

FUSRAP

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM OVERSIGHT AND MONITORING COOPERATIVE AGREEMENT

2nd Quarter: April Through June 2016 Report



Missouri Department of Natural Resources

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COVER PHOTO: In May, the Missouri Department of Natural Resources (department) observed characterization of U.S. Army Corps of Engineers (USACE) contractor characterization sampling at a business located in the 100 block of Ford Lane; parts of this property are within the Coldwater Creek flood plain.

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The department observed USACE contractor sampling at St. Ferdinand Park in May. Portions of this park are within the flood plain of Coldwater Creek.

History of the Formerly Utilized Sites Remedial Action Program Sites

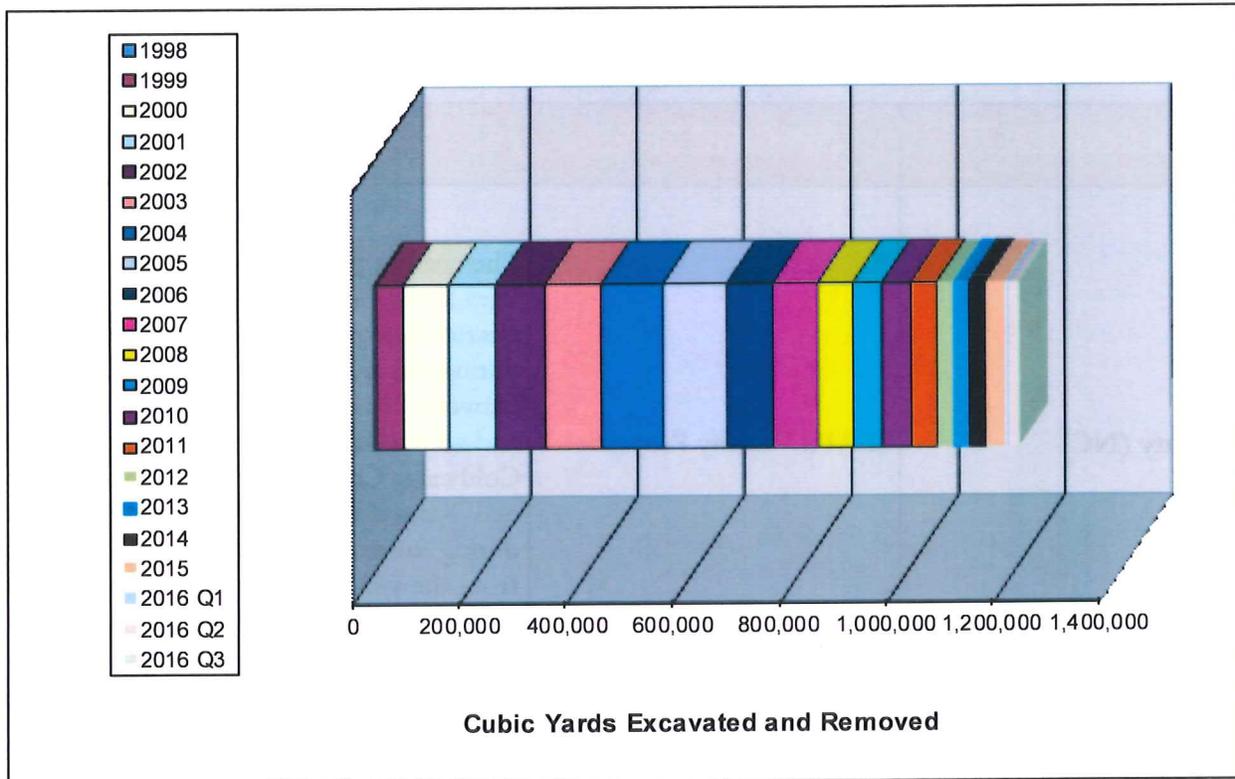
The St. Louis Downtown Site (SLDS) processed uranium for the nation's early atomic energy program. In 1946, the U.S. Department of Energy (DOE) predecessor agencies began utilizing the St. Louis Airport Site (SLAPS) as a storage area for radioactive wastes and processed residues, the majority of which originated at the SLDS. Methods of storage at the SLAPS included both uncovered bulk storage piles and materials containerized in drums. In 1966, the materials at the SLAPS were sold by the Atomic Energy Commission (AEC) and were shipped to a facility at 9200 Latty Avenue (Futura), where the majority of the material was dried and shipped to out-of-state processing facilities. Eight thousand, seven hundred tons of radioactively contaminated barium sulfate processed waste were mixed with 39,000 tons of soil and disposed of at West Lake Landfill in 1973. (West Lake Landfill is being addressed separately from the FUSRAP.)

