

FUSRAP

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM OVERSIGHT AND MONITORING COOPERATIVE AGREEMENT

1st Quarter: January Through March 2016 Report



MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Missouri Department of Natural Resources

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COVER PHOTO: Twice annually USACE samples and analyzes Coldwater Creek sediment and water at eight fixed locations to confirm that remedial actions along the creek have not adversely impacted conditions at sampled locations. The department observed the USACE contractor and collected split samples during the March 22, 2016 sampling event.

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Department staff taking a one minute gamma count rate measurement at a private residence near Coldwater Creek in Florissant in preparation for soil sampling on February 19, 2016.

History of the Formerly Utilized Sites Remedial Action Program Sites

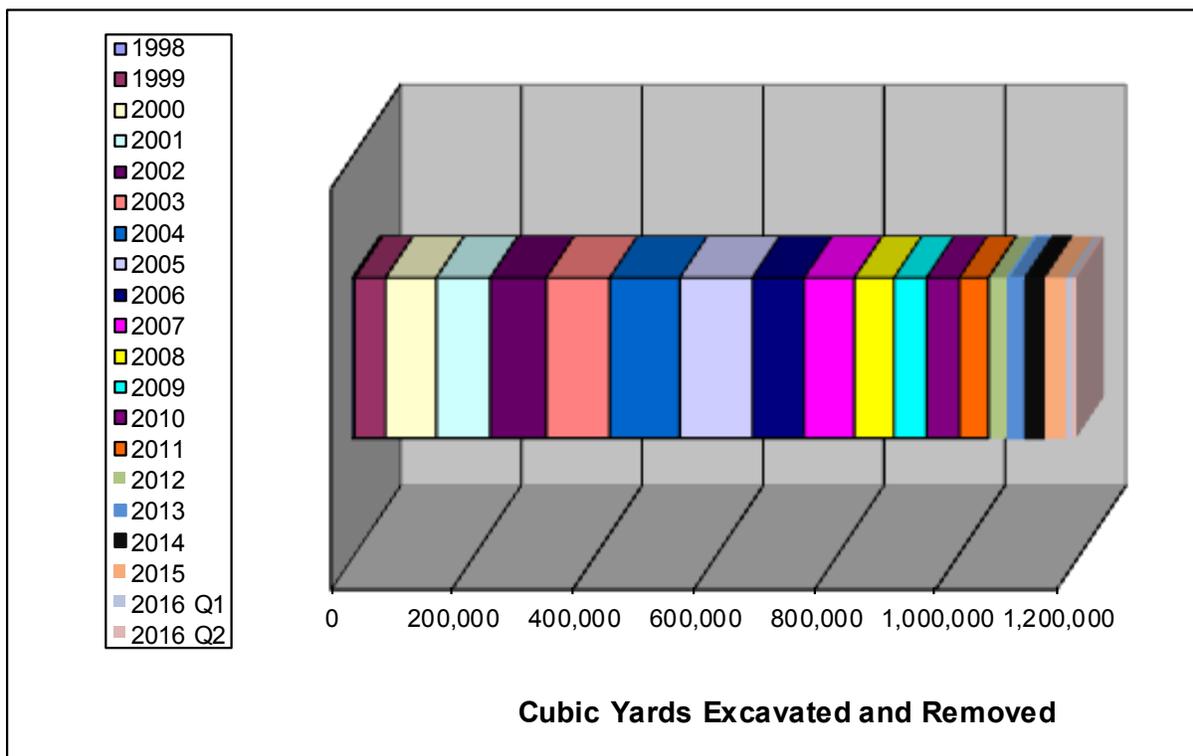
The St. Louis Downtown Site (SLDS) processed uranium for the nation's early atomic energy program. In 1946, the U.S. Department of Energy's (DOE) predecessor agencies began utilizing the St. Louis Airport Site (SLAPS) as a storage area for radioactive wastes and processed residues, the majority of which 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. Approximately 8,700 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 Appropriations Bill transferred the responsibility for the remediation of FUSRAP properties from the DOE to the U. S. Army Corps of Engineers (USACE). The total volumes of contaminated soils, sediments and debris at St. Louis FUSRAP sites were estimated to have been about 1.1 million cubic yards. USACE has already excavated more soil than had been originally estimated.

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; restoration of the park and tennis court began. Sampling of Coldwater Creek between Frost and St. Denis Bridge continued. Remediation of Duchesne Park and the archdiocese property nearby began during the quarter. The volume of soil shipped from the vicinity properties this quarter was about 3,325 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 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 will begin early next quarter. The volume of soil shipped from St. Louis Downtown Sites in this quarter was about 7,304 yd ³ .
NON-SITE SPECIFIC		Nine 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 10,629 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 2015 is October 1, 2014, through September 30, 2015.

Work Performed by Department Personnel

DOCUMENT REVIEWS

The Missouri Department of Natural Resources’ (department) 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 department reviewed the draft version of this document. Missouri Department of Health and Senior Services (DHSS) also reviewed the draft document. The department requested more specific information on utility and property owner outreach, and also asked for more frequent contact of property owners and others to prevent miscommunication regarding status of properties. The department asked that the document include consideration of interim institutional controls use, 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. These comments on the draft were transmitted February 27, 2015. DHSS requested USACE update risk factors in their 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 is currently working on responses to DHSS comments on the draft.

