

FUSRAP Public Meeting: Questions captured from Facebook video (open-microphone interactions)

1. Will Duchesne Park and St. Cin Park, that are downstream from Ballfields, be re-contaminated with materials from Ballfields Phase 2B? Will future rain and flooding re-contaminate previously remediated areas? Will flooding of Coldwater Creek contaminate my property?

The North County source areas for Manhattan Engineer District/Atomic Energy Commission (MED/AEC) contaminated soil -- St. Louis Airport Site (SLAPS) and Hazelwood Interim Storage Site (HISS) -- have been remediated. Preventive measures are also being implemented at every remediation site, including Ballfields Phase 2B, to prevent run-off from going directly to Coldwater Creek. These measures will prevent MED/AEC contaminated soils from entering the creek. The U.S. Army Corps of Engineers (USACE) also employs a monitoring program that monitors the creek (sediment and water) to verify that no contamination is re-entering the creek.

2. Will FUSRAP be posting warning signs along Coldwater Creek?

Dose rate/radiation levels in Coldwater Creek are currently very near naturally occurring background levels for radioactive materials. Ignoring the background contribution levels, CWC radiation levels are 500 times less than what needs to be present to require signage (2 mrem in any one hour), according to DA PAM 385-24 Table 5-1.

Although small areas of contamination have been identified above North County Record of Decision (ROD) remediation goals along Coldwater Creek, the environmental monitoring program has confirmed that the North County waste is not migrating from the soils into Coldwater Creek. The St. Louis FUSRAP team monitors the air, groundwater, storm-water run-off and sediments for Manhattan Engineer District/Atomic Energy Commission (MED/AEC) contamination, and the data indicates that Coldwater Creek is not being affected and therefore signage is not needed.

Learn more about Coldwater Creek monitoring in the North St. Louis County Sites Annual Environmental Monitoring Data and Analysis Reports (EMDAR) at <http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/> under "Other FUSRAP documents."

3. Are you going to investigate the previous haul routes, such as Frost, Latty and all those areas, and will you find contamination?

The U.S. Army Corps of Engineers (USACE) team is investigating the haul routes associated with the St. Louis Airport Site Vicinity Properties (SLAPS VPs) and Hazelwood Interim Storage Site (HISS)/Latty Record of Decision (ROD). The FUSRAP team completed sampling on the following haul routes: Latty Avenue, Byassee Road, Eva Road, Hazelwood Avenue, McDonnell Boulevard, Banshee Road and Pershall Road including I-270 right of way, and has partially completed sampling along Frost

Avenue. The FUSRAP team will complete sampling Frost Avenue in the near future. The rights of way along McDonnell Boulevard, Eva Road, Frost Avenue and Latty Avenue have been partially remediated. USACE has “released for beneficial use” Banshee Road, Byassee Road and Hazelwood Avenue.

4. Is there any testing going on in people’s homes? Will the U.S. Army Corps of Engineers be checking the basements of people whose properties back up to Coldwater Creek?

Based on modeling, research and observation during sampling and remediation activities (such as at Palm Drive Properties), the U.S. Army Corps of Engineers (USACE) does not anticipate the need to test for FUSRAP contaminants of concern on the exterior or interior of residential structures along Coldwater Creek. There has been, to date, no demonstrated or identified transport mechanism for Manhattan Engineer District/Atomic Energy Commission (MED/AEC) impacted material to enter into the homes.

USACE will test for contamination of structures if, during the course of sampling and/or remediation, conditions are encountered that would suggest that there has been potential for transport of contaminated soils very near or into the structures.

There is currently no planned testing inside Coldwater Creek residences. Checking inside residences will be on a case-by-case basis, depending if FUSRAP soil sampling outside the structure shows that radiological contamination is present on the property and if there is a history of past surface flood waters from the creek getting into the homes through windows, doors, cracks in the foundation and other direct transport mechanisms. Basement flooding from water backing up through floor drains and heavy rainfall infiltration are not transport mechanisms for the radiological contaminants of concern that FUSRAP is remediating.