Processing, transportation, storage, and management practices during the above-stated period led to the contamination of the three major FUSRAP sites: SLDS, SLAPS, and the Hazelwood Interim Storage Site (HISS)/Futura, with the latter two sites being placed on the National Priorities List (NPL) in 1989. In addition, approximately 78 contaminated vicinity properties have been identified as SLAPS Vicinity Properties (VPs).

On October 13, 1997, the Energy and Water Development Appropriations Act transferred the responsibility for the remediation of FUSRAP properties from the DOE to the USACE. The total volume of contaminated soils, sediments and debris at St. Louis FUSRAP sites was estimated to have been about 1.1 million cubic yards. USACE has already excavated more soil than had been originally forecasted.

Status of Work Completed This Quarter by USACE

MAJOR AREA	SPECIFIC SITES	WORK DESCRIPTION
North County (NC)	SLAPS Vicinity Properties	The current phase of remediation work at St. Cin Park along Coldwater Creek was completed last quarter; restoration of the park was completed during this quarter. Sampling of Coldwater Creek between Frost and St. Denis Bridge continued and additional characterization sampling at Coldwater Creek vicinity properties also continued. Remediation of Duchesne Park continued during the quarter. The volume of soil shipped from the vicinity properties this quarter was about 1,247 yd ³ .
North County (NC)	HISS/Futura and Latty Ave. Vicinity Properties	Most remediation work on these properties has been completed. No soil or debris was shipped during the quarter. A long-term institutional controls plan for these properties is being developed by USACE.
Saint Louis Downtown Sites (SLDS)	Saint Louis Downtown Site and Vicinity Properties	Building 101 excavation at Plant 6 West Half continued during the quarter. Additional sampling for a remedial investigation addendum for the SLDS began within Mallinckrodt properties. The volume of soil shipped from St. Louis Downtown Sites in this quarter was about 5,398 yd ³ .
NON-SITE SPECIFIC		Eight utility support operations were undertaken by the USACE during the quarter. The total volume of soil and debris shipped this quarter for the entire St. Louis FUSRAP project was about 6,645 yd ³ . (For reference, about 36,835 yd ³ of material was shipped from all St. Louis FUSRAP project sites during Federal Fiscal Year 2015.)



Years and quarters on this chart are based on the Federal Fiscal Year (FFY). For example, FFY 2016 is October 1, 2015, through September 30, 2016.

Work Performed by Department Personnel

DOCUMENT REVIEWS

The department's Federal Facilities Section (FFS) provides technical review on major decision documents, work plans, pre-design investigation reports, remedial designs and post remedial action reports.

Comments on document content are submitted to the USACE for response and become part of the public record. Listed below are documents reviewed by the department during this quarter and documents previously reviewed for which some resolution of comments is pending.

