F U S R A P U P D A T E *The St. Louis Sites* Formerly Utilized Sites Remedial Action Program • Summer 2011 (314) 260-3905

#### (014) 200-0700

### **St. Louis Downtown Site**

In Fiscal Year (FY) 2011, Remedial Action (RA) construction activities were in progress or recently completed at the Covidien (formerly Mallinckrodt) Plant. These areas include Plant 6 West Half (6WH) Phase 2, Plant 7 North (7N) Hazardous Waste Storage Area (HWSA), Plant 7 West (7W)700 Pad; Burlington Northern Santa Fe (BNSF) Railroad Vicinity Property (VP) DT-12; and City Property Phase 2, East of the Mississippi River (River) Levee (Levee).

In November 2010, remediation of Plant 6WH was completed in Excavation Areas (EAs) 4 through 6; the surface was restored with asphalt pavement in November 2010. The remediation of EAs 4 through 6 required the removal and disposal of approximately 12,100 bank cubic yards (cys) of contaminated soil. EA 3 continues to be used for railcar loading activities.

The demolition of the above ground structure at the Plant 7N HWSA was completed in FY10 and remediation began in November 2010. Remediation of this area required the removal and disposal of approximately 2,750 bank cys of contaminated soil as well as buried concrete foundations that were left in place following the decommissioning of historical Manhattan Engineer District/Atomic Energy Commission (MED/AEC) operation support facilities. Restoration of this area will begin after Covidien completes the required closure procedures for this previously permitted hazardous waste storage facility.

Remediation of the adjacent Plant 7W 700 Pad began in June 2011 with the demolition of the concrete foundation. An estimated volume of 4,890 bank cys yards of contaminated soil is anticipated to be removed.

### **Upcoming Events**

**Information Releases:** Winter Newsletter - January 2012 This newsletter is issued twice a year.

Upcoming Meeting: St. Louis Oversight Committee Meeting-TBD. Check www.mvs.usace.army.mil/eng-con/expertise/ fusrap.html for meeting date and time.



Demolition of SLDS 700 Pad

Remediation of this area is expected to be completed in October 2011.

Remediation of BNSF property DT-12 included the removal of approximately 2,200 bank cys of contaminated soil from six excavation areas along the railroad right-of-way between Angelica Street and Dock Street. One of the excavation areas was expanded into Covidien Plant 7 South (7S) and included the removal of approximately 150 bank cys of contaminated soil. This extension of Covidien Plant 7S remediation was also completed in November 2010.

In Spring 2011 remediation began on City Property Phase 2, East of the Levee. City Property Phase 2 consists of 6 EAs, containing approximately 21,200 bank cys of contaminated soil to be removed. Remediation of EAs 4, 5, and 9 was completed in April 2011 and included the removal and disposal of approximately 810 bank cys of contaminated soil. Over 200 linear feet of sheet pile shoring was installed along the east side of the levee in March 2011 to protect the levee during remediation of EA 7, but RA at this location has been delayed because of continuing high river levels. Completion of the remediation of EA 3, which began in April 2011, has also been delayed because of continuing high river levels.



# **North County**

## **Latty Avenue Sites**

#### Hazelwood Interim Storage Site/Futura

The U.S. Army Corps of Engineers (USACE) continues remedial activities at the Latty Avenue site. In February 2011, the USACE completed remedial activities at the Futura site removing a total of 37,447 cys of contaminated material and shipping it to an out-of-state licensed facility. The Futura site is currently undergoing restoration activities.

Remedial activities are almost completed on the Hazelwood Interim Storage Site (HISS) property. The USACE removed the HISS rail spur and completed the cleanup of soil underneath and adjacent to the railspur. Since the HISS railspur has been removed, contaminated soils and material are being transported to the St. Louis Airport Site (SLAPS) and shipped off-site to a designated disposal facility. Work is currently being completed at the north end of the HISS property close to Latty Avenue. Additional remedial activities at the HISS include the removal and cleanup of the sanitary sewers at the site. Plans for the removal and replacement of sanitary sewers at the HISS are in progress to allow for excavation of remaining contaminated soils. The USACE anticipates remedial activities at the HISS site will be completed by the end of the year. Since the beginning of FY11, over 27,000 cys of contaminated soil/ material has been shipped to an out-of-state licensed facility.



Removal of HISS Railspur



Decontamination of the building at VP 02(L)

#### **Latty Avenue Vicinity Properties**

In FY10, the USACE completed remedial activities on Vicinity Property (VP)-02L. Over 16,000 cys of contaminated soil/material was removed from the property and shipped to an out-of-state licensed facility. The USACE is completing the remediation of the building at VP-02L. Contaminated dust was found in the dock/loadout area and on the rafters of the structure, as well as in two exhaust fans and in the floor drain located in the dock/ loadout area. No contamination was found in the storm water drainage system or the floor drains inside of the building. The remediation/decontamination of the building has been expedited by the USACE since the building is empty. The USACE anticipates the completion of remedial activities in the building by the end of this summer.