5. When does (St. Louis) FUSRAP contact residents who live within the yellow (Under Evaluation) zone?

The U.S. Army Corps of Engineers (USACE) needs a right of entry (ROE) before sampling takes place on a property. USACE will notify a property owner/business owner about six to eight weeks before sampling is scheduled on the property if the property is within the 10-year flood plain. If an ROE is signed by the owner, a postcard is sent to the owner by the USACE sampling contractor a few weeks before the sampling crews will start sampling on that property. The USACE contractor will also call the owner the day before sampling will start on the property. Once sampling is completed on the property, the USACE contractor will leave a door hanger to let the owner know that sampling was completed.

If no contamination is found on the property, USACE will send the property owner a Pre-Design Investigation Summary Report/Final Status Survey Evaluation document. It can sometimes take many months for USACE to complete this document, but it will provide

the property owner with all the data that was found on the property. The document will state that the data from the property is below the North County Record of Decision remediation goals and will “release the property for beneficial use.”

If contamination is suspected on the property, USACE will call the property owner to make an appointment with the owner to discuss the results of sampling on the property. If additional sampling is necessary to determine the extent of contamination, USACE will contact the property owner to arrange when the sampling crews will perform the additional sampling. USACE will work with the property owner to develop a remedial design and schedule to remediate the property.

If contamination was found and remediation performed, the FUSRAP team will provide a copy of the Post-Remedial Action Report/Final Status Survey Evaluation (PRAR/FSSE) to the homeowner. It can sometimes take many months for USACE to complete this document, but it will provide the property owner with all the data that was found on the property. The document will state that the contamination found on the property was remediated below the North County Record of Decision remediation goals and will “release the property for beneficial use.”

6. Why wasn't contamination (information) disclosed when I was looking to buy a house in the area?

Full disclosure of real-estate conditions at the time of sale is the seller's responsibility to the buyer.

The U.S. Army Corps of Engineers (USACE) has many public records posted on its St. Louis FUSRAP website that provide property contamination information. Pre-Design Investigation Reports/Final Status Survey Evaluation (PDIR/FSSE) reports found on the website contain information about properties that are below remedial goals for contaminants of concerns (no remediation required), and are “released for unrestricted beneficial use.” There are many more properties currently under sampling and evaluation, or scheduled for future sampling and evaluation, for which USACE does not yet have public records available.

USACE has endeavored to keep the public fully aware of the status of the properties within the Record of Decision (ROD) boundary and along the Coldwater Creek 10-year floodplain.

7. Do you test graded areas in which contractors have likely dispersed contaminated soil throughout newly developed areas?

The U.S. Army Corps of Engineers (USACE) intends to sample all properties within the 10-year floodplain.

The FUSRAP team locates radiologically contaminated soil within the Record of Decision boundary using historical data, aerial photos, historical topographic maps, etc.

Along Coldwater Creek north of I-270, that boundary is, for the most part, the 10-year floodplain demarcation. The FUSRAP team will extend beyond the 10-year floodplain if, during the course of sampling, it appears an area of contamination is extending farther away from the creek.

USACE encourages anyone to provide USACE with any substantive records of any areas that might be connected to Coldwater Creek source contaminants. This could take the form of sample analysis, photos, newspaper articles, development records, etc.

Contact USACE at STLFUSRAP@usace.army.mil with any additional information.

8. What about the foundations of the businesses and homes that were built from this stuff?

The U.S. Army Corps of Engineers (USACE) has no record of radioactive waste sold to developers for use as a building material.

Read the history at <http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/> under “Contamination and Chronology.”

However, you are welcome to submit substantive evidence to USACE that your structures were constructed with radiological residues. The FUSRAP team will add it to its database to help team members ensure they capture all radiological contamination.