1. ***“Third Five-Year Review Report for the FUSRAP St. Louis Sites,” Revision 0, dated August 17, 2015.***

The Missouri Department of Health and Senior Services (DHSS) and the department reviewed the draft version of this document. The department requested more specific information on utility and property owner outreach, and asked for more frequent contact of property owners and others to prevent misunderstandings regarding status of properties. The department asked that the document include consideration of interim institutional controls use, recommended adding information on status to the included tables of properties and expanded discussions in several sections. The department asked USACE to consider publishing this report on the FUSRAP web pages. The department's comments on the draft were transmitted February 27, 2015. DHSS requested USACE update risk factors in USACE's models consistent with the latest USEPA guidance. USACE considered and responded to comments on the draft version of this document adequately addressing department concerns. USACE responded to DHSS comments on the draft; DHSS is considering these responses.

DOCUMENT REVIEWS (CONTINUED)

2. ***“Remedial Design/ Remedial Action Work Description, Spirit Asphalt Property”*** Revision B, dated March 10, 2016.

The department recommended that USACE’s work plan for the area explicitly consider the potential for encountering co-located non-FUSRAP contamination during excavation.

3. ***“Remedial Design/Remedial Action Work Description, Palm Drive Properties”*** Revision B, dated April 25, 2016.

The department recommended that USACE clarify their intention to remove all contamination that may be encountered within this residential area to below Record of Decision remediation goals and asked for additional clarification on the methods used to minimize fugitive dust emissions from soil stockpiles. The department requested further information and aerial photos regarding a drainage feature identified in the report; the department also asked for notification prior to backfill of completed survey units in this area to allow for independent verification sampling.

OVERSIGHT COMMITTEE

The St. Louis Oversight Committee meets periodically to get updates from USACE and others on current remediation work, discuss the history of the sites, to be briefed on USACE future plans and to provide community feedback to USACE. The St. Louis Oversight Committee last held a public meeting on February 17, 6-8 PM, at the James Eagan Civic Center, 1 James J Eagan Drive, Florissant. USACE gave a briefing; St. Louis County Health Department gave an update on their efforts regarding Coldwater Creek. The next public meeting of the committee has not yet been set. The current contact for the St. Louis Oversight Committee is Carl Chappell at (Cfchappell@sbcglobal.net).

SITE OBSERVATIONS

Field personnel conduct site visits to observe and document the status of remedial actions, environmental monitoring, contaminant migration prevention and pre-design investigations. USACE personnel are notified of findings and reports are filed for public record.

The following site visits were conducted on these dates during this quarter:

SPECIFIC SITES	APRIL	MAY	JUNE
North County Sites (HISS/Futura, SLAPS, and Vicinity Properties)	4, 14	5, 12, 25, 26	1, 6, 8, 20, 22, 23, 28
SLDS	5, 14		

SAMPLING

Samples are obtained by department personnel and shipped to a contract laboratory for analysis. The purposes of sample collection include confirmation of results from remedial actions, storm water controls and treatment, and investigating locations of potential concern.

Department of Natural Resources Split Samples

The department obtained a split soil sample at Ford Lane Location 10 during the quarter. Location 10 is in the Coldwater Creek flood plain. The sample was taken on May 12, 2016. It has been analyzed and analytical results are available upon request. The sample results were shared with USACE and USACE's contractor.

Department of Natural Resources Bi-Annual Coldwater Creek and Quarterly FUSRAP Ground-water Monitoring Well Sampling

The Department obtained three sediment split samples and three water split samples of Coldwater Creek at locations from SLAPS to St. Denis Bridge during USACE bi-annual sediment and surface water testing on March 22, 2016. The samples have been analyzed, and results are available upon request. No contamination above FUSRAP project remediation goals was found. Our sample results will be compared with USACE results when the information becomes available.

COMMUNITY RELATIONS

Department personnel are available for questions, requests for information or as a means of submitting comments and concerns. It is our goal to encourage community involvement and ensure that the concerns of the citizens of Missouri are addressed. Special requests regarding field oversight, research and presentations are welcome. Contact the Federal Facilities Section at (573) 751-3907 for assistance.

US AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY(ATSDR) PUBLIC MEETINGS ON COLDWATER CREEK HEALTH ASSESSMENT

The Agency for Toxic Substances and Disease Registry (ATSDR) last held a second public open house and poster session on January 26, 2-8 PM at the Jamestown Bluff Branch of the St. Louis County Public Library, 4153 N. Highway 67 in Florissant. ATSDR discussed the status of the ATSDR Coldwater Creek Public Health Assessment (PHA) being conducted and details about the PHA process. Residents had the opportunity to meet scientists, ask questions and discuss potential exposure concerns. For more information about ATSDR's Coldwater Creek Public Health Assessment in St. Louis, community members can call 1-800-CDC-INFO (232-4636), email Coldwater-Creek@cdc.gov, or visit http://www.atsdr.cdc.gov/sites/coldwater_creek/index.html. Additional meetings are planned but have not yet been scheduled.

USACE PUBLIC MEETING

USACE hosted a public meeting on Wednesday, June 29 from 6-8:30 p.m. at the James J. Eagan Civic Center, 1 James J. Eagan Dr., Florissant. USACE provided a status report on their investigation and remediation at the St. Louis FUSRAP sites including along Coldwater Creek. This included the discussion of approximately 6,700 samples collected between I-270 and St. Denis Bridge. About eight percent of these samples (554) exceed remediation goals. Results, when validated, will be published on the USACE website. Properties were not specifically identified, pending notification of the owners and determination of the initial extent of contamination in these areas. The schedule for remediation of these areas continues to be pushed out due to additional contamination discovered in areas that are currently under remediation and relocation of utilities. St. Cin Park remediation and restoration was completed in June of 2016. Duchesne Park is currently under remediation. Palm Drive Properties, Archdiocese Property, and the rest of the Ballfields Area near SLAPS are scheduled to be remediated after Duchesne Park.

Following the status report, the USACE health physicist gave a presentation regarding worst-case air dispersion modeling performed on the SLAPS and HISS. USACE modeling concluded that wind dispersal was not a primary transport mechanism for contamination. He also discussed 22,000 historical perimeter air monitoring samples collected during active remediation efforts at SLAPS and HISS and explained that they were below Nuclear Regulatory Commission limits. ATSDR staff then gave a brief status update on the Public Health Assessment Project. Attendees were then invited to speak with and question USACE, USACE contractors, ATSDR, USEPA, and department staff at individual tables.

REGULATORS COORDINATION MEETINGS

Personnel from the EPA, the USACE, and the department periodically meet in person and by conference call to discuss site status, document schedules, landowner assistance projects and other similar issues. These coordination meetings are beneficial, as they keep the parties informed of site status, allow for discussion of cleanup issues, and provide coordination of agency activities as they relate to cleanup of the sites. Meetings were held on April 20, May 25, and June 29 during this quarter. A supplemental meeting focused on railroad property in the vicinity of Futura was held on April 13.

Site Activities This Quarter

USACE REMEDIAL ACTIONS

NORTH COUNTY

- Characterization sampling of Pershall Rd. was on hold during the quarter. St. Cin Park restoration work was completed.
- Characterization sampling of Coldwater Creek between Frost Ave. and St. Denis bridge continued. Duchesne Park and Arch-diocese property remediation continued.
- Characterization and sampling of businesses and residential areas adjoining Coldwater Creek continued during the quarter.

ST. LOUIS DOWNTOWN SITE

- Plant 6 (Mallinckrodt) excavation of soils underlying building 101 continued during the quarter.
- Utility supports within the SLDS record of decision boundaries were completed during the quarter.
- USACE began additional sampling for a remedial investigation addendum within Mallinckrodt Plants.



EA-1 at Duchesne Park just after the end of the quarter. Remediation at the park continues, and it is expected to be completed sometime in the next two quarters.



Duchesne Park EA-2 excavation was backfilled just after the end of the quarter. Excavation of additional areas continues.

