

The St. Louis Sites

Formerly Utilized Sites Remedial Action Program • Summer 2018

(314) 331-8000

www.mvs.usace.army.mil

HS seniors explore careers at District HQ, FUSRAP

The U.S. Army Corps of Engineers (USACE), St. Louis District, held a farewell ceremony for six high-school interns April 30 at the Robert A. Young Federal Building in downtown St. Louis.

The ceremony brought the district's internship program to a close for the 2017-2018 school year. From January through May, the students from the Clyde C. Miller Career Academy had worked at the district headquarters and toured project field sites two to three days a week.

USACE has collaborated with Clyde C. Miller Career Academy for seven years running. Miller has placed high-school seniors as interns with businesses for about 20 years.

While at the St. Louis District, the interns learned how to communicate effectively in the workplace, pay attention to detail, prepare for briefings and work as a team. The internship gave students exposure to USACE, its missions and career opportunities.

At the ceremony, district commander Col. Bryan Sizemore praised the students for their hard work and predicted a bright future as a result of their participation in the Science, Technology, Engineering and Mathematics (STEM) program.

Students Jaylon Wheeler and Keyontay Lampkin, both 18, toured the St. Louis District's Formerly Utilized Sites Remedial Action Program (FUSRAP) Laboratory in Berkeley, Missouri, March 19. The lab analyzes samples to determine if they have low-level radiological contamination. FUSRAP addresses radiological contamination generated by activities of the Manhattan Engineer District and the Atomic Energy Commission (MED/AEC) during the development of atomic weapons in the 1940s and 1950s.



Two students from the Clyde C. Miller Career Academy learn about testing samples from chemist Chelsea Jarrell at the U.S. Army Corps of Engineers (USACE), St. Louis District, Formerly Utilized Sites Remedial Action Program (FUSRAP) Laboratory in Berkeley, Missouri, Monday, March 19, 2018. Keyontay Lampkin and Jaylon Wheeler, both 18, toured the FUSRAP Lab as part of an internship with USACE through their high school.

“My favorite part of what we saw was when the chemist heated up the platinum crucible and made the liquid turn to ‘glass.’ ” Wheeler said. The glass-like disk is the result of a two-step process. The chemist breaks down a soil sample with heat and a fluoride mixture. The chemist then uses heat, sulfuric acid and sodium sulfate to dissolve the fluoride “cake.” When the melted pyrosulfate “cake” cools to room temperature, it looks like a glass circle.

“I’m learning a lot because I didn’t know there was such a variety of things under civil engineering,” he said. “It’s pretty cool.”

Lampkin explained that Clyde C. Miller Career Academy is a career and technical school, and its partnership with USACE allows the students to investigate even further the idea of engineering as a career.

“Our freshman and sophomore year, we cycle through all the programs to give us a feeling of the (technical) pathways to make sure that’s really what we want to do,” she said.

Through USACE’s internship program, young men and women talk about engineering in a work setting, experience it firsthand and possibly choose it for a career.

Upcoming Events

Information Releases: Winter Newsletter – January 2019. FUSRAP issues this newsletter twice a year.

Upcoming Meetings: For updates, check <http://bit.ly/FUSRAPstl> or <http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/> and <http://www.facebook.com/teamsaintlouis>.



US Army Corps
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St. Louis District

St. Louis Formerly Utilized Sites Remedial Action Program Activities

St. Louis Downtown Site

The St. Louis Downtown Site (SLDS) remedial action (RA) construction activities are continuing at three separate locations in the Mallinckrodt LLC (Mallinckrodt) Plant: the Plant 6 former Building 101 area, the Destrehan Street-East/Plant 7W-North area, and the Plant 1 former Building 17 area. In addition, pre-design investigation (PDI) sampling is underway in the Plant 1 former Building 10 area. Planning/design is also underway for RA of previously inaccessible areas at Plant 2 North, Gunther Salt Properties, and Heintz Steel and Manufacturing Vicinity Property (DT-6).

