

FUSRAP Public Meeting: Questions captured from Facebook video (Real-Time social-media interactions)

1. Where are they moving the contaminated dirt?

Radiologically contaminated soils are removed and transported for disposal at facilities in Michigan, Utah or Idaho that are federally licensed to receive soils with low-level radiological contamination.

2. How do we know that all of the contaminated stuff that was removed and relocated in the past was actually safely removed?

U.S. Army Corps of Engineers' Formerly Utilized Sites Remedial Action Program (FUSRAP) follows safety and quality-control procedures required by the Army as well as the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in addition to an extensive Environmental Monitoring Program in accordance with the North County Record of Decision.

Multi-layered protocols are put in place to ensure that the contaminants of concern are removed, transported and disposed of in the safest manner to protect human health and the environment.

For example, before leaving excavation sites, the FUSRAP team scans the exterior of trucks for radioactive particulates, and sweeps and washes if necessary to keep contamination from going off-site. Similar procedures are used on the railcars at the loading site. Sift-proof tailgates and geotextile liners in the trucks prevent the escape of contaminated soil along haul routes from the excavation sites to the railcar loading site. The haul routes used by the trucks are periodically scanned.

To view the most recent Environmental Monitoring Data and Analysis Report (EMDAR), 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/> and look under "Other FUSRAP documents."

3. Are there any plans for testing Coldwater Creek south of the airport?

The Coldwater Creek area south of the airport is outside the scope of the Record of Decision (ROD) boundary for the North St. Louis County sites.

To read 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](http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/Final_ROD_linked.pdf).

4. Do prior homeowners get notified of radiological contamination?

The U.S. Army Corps of Engineers does not notify prior homeowners of the results of sampling. Current homeowners are notified as soon as FUSRAP finds contaminants above remediation goals (RGs) on their property and maintains communication with them during the investigation, design and remediation portions of implementation.

5. What cleanup was done prior to this?

In accordance with a May 1992 engineering evaluation and cost analysis (EE/CA), the U.S. Department of Energy began removal actions at the St. Louis Airport Site Vicinity Properties (SLAPS VPs). In 1995, DOE excavated contaminated soils from the frontages of six residential vicinity properties and two industrial properties along Frost and Hazelwood Avenues. This resulted in removal of approximately 580 cubic yards of contaminated soil from the properties for disposal at a licensed out-of-state disposal facility. In 1997, Congress moved responsibility for FUSRAP from the U.S. Department of Energy to the U.S. Army Corps of Engineers (USACE).

6. What does "releasing properties" mean?

FUSRAP has adopted the terminology "released for beneficial use" for those properties determined to have concentrations of contaminants of concern (COCs) below the remedial goals (RGs) established in the Record of Decision, meeting the criteria for unlimited use and unrestricted exposure.

If no COCs above RGs are found on a property after initial sampling, a Pre-Design Investigation Report (PDIR)/Final Status Survey Evaluation (FSSE) is produced and provided to the property owner that states no radiological contamination was found on the property, allowing the property to be released to the property owner for appropriate beneficial use.

If COCs are found during investigation and sampling, remediation designs are prepared and the area is cleaned up. Following remediation, a Post-Remedial Action Report/Final Status Survey Evaluation (PRAR/FSSE) is prepared and provided to the property owner stating the property is released to the owner for beneficial use.

These reports contain all the sampling results for the property, including risk-and-dose information, and provide the property owner with all the data that was found on the property.

Read more about it at

<http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/factsheets/PropertySiteReleaseFactSheet.pdf>.

7. Why does FUSRAP remediate to remediation goals instead of background levels or zero contamination?

Radiation is naturally occurring at background levels. By definition, there will always be background levels. FUSRAP remediates to achieve the remediation goals (RGs), found in the Record of Decision (ROD). FUSRAP has developed remediation goals for soils, structures and sediments that are protective and support unlimited use and unrestricted exposure.