The USACE has completed the characterization of VPs 3L– 5L. In FY12, the USACE plans to release these properties under a Pre-Design Investigation Report/Final Status Survey Evaluation (PDIR/FSSE) because no remedial activities were required on these properties.

#### **SLAPS Vicinity Properties**

During FY11, the USACE also completed remedial activities and restoration at VP-12 located on McDonnell Boulevard across from the SLAPS with the removal of 2,821 cys of contaminated soil. In addition, 2,939 cys of contaminated soil was removed from the Coldwater Creek (CWC) area adjacent to VP-12 on McDonnell Boulevard,

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### The St. Louis Sites

166 cys was removed from VP-31A located on Hazelwood Avenue, and 734 cys was removed from McDonnell Boulevard (East Section).

During this FY, the USACE characterized the soils under McDonnell Boulevard and Eva Road and is currently characterizing soils in the VP-40a (Norfolk Southern Railroad property located within the Formerly Utilized Sites Remedial Action Program [FUSRAP] boundaries) and VP-16/Eva Loadout areas located on Eva Road in anticipation of remedial activities in the FY12. The USACE also expects to start remediating the eastern portion of the Ballfields adjacent to Eva Avenue.

As of July 2011, the USACE has released the Post Remedial Action Reports (PRARs) for VPs 5, 6, 8, and 9 and PDIR/ FSSE VPs 3 and 4. The USACE anticipates the release of the PRARs for VPs 53 and 63 during late summer/early fall timeframe. VPs 5, 6, 53, and 63 were cleaned up using American Recovery and Reinvestment Act funds.

#### **Coldwater Creek**

CWC is the major drainage mechanism for the SLAPS, SLAPS VPs, and the Latty Avenue Properties. It has been designated as a Metropolitan No-Discharge Stream. CWC flows adjacent to the SLAPS and SLAPS VPs, then meanders near the HISS, Futura and other Latty VPs and continues to flow through northern St. Louis County until it discharges into the Missouri River. In the industrial area located between the airport and Pershall Road, the water quality in CWC is generally poor. The present and reasonably anticipated future uses of the lower reach of CWC are recreation and live stock/wildlife watering.

Since 1998, as part of the St. Louis FUSRAP Environmental Monitoring Program (EMP), the USACE has monitored surface water and sediment for radiological and chemical parameters at six different monitoring stations along CWC adjacent to and downstream from the North County Sites. These sampling events are conducted semi-annually and have the following objectives: to document compliance with appropriate standards; to provide the public with information; to provide a historical record for year-to-year comparisons; and to identify environmental impacts. The EMP for CWC evaluates the water quality and radiological and chemical parameters present in the surface water and sediment.

Surface water and sediment data collected from CWC are evaluated relative to historical sample results obtained at each station. In addition, the Record of Decision established sediment remediation goals for radium-226, thorium-230,



Location of the 6 monitoring stations on Coldwater Creek

and uranium 238 and these criteria are also being used in evaluating CWC sediment. Although CWC is not a source of drinking water, the drinking water standard for totaluranium is used as a monitoring guide for surface water.

A trend analysis of the data from each station is also performed to determine the effects of the remedial actions on surface water and sediment in CWC. This trend analysis is reported annually in the Environmental Monitoring Data and Analysis Report (EMDAR). This assessment evaluates if surface water and sediment could adversely affect human health. Assessments completed since 1998 indicate that radiological dose levels in CWC are 100 times less than the regulatory limit.

It should be noted that FUSRAP was created to address environmental waste resulting from MED/AEC operations. Non-FUSRAP discharges are relatively common along the sampled reaches of CWC, and consequently sample parameters could be influenced by existing industrial sources rather than former MED/AEC operations.

## **Educational Information**

#### What does the Environmental Monitoring Program at FUSRAP involve?

The intent of the EMP is to: 1) document compliance with appropriate standards; 2) provide the public with information; 3) provide a historical record for year-to-year comparisons; and 4) identify environmental impacts. The USACE issues the Annual EMDAR for each calendar year. The EMDAR provides an evaluation of the data collected as part of the EMP. The USACE monitors various media at the FUSRAP sites including groundwater, surface water, air, and sediment for contaminants-of-concern. The public will be able to review the EMDAR for 2010 along with other key FUSRAP documents on our website at http://www.mvs.usace.army.mil/eng-con/expertise/fusrap.html.

Keeping in Touch		
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