In the Plant 6 former Building 101 area, the FUSRAP team has completed RA, and backfill is approaching planned final grades. However, final grading and turnover of the area will be completed with adjacent RA in Destrehan Street.

RA at Destrehan Street-East/Plant 7W-North is continuing, proceeding from east to west in four linear sections (Areas 1 through 4). The FUSRAP team has completed three of the four areas, including restoration of the water main and sewer line. RA in Area 2 included the removal and replacement of underground sewer lines that will be connected to upstream Plant 7W sewers. Demolition and removal of portions of the inactive concrete sedimentation structures was required. In addition, guided excavation within Plant 7W resulted in the ongoing removal of a portion of the 27-inch diameter underground sewer. The team continues to place backfill and grade it to base elevation for restoration of the Destrehan Street



An excavator operator from contractor HydroGeoLogic Inc. (HGL) performs remediation at Destrehan Street at the St. Louis Downtown Site (SLDS) Wednesday, April 18, 2018.

Keeping in Touch

Feedback - If you have any suggestions, questions or comments, contact the U.S. Army Corps of Engineers using any one of the following contact methods:

Phone: 314-260-3905/314-331-8000
Mail: U.S. Army Corps of Engineers, St. Louis District
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Email: STLFUSRAP@usace.army.mil

Mailing List - To receive newsletters and other printed communications, sign up for the FUSRAP mailing list using one of the contact methods above.

Homepage - To reach the FUSRAP webpage, visit <http://bit.ly/FUSRAPstl> or <http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/>.

Facebook - Visit the USACE, St. Louis District, page at <http://www.facebook.com/teamsaintlouis>.

pavement. However, the team won't install the pavement and drainage structures until all four areas are completed. Approximately 19,000 cubic yards of contaminated material have been removed and 1,500 cubic yards remain to complete the RA, which is projected for December.

RA at the previously inaccessible Plant 1 former Building 17 area is nearing completion. Excavation within the shored area included the removal of the collapsed portion of the Plant 1 sewer. Once RA was complete within the shored area, Mallinckrodt installed a new sewer, and the area was backfilled to interim elevation to allow for removal of the internal bracing system. RA is currently underway in the remaining Plant 1 area to the east of the shored area. The team has removed about 21,000 cubic yards of contaminated material, and approximately 200 cubic yards remain to be removed. Completion of RA in the Plant 1 former Building 17 area is currently scheduled for mid-2018.

Pre-design investigation of the previously inaccessible Plant 1 former Building 10 area is now underway to determine if RA will be necessary. Upon subsequent removal of buildings and structures at SLDS, other previously inaccessible areas are expected to become available for additional sampling.

North St. Louis County Sites

North County shipping to a licensed, out-of-state disposal facility has increased to 13,943 cubic yards shipped.

Chez Paree

An additional area of contamination was found north of the original contaminated area at Chez Paree Apartment Complex and east of the swimming-pool area. USACE, St. Louis District, completed the remediation April 19 and restoration (backfilling and adding grass seed) May 8.

Since the FUSRAP team started excavation on the additional area at Chez Paree in late January, it has removed more than 1,445 cubic yards of contaminated material above North County remediation goals.

The team completed remedial activities and restoration of this area earlier than expected. As a result, Chez Paree residents can conduct their summer activities without remedial activities interfering with them.

Ballfields Phase 2B

On April 28, after the completion of remedial activities at Chez Paree, the remedial activities at the Ballfields Phase 2B resumed. To date, the FUSRAP team has removed more than 18,400 cubic yards of contaminated material from Ballfields Phase 2B. Remedial activities will continue at the Ballfields this summer.



After finishing discharging water through a micron filter, the crew prepares to begin the remedial excavation and hauling of contaminated material from the Ballfields Phase 2B project to the load-out facility Tuesday, May 22, 2018.