DOCUMENT REVIEWS (CONTINUED)

2. *“Post-Remedial Action Report and Final Status Survey Evaluation for the Accessible Soils Within the St. Louis Downtown Site Kiesel Riverfront Property”* Revision B, dated January 5, 2015.

The department requested clarification regarding an apparent inaccessible soils area on one of the figures. The department requested USACE respond to DHSS comments upon receipt. Comments were transmitted to USACE on February 16, 2016.



USACE remediation operations began at Dukesne Park in Florissant during the quarter. Department staff inspected the excavation area and reviewed surface water management practices with USACE on February 23.

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 immediately notified of findings, and reports are filed for public record.

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

SPECIFIC SITES	JANUARY	FEBRUARY	MARCH
North County Sites (HISS/Futura, SLAPS, and Vicinity Properties)	7, 26	3, 4, 11, 17, 18, 19, 23	4, 16, 22, 30
SLDS			23

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/treatment, and investigating locations of potential concern.

Department of Natural Resources Residential Sampling

The department obtained soil samples during the quarter at two different private residence locations along Coldwater Creek downstream of St. Ferdinand Park. Three samples were taken on January 7 and three samples were taken February 19. The samples have been analyzed, and analytical results are available upon request. No contamination above project remediation goals was found at the sampled residential locations and sample results were shared with respective property owners and USACE.

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 our results are available upon request. No contamination above FUSRAP project remediation goals was found. Our sample results will be compared with USACE results, when this 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.

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 held one public meeting during the quarter on February 17, 2016, 6-8 p.m., at the James Eagan Civic Center, 1 James J Eagan Drive, Florissant. USACE gave a briefing, and 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).

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

ATSDR held a second public open house and poster session on January 26, 2016 from 2-8 p.m. at the Jamestown Bluff Branch of the St. Louis County Public Library, 4153 N. Highway 67 in Florissant. The Agency for Toxic Substances and Disease Registry (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 their potential exposure concerns. ATSDR's main interest in conversations with the public is to gain a better understanding of how residents and others interacted with the creek. For more information about ATSDR's Coldwater Creek Public Health Assessment in St. Louis, MO, community members can call 1-800-CDC-INFO (232-4636), email ColdwaterCreek@cdc.gov, or visit www.atsdr.cdc.gov/sites/coldwater_creek/index.html. Additional meetings are planned but have not yet been scheduled.

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 January 27, February 24, and March 23 during this quarter. A supplemental meeting focused on railroad property in the vicinity of Futura was held on March 3.

Site Activities This Quarter

USACE REMEDIAL ACTIONS

NORTH COUNTY

- Characterization sampling of Pershall Rd. was on hold during the quarter. The current phase of remediation at St. Cin Park in Hazelwood was completed.
- Characterization sampling of Coldwater Creek between Frost Ave. and St. Denis bridge continued. Duchesne Park and Archdiocese property remediation began.
- 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 considered additional sampling requirements for an addendum to the remedial investigation for the St. Louis Downtown Sites.



Plant 6 (Mallinckrodt) excavation of soils underlying former Building 101 continued during the quarter. The department observed the status of this work on March 23.



Another perspective on the Plant 6 West Half Building 101 excavation at SLDS. Excavation of this area proceeded during the quarter and is expected to be completed in 2016.

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 during the next quarter.
- USACE Pershall Road characterization sampling may be completed during the second quarter of 2016. Banshee Rd. additional verification sampling may begin.
- USACE will finish restoration of this phase of St. Cin Park adjacent to Coldwater Creek, including the basketball court.
- USACE may complete work at Duchesne Park and start work on the Archdiocese Property in Florissant during the next quarter.

ST. LOUIS DOWNTOWN SITE

- USACE remediation of DT-2 (City Property) may continue. This work is currently expected to be completed in mid-2016.
- USACE Plant 6/Building 101 area soil excavation will continue. This work is currently expected to be completed mid-2016.
- Support of utility excavation activities at the St. Louis Downtown Sites will continue.
- Additional sampling locations for a remedial investigation addendum have been identified and will be sampled.

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

ST. LOUIS DOWNTOWN SITE

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

SITE OBSERVATIONS AND SAMPLING

The department's 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 (also known as LTS), 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. Long term stewardship will also be required for portions of the downtown site for which remediation goals are deemed suitable for industrial use. Completion of the project is currently expected to be in 2021; 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
Medical Monitoring	1/11	Carey
ATSDR Coldwater Creek PHA Open House	1/26	Carey, Lamons, Moore
HWP RRA Unit Meeting	1/29	Carey, Moore, Alexander, Anderson, Drake*
HWP All Staff	2/8, 3/18	Carey, Alexander*
E3 Mandatory Training	2/10	Carey, Moore, Alexander *, **
Regulator Conference Call Rail Road Property near Futura	2/9, 3/3	Carey, Drake, Moore
Regulator Conference Update Meetings	1/27, 2/24, 3/23	Carey, Drake, Anderson, Moore, Alexander
Preparatory Meeting Duchesne	2/11	Carey, Moore
FFS Section Meeting	3/8	Carey Alexander, Moore, Drake, Anderson*
Draft DNR Sampling Protocols Meeting	3/21	Carey
Prep Meeting for Drilling Activities Plants 1, 2, 10 SLDS	3/21	Carey
SLDS Status Meeting	3/23	Carey
Vapor Intrusion Seminar	3/31	Carey, Moore, Alexander *, **