You may contact the FUSRAP team at STLFUSRAP@usace.army.mil.

9. Why did the entire community have to get in an uproar to get acknowledgement of the (radioactive contamination) problem in the first place?

The St. Louis Airport Site (SLAPS) and the Hazelwood Interim Storage Site (HISS)/Futura sites were added to the Formerly Utilized Sites Remedial Action Program (FUSRAP) by the Department of Energy in 1984. In 1989, SLAPS/HISS/Futura sites were added to the National Priorities List (NPL) by the U.S. Environmental Protection Agency (EPA). The U.S. Army Corps of Engineers (USACE) took over the execution of FUSRAP in 1998.

In 1998, USACE developed a Community Involvement Program to involve the public on each step of the Manhattan Engineer District/Atomic Energy Commission (MED/AEC) cleanup. USACE has held several public meetings since 1998. Each public meeting has been announced in the newspapers, on television and on social media. USACE has had a website since 1998. It includes the history of the St. Louis sites, documents, fact sheets and newsletters. USACE sent out newsletters quarterly until 2009 when newsletters started to be sent out twice a year. In 1996, the St. Louis Sites Remediation Task Force (a group of private citizens) developed and printed “The History of the St. Louis Uranium Processing Plant Radioactive Waste Sites.” This group of citizens and

business leaders were the basis for the St. Louis Oversight Committee. This committee held several public meetings where USACE was invited to present information and updates on MED/AEC remediation activities at the St. Louis Sites. There has been a history of public outreach since the late 1980s to inform the public of MED/AEC contamination in the St. Louis area.

Additional information about USACE activities can be found on the St. Louis District website. The FUSRAP webpage at <http://bit.ly/FUSRAPstl> or <http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/> explains the program.

To keep St. Louis residents updated on the Formerly Utilized Sites Remedial Action Program, FUSRAP issues its newsletter, "The St. Louis Sites," twice a year. To receive newsletters and other communications, sign up for the FUSRAP mailing list by contacting the team at 314-260-3905, via email at STLFUSRAP@usace.army.mil or at

U.S. Army Corps of Engineers
St. Louis District
FUSRAP Project Office
8945 Latty Ave.
Berkeley, MO 63134-1024

FUSRAP information is also posted to Facebook on the USACE, St. Louis District, page at <http://www.facebook.com/teamsaintlouis>.

10. What are some proactive steps we can take to reduce our risk of exposure to MED/AEC contaminants in Coldwater Creek that are realistic?

Coldwater Creek is an urban creek and may contain many contaminants. The Metropolitan St. Louis Sewer District (MSD) has posted signs along the creek warning of E. coli contamination from sewage. At this time, the U.S. Army Corps of Engineers (USACE) recommends that you limit playing in the creek to avoid ingesting creek water. If you live within the 10-year floodplain of Coldwater Creek and your property floods during rain events, avoid breaking or penetrating the ground surface as much as possible until your soil has been tested.

11. What defines "clean"?

The U.S. Army Corps of Engineers (USACE) has to meet the remediation goals (RGs) in the Record of Decision (ROD) for FUSRAP contaminants. When the concentration of contaminants of concern from Manhattan Engineer District/Atomic Energy Commission (MED/AEC) activities are below RGs, an area is considered "clean" from MED/AEC contaminants and meets criteria for unlimited use and unrestricted exposure.

To read about RGs in the Record of Decision for the North St. Louis County sites, visit http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/Final_ROD_linked.pdf.

12. How can we protect ourselves against radon?

Radon is not a Manhattan Engineer District/Atomic Energy Commission (MED/AEC) contaminant of concern. Radon is a naturally occurring radioactive gas that filters up through soil and rocks. It often builds up in basements when ventilation is insufficient to release it into the air.