Tasks and Goals for Next Quarter

NORTH COUNTY

- USACE characterization sampling of Coldwater Creek between Frost Ave. and St. Denis Bridge and residences along Coldwater Creek will continue and may be completed.
- USACE Pershall Road characterization sampling may be completed. Banshee Road additional verification sampling may begin.
- USACE may begin excavation at Ballfields and Palm Drive Properties.
- USACE may complete work at Duchesne Park and the Archdiocese Property in Florissant.

ST. LOUIS DOWNTOWN SITE

- USACE remediation of DT-2 (City Property) may continue. This work is currently expected to be completed in 2016.
- USACE Plant 6 and building 101 area soil excavation and restoration will continue and may be completed. Plant 7W and basin area remediation will begin.
- Support of utility excavation activities at the SLDS will continue.
- Additional sampling for a remedial investigation addendum will continue.

DOCUMENT REVIEWS

Review of the following documents and data are potentially anticipated during the next quarter.

NORTH COUNTY

- Futura Environmental Covenant Draft
- Coldwater Creek Frost to St. Denis Pre-Design Investigation Report
- Latty Avenue Pre-Design Investigation Report
- Pre-Design Investigation Report and Remedial Design/Remedial Action Work Description, Palm Drive adjacent to Coldwater Creek
- Pre-Design Investigation Report Final Status Survey Evaluation SLAPS VP-59
- IA-12 Post Remedial Action Report
- Pre-Design Investigation Report and Final Status Survey Evaluation VP-6C
- Pre-Design Investigation Report and Final Status Survey Evaluation Seeger Properties

ST. LOUIS DOWNTOWN SITE

- ESD for Kiesel Hall Street Area Expansion
- Plant 6E and Plant 7E Post-Remedial Action Reports

SITE OBSERVATIONS AND SAMPLING

Our on-going role in providing site observations and sampling investigations will continue as per previous quarters.

DEPARTMENT PROJECTS

Staff will continue to work on committees affiliated with long-term stewardship, groundwater, and the Five-Year Review.

LONG-TERM STEWARDSHIP

Long-term stewardship applies to sites and properties where long-term management of residual contaminated environmental media is necessary to protect human health and the environment over time. This generally includes the establishment and maintenance of physical and legal controls, implementation entities, authorities, accountability mechanisms, information and data management systems, and other resources. The need for long-term stewardship will exist for areas of inaccessible contamination at both the North St. Louis County and Downtown Properties located under roads, railroads, buildings and other similar structures deemed by the current owners to be vital or in-use. The need for long term stewardship will also exist for portions of the downtown site for which Remediation Goals are deemed suitable for industrial uses. Completion of the project is expected by 2021, and this will be followed by a two-year transitional period to transfer responsibility from the USACE to the U.S. Department of Energy.

Financial Reporting

The department's Hazardous Waste Program submits a financial report separate from this document. The report includes costs incurred during the reporting period with request for reimbursement forms.

Status of Work Completed This Quarter

* USACE Cooperative Agreement funds were not used for all of the staff listed as participating in this training, conference, or meeting; ** USACE Cooperative Agreement funds were used for a percentage of this training.

TRAINING, CONFERENCE OR MEETING	DATES	DEPARTMENTAL STAFF
Business Writing Webinar	4/8	Carey
Rail Road Property near Futura Meeting	4/13	Carey
Prep Meeting for SLDS Additional PDI Sampling	4/14	Carey
Regulator Update Meetings	4/20, 5/25, 6/29	Carey, Moore, Drake, Anderson
HWP All Staff	4/4	Carey, Moore, Anderson, Lamons,
8 Hour HAZWOPER Refresher	4/6	Carey, Alexander, Moore *, **
EPA-DNR FUSRAP Conference Call	4/19, 4/29, 5/17, 5/24	Carey, Drake, Moore
Purchase Card Mandatory Training	5/5	Carey
Psychological First Aid	5/24	Carey, Alexander, Moore *, **
Ludlum Instruments Calibration Training	5/14-15	Carey **
USACE Public Meeting	6/29	Carey, Drake, Moore