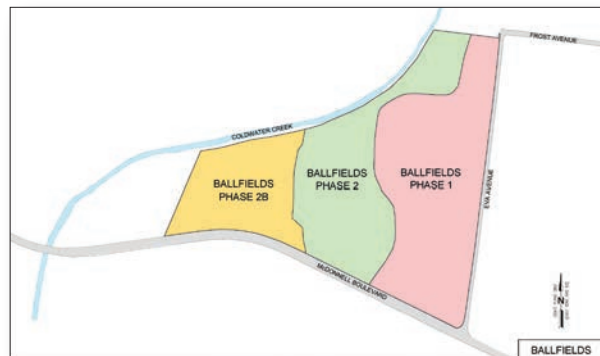
The "Ballfields" area consists of approximately 60 acres north of Lambert-St. Louis International Airport. The area is bounded to the south by McDonnell Boulevard, to the north by Coldwater Creek and Frost Avenue, and to the east by Eva Avenue. Historically, the area was agricultural land, a baseball field, and a part of the former Brown Road. Contamination of the area occurred when residues migrated from SLAPS via runoff onto adjacent properties through CWC or was windblown, released, or otherwise deposited when material was transported along haul routes.

To assist with water management, the USACE decided to remediate the Ballfields in three phases, generally moving from up gradient to down gradient areas. Phase 1 is complete. Remediation in Phase 2 (17 acres) is ongoing. The remedial design for Phase 2B is currently being prepared.

## Upcoming Events

**Information Releases:** *Winter Newsletter - January 2014*  
This newsletter is issued twice a year.

**Upcoming Meeting:** *St. Louis Oversight Committee Meeting*  
The next meeting time and date will be posted on the USACE website when scheduled: [www.mvs.usace.army.mil](http://www.mvs.usace.army.mil). Click on FUSRAP for updates, or call Jo Anne Wade at 314.260.3913.



Ballfields Phases 1, 2, and 2B



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**VP-16/Eva Loadout**

The USACE has completed remediation at VP-16/Eva Loadout. This property is located at Eva Road and McDonnell Boulevard. Efforts required coordination with the railroad.

**IA-10**

IA-10 is the area north of the Ballfields and adjacent to CWC. The USACE is completing the characterization of IA-10. Additional samples were needed to identify and bound areas that may need remediation. In 2011, the USACE remediated the part of IA-10 adjacent to McDonnell Boulevard and CWC.

**Coldwater Creek**

The U.S. Department of Energy and the USACE have supported several sampling events in CWC. USACE continues to develop plans for reaches of the creek – working upstream to downstream – to fill data gaps. The purpose of the sampling is to confirm that the creek meets North County Record of Decision (ROD) cleanup requirements or to identify and quantify any material requiring removal in order to meet ROD requirements. If remediation is required, USACE will remove the sediment and soil and ship it to an offsite, permitted disposal facility in accordance with the ROD.

In 2012 to 2013, the USACE initiated sampling of CWC from McDonnell Boulevard to Frost Avenue. Sampling was completed in March 2013, but additional sampling is needed to identify and bound areas that may need remediation.

The USACE is currently developing a sampling plan for the CWC reach from Frost Avenue to the St. Denis Bridge and the area within the 10-year floodplain of the creek. Sampling is scheduled to begin in late summer or fall 2013. After



*Coldwater Creek*



*IA-10 Delineation Sampling*

this reach of CWC is completed, the USACE will continue characterizing the creek from St. Denis Bridge toward the Missouri River.

**Other VPs**

This summer/fall sampling will also be conducted on two additional groups of vicinity properties – one along McDonnell Boulevard (between Lindbergh Boulevard and Airport Road) and one along Byassee Road. Sampling plans are being prepared for these areas. Real estate access will also be pursued.