Public health assessment relies on Corps of Engineers data

The Agency for Toxic Substances and Disease Registry recently released the public health assessment “Evaluation of Community Exposure Related to Coldwater Creek,” drawing on thousands of survey and soil test data points collected by the U.S. Army Corps of Engineers, St. Louis District, Formerly Utilized Sites Remedial Action Program over the past 20 years.

FUSRAP’s primary objective is to remediate radiological contamination generated by activities of the Manhattan Engineer District and the Atomic Energy Commission (MED/AEC) during the development of atomic weapons in the 1940s and 1950s.

“Although FUSRAP has no direct medical support mission, we continue to pursue our assigned mission to protect human health and improve the environment for residents in the area,” said Bruce Munholland, the FUSRAP program manager. “Just recently, the 2018 federal budget for remediation of St. Louis sites was increased by \$12

million, which enables us to accomplish our goals at a quicker pace.”

Since USACE began monitoring in 1999, the waters of Coldwater Creek have never shown the presence of radiological contamination above the remediation goals (RG) set forth in the Record of Decision for the North St. Louis County Sites. (Visit the FUSRAP website for the North St. Louis County Sites Annual Environmental Monitoring Data and Analysis Reports.) The FUSRAP team has identified isolated subsurface pockets of radiological contamination above RGs along the banks of Coldwater Creek. The environmental monitoring program continues to confirm that the creek is not being re-contaminated by these subsurface pockets.

USACE currently tests all properties within the 10-year floodplain of Coldwater Creek. If the FUSRAP team discovers contaminants near the 10-year floodplain boundary, it continues testing beyond the boundary until the limit of contamination is established.

“Where MED/AEC radiological contamination is found at or near the surface, orderly preparations are made for removing the contamination and reducing risk of exposure as quickly as we can,” he said.

Contamination found at depths that are inaccessible to the public will be scheduled for future remediation.

Where contaminated soils are known to exist in soils close to a home, USACE will test in the home if there is also a demonstrated transport pathway for contaminants to move with the soils into the home during flood situations.

FUSRAP has a plan for providing restricted-use signs when and where appropriate in accordance with local, state and federal regulations governing Hazardous, Toxic and Radioactive Waste (HTRW) posting requirements. Since the radiation levels along CWC are below the regulated levels that mandate signage, no restricted-use signs have been posted. This plan is currently under review.

Educational Information

Q: When does USACE contact residents who live in areas under evaluation for contamination?

A: The U.S. Army Corps of Engineers (USACE) requests a right of entry signed by the property/business owner about six to eight weeks before the scheduled sampling date. After receiving a signed ROE, USACE sends a postcard to the owner one to four weeks before sampling is scheduled to start. On the first day of sampling, before starting work, the USACE contractor will knock on the door to remind the owner of the sampling. The contractor will leave a leaflet on the door when sampling is complete.

If no contamination is found on the property above the North County Record of Decision (ROD) remediation goals, USACE sends a letter informing the property owner and giving notice that a Pre-Design Investigation Summary Report/Final Status Survey Evaluation will be prepared and provided in the future. Once the report is finalized, USACE sends it to the property owner. The report, which includes all the data from samples taken on the property, states that the data are below ROD RGs and the property meets the criteria for unlimited use and unrestricted exposure (UUUE).

If contamination is found on the property above ROD RGs, USACE makes an appointment with the property owner to discuss the results of sampling and to arrange for additional sampling, if needed. After the investigations, USACE will work with the property owner to develop a remedial design and schedule to remediate the property.

Once remediation is performed, USACE sends a letter to inform the property owner that the contamination has been remediated below ROD RGs and to expect a full report. Once the Post-Remedial Action Report/Final Status Survey Evaluation is completed, USACE provides a copy to the property/business owner. The report states that the contamination was remediated to ROD RGs and that the property meets the criteria for UUUE, which releases the property for beneficial use.

This newsletter is printed on recyclable paper.



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