Any home could have a radon problem. Radon can be trapped in new and old homes, well-sealed and drafty homes, and homes with or without basements. Testing is the only way to know if you and your family are at risk from radon. The U.S. Environmental Protection Agency (EPA) and the Surgeon General recommend testing all homes below the third floor for radon. Missouri residents can ask for a free radon test kit from Missouri Department of Public Health on its website at <http://health.mo.gov>. Ways to reduce radon in your home are discussed in the EPA's "Consumer Guide to Radon Reduction" at <https://www.epa.gov/radon/consumers-guide-radon-reduction-how-fix-your-home>.

Read more about radon and protective measures at http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/factsheets/Radon_basics_levels_factsheet_web_22June15.pdf.

13. As you drive east on McDonnell Boulevard off to your right toward the railroad tracks, what is the raised area with the fence around it that has radioactive signs all around it? Why is there a hose draped over the top of the load-out area so water can be dumped into an open drain marked "MSD"?

The raised area is a sedimentation basin to collect storm water run-off from the load-out area.

After storm water from the St. Louis Airport Site (SLAPS) sedimentation basin has been tested, and treated (if needed), the U.S. Army Corps of Engineers (USACE) team discharges it into the Metropolitan St. Louis Sewer District (MSD) storm sewer system. USACE obtains permits from MSD and the Missouri Department of Natural Resources to discharge water in this fashion.

14. When will USACE FUSRAP investigate Foxtree Drive?

The area of Foxtree Drive inside the 10-year floodplain was sampled and "released for beneficial use" via the Pre-Design Investigation Report (PDIR)/Final Status Survey Evaluation (FSSE) dated Oct. 9, 2017. Property owners whose properties were tested should have received a copy of that report. For a copy of the report, visit the FUSRAP webpage at <http://bit.ly/FUSRAPstl> or <http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/> under "St. Louis Airport Site Vicinity Properties."

15. If those Foxtree Drive properties have been released, why was the color-coded map showing them in blue “being processed for release” as opposed to green “released for beneficial use”?

The Foxtree Drive properties should have been coded as green, “released for beneficial use.”

16. Why did FUSRAP only remediate some of the houses on Palm Drive, considering the same water and sludge from Coldwater Creek floods my basement?

The U.S. Army Corps of Engineers (USACE) sampled all the residential properties on Palm Drive. Contamination was found in the backyards of only four of those properties, as well as the Chez Paree Apartment complex within the 10-year flood plain and the Metropolitan St. Louis Sewer District (MSD) right of way adjacent to the creek. The contaminated soils were found no closer to houses than 75 feet. There was no evidence that flood waters from Coldwater Creek that contaminated the backyards carried contaminated soils to the houses. USACE remediated the contamination found on these properties.

17. Have you tested all of Coldwater Creek including the sediment in the middle of the creek bed?

The Coldwater Creek corridor, which includes the sediment and banks, is in the process of being sampled (as are the properties adjacent to the creek corridor). The U.S. Army Corps of Engineers (USACE) intends to continue sampling from its current location at St. Ferdinand Park, all the way down the creek to the Missouri River, according to the North County Record of Decision (ROD).

18. Why doesn't FUSRAP offer a buy-out of homes?

The remedy specified in the North County Record of Decision does not include home buy-outs. The modeling and sampling conducted during the study phases led the FUSRAP team to the conclusion that there would not be widespread contamination in homes, but rather that it would be localized to structures near the source piles. Sampling and remediation to date have borne out the team's conclusion.

19. Are you checking with local cancer centers to see if there is a correlation of cancer patients to the areas that are affected?

Agencies such as the St. Louis County Department of Public Health <https://www.stlouisco.com/HealthandWellness/Contact> and the Missouri Department of Health and Senior Services <http://health.mo.gov/>, as well as the Agency for Toxic Substances and Disease Registry (ATSDR) https://www.atsdr.cdc.gov/sites/coldwater_creek/index.html, are government agencies with a health mission in the vicinity of Coldwater Creek.