To read 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](http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/Final_ROD_linked.pdf).

8. What does RG mean?

The Record of Decision (ROD) for the North St. Louis County sites contains remediation goals (RGs) for the radiological contaminants of concern (COCs) -- uranium, thorium and radium isotopes. The ROD explains how they were developed.

Learn how RGs were developed in the Record of Decision for the North St. Louis County sites at [http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/Final ROD linked.pdf](http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/Final_ROD_linked.pdf).

9. Will they 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 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.

10. What are response action levels?

The U.S. Army Corps of Engineers (USACE) remediates contaminated soils to below the remediation goal (RG) levels determined in the Record of Decision (ROD).

Response action levels for groundwater and surface-water monitoring are discussed in the ROD beginning on page 2-88 (page 103 using the page-finder).

Read about how RGs were developed in the Record of Decision for the North St. Louis County sites, and about response action levels at http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/Final_ROD_linked.pdf.

11. Are FUSRAP RGs the same as "SAFE" limits or protective-action guidelines (PAG), which the EPA has raised three times in last seven years?

The guidelines in the U.S. Environmental Protection Agency's "PAG Manual: Protective-Action Guides and Planning Guidance for Radiological Incidents" do not apply to FUSRAP response actions (cleanup). PAG identifies guidelines that would trigger public safety measures, such as evacuation, in response to a nuclear incident. FUSRAP follows remediation goals. The Record of Decision (ROD) contains remediation goals (RGs) and explains how they were developed.

Learn how RGs were developed at http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/docs/Final_ROD_linked.pdf.

Read more about the EPA's PAG at https://www.epa.gov/sites/production/files/2017-01/documents/epa_pag_manual_final_revisions_01-11-2017_cover_disclaimer_8.pdf.

12. What levels of radiological contamination are safe?

In general, a yearly dose of 620 millirems from all radiation sources (such as background, medical, etc.) has not been shown to cause humans any harm, according to the U.S. Nuclear Regulatory Commission. The U.S. average natural background dose is 310 millirems.

13. Did radiological contamination get into the water supply?

North St. Louis County's water supply comes from the Missouri River and the Mississippi River. The water utility is responsible for testing and treating as necessary to ensure it meets the Environmental Protection Agency's safe drinking-water standards.

14. Was radiological contamination dumped into the Missouri River?

FUSRAP historical records do not indicate that radiological contamination was dumped into the Missouri River.

15. Will areas where the creek once was (but has since been rerouted) be checked for radiological contamination?

Yes, part of the investigation process includes historical information checks (aerial photos, topographic maps, etc.) to determine past creek-bed locations. This includes natural and man-made movement of the creek.

16. Isn't the site of the FUSRAP Project Office at 8945 Latty Ave. where the waste was stored originally?

No, the closest source site to the FUSRAP Project Office on Latty Avenue was the Hazelwood Interim Storage Site (HISS) about 1,000 feet away.

17. How many people attended this FUSRAP Public Meeting tonight (Feb. 22, 2018)?

The event was "standing room only;" approximately 185 people signed in. Approximately 230 more watched via Facebook Live.

18. What is the status of the Archdiocese of St. Louis areas? Does that include the St. Ferdinand Cemetery (Parcel 08K220150 at 9 Brower Lane, Florissant) or just the St. Ferdinand Park area?

Radiological contamination requiring future remediation has been found below the surface in an inactive, non-cemetery area of the Archdiocese's property adjacent to Coldwater Creek, just south of Duchesne Park. It will be remediated as work progresses downstream through that area. No radiological contamination has been found in St. Ferdinand Park or the St. Ferdinand Cemetery.

19. Where does the 2 percent risk come from?

Read about risk at

<http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/factsheets/Risk%20Range%20Fact%20Sheet.pdf>.