**Conceptual Site Model and Coldwater Creek**

Before the ROD was prepared for the North County sites (including CWC), a Conceptual Site Model (CSM) was developed. A CSM presents the conditions and the physical, chemical, and biological processes that control the transport, migration, and potential impacts of contamination to human and/or ecological receptors. It may be a simple illustration (i.e., a drawing) or a sophisticated, comprehensive document. In the pre-ROD phase of a project, a CSM is used to identify



the sources, receptors and pathways associated with the site, to identify data gaps and develop a sampling plan to address those gaps, and to support remedial decision making. In the post-ROD phase of a project, a CSM is continually re-examined to ensure that the most recent understanding of the site (based on additional sampling and actual remedial action data) continues to support the original CSM. This assists in the development of pre-design sampling and remedial action design documents (if such action is needed) and ensures protection of the public and environment.

In the case of CWC, the original CSM (as presented in the Feasibility Report/Baseline Risk Assessment) was re-examined. Historical characterization data and remediation activities in North County supported the conclusions of the original model. The model was then developed in greater detail with specific focus on CWC to identify target areas for the currently planned round of sampling.

The CSM indicated that the original sources of contamination for CWC were the storage of materials at the St. Louis Airport Site (SLAPS), the stockpiling and processing of materials at the Latty Avenue Site, and the transportation of the material (by truck) when the material was moved from SLAPS to the Latty Avenue Site.

Potential transport mechanisms are ways by which material could move from SLAPS, the Latty Avenue Site, and roads into CWC. These mechanisms include surface water (i.e., storm water runoff), ground water seepage from beneath storage areas to CWC, windblown emissions (in the immediate vicinity) and physical movement (i.e., falling off trucks into CWC or falling off trucks and being carried by storm water into CWC).

After evaluating these transport mechanisms and how the material would be moved by water within the creek, the following target areas were identified:

- Areas where channel improvements, realignments, or obstructions could have trapped sediment between 1946 and present;

### Keeping in Touch

**Mailing Lists** - To receive newsletters and other printed communications, sign up for our mailing list any time.

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**Homepage** - To reach our site, go to [www.mvs.usace.army.mil](http://www.mvs.usace.army.mil). Click on FUSRAP.

If you have any suggestions, questions, or comments, please contact us.



*Coldwater Creek - Sampling Depositional Areas*

- Tributaries and drainage areas within the 10-year floodplain of CWC;
- Depositional areas within the creek; and,
- Topographical low-lying areas outside the banks of CWC.

In addition to sampling these target areas, a systematic sampling grid will be applied to the area to ensure suitable coverage for statistical purposes. Flooded structures will be scanned, and gamma walkover surveys will be performed to cover those areas not previously evaluated.

Because USACE will require access to private property to perform portions of the sampling, landowners may be contacted by USACE real estate personnel. A signed right-of-entry document will be required before sampling can proceed on private property.

## Educational Information

**Q:** Which government agencies control FUSRAP? How is a site included in FUSRAP?

**A:** FUSRAP was established to address contamination resulting from the Nation's early atomic weapons program. The U.S. Department of Energy (DOE) acted as the lead agency for the entire program until October 1997 when Congress transferred the lead agency role and responsibility for the execution of the cleanup aspect to the USACE. DOE continues to be responsible for site designation ("pre-cleanup") and long term management of remediated sites ("post cleanup"). Typically for site designation, DOE initiates an evaluation of the site. The basic criteria for inclusion in FUSRAP are: (1) the site/area was involved in MED/AEC activities, (2) residual radioactive contamination likely remains at the site from these activities at levels that may pose a risk to human health or the environment or exceed applicable standards, and (3) the site is not subject to cleanup under any other remedial action program or a Nuclear Regulatory Commission or state license. A site can also be added to FUSRAP by legislation directed by Congress.

After inclusion in FUSRAP, the site competes for a share of the USACE's annual FUSRAP budget. When funded, USACE follows the CERCLA process for planning, investigating, and executing remedial activities. The U.S. Environmental Protection Agency and the state assist USACE by reviewing documents, providing field oversight, and providing input into project decisions.



The logo for FUSRAP (Federal Uranium Site Remedial Action Program) features the word "FUSRAP" in a bold, blue, italicized sans-serif font. The letters are set against a background of a blue grid pattern that recedes into the distance, creating a sense of depth and technical precision.

This newsletter is printed on recyclable paper



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