20. If you want the bad stuff gone, why have you repeatedly stated that you are not concerned with the health issues?

The health and safety of North County residents are of the utmost concern to the FUSRAP team. Its stated mission is to protect human health and the environment. Its part in the community transition to improved public health is cleaning up radiological contaminants that exceed remediation goals (RGs) established in the Record of Decision.

The FUSRAP team does not have a mission for assisting with health issues caused by the past practices of others. Other agencies -- such as the St. Louis County Public Health Department and the Department of Health and Senior Services as well as the Agency for Toxic Substances and Disease Registry (ATSDR) -- have health missions.

21. Why is it that they are just now studying this issue when they have known that Coldwater Creek was contaminated for decades?

The U.S. Department of Energy (DOE) initiated FUSRAP in 1974 to study and take appropriate response actions at sites that have become contaminated because of work performed by private companies for the Manhattan Engineer District/Atomic Energy Commission (MED/AEC). The St. Louis Downtown Site (SLDS), St. Louis Airport Project Site (SLAPS), St. Louis Airport Site Vicinity Properties (SLAPS VPs) and Latty Avenue Properties (Latty) were placed in FUSRAP at that time. When the U.S. Army Corps of Engineers took over the mission in late 1997, its first priority was cleaning up the sources of radiological contamination at the St. Louis Airport Site (SLAPS). In September 2005, the Record of Decision was signed and established the remedy. All sampling, testing and survey since then have been part of the pre-design investigation process to remediate the North County sites.

22. How do we stop breathing in radiological contaminants?

There are no airborne radiological contaminants in the area of North St. Louis County. The air is monitored around the perimeter of all excavation locations. The air is continually monitored around the stockpile awaiting shipping and disposal at the St. Louis Airport Site (SLAPS). Since the start of remedial-action operations, there have never been any releases of any kind via air, water, soil or sediments. For all the most recent environmental monitoring results for North County, go to http://www.mvs.usace.army.mil/Portals/54/docs/fusrap/other%20FUSRAP%20docs/NC_EMDAR_CY_2016_Rev0_07-21-2017.pdf.

23. Has there been any remediation north of St. Ferdinand Park yet?

No, remediation near St. Denis Bridge is the farthest north that remediation has been performed. In 1998, the U.S. Army Corps of Engineers (USACE) removed and backfilled 450 cubic yards of contaminated soil and concrete in support of the city of Florissant's upgrade of the St. Denis Bridge over Coldwater Creek.

24. How much radiological contamination have they found? What type of exposure?

Since late 1997, USACE has removed nearly 1.3 million cubic yards of contaminated soils and material from all St. Louis sites; about 900,000 cubic yards of which has come from North County. Currently, more than 100,000 cubic yards have been identified in NORCO for future removal, with 10 miles of creek corridor and adjacent 10-year floodplain yet to be sampled. Based on the conceptual site model and trends being realized during sampling and remediation, the amount of contaminated soil for remediation should decrease as the FUSRAP team continues to proceed downstream. The radiological contamination is classified as low-level.

25. Does the Radiation Exposure Compensation Act (RECA) cover residents in St. Louis FUSRAP sites, such as vicinity properties?

The Radiation Exposure Compensation Act established an administrative program for claims relating to atmospheric nuclear testing and claims relating to uranium industry employment. The Department of Justice administers RECA. Read more about it at <https://www.justice.gov/civil/common/reca>.

26. Is there a list of the parts of the creek that have been tested along with the results as well as a list of the areas that have yet to be tested?

As of April 11, 2018, the FUSRAP team has sampled Coldwater Creek from Banshee Road on the north side of St. Louis Lambert International Airport to St. Ferdinand Park. 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, in accordance with the North County Record of Decision (ROD).

Approximately 10 miles of creek corridor, which includes the sediment and banks, and adjacent properties from St. Ferdinand Park to the Missouri River remain to be sampled.

27. What about West Lake Landfill and the underground fire?

The West Lake Landfill site is a Superfund site, whose cleanup is under the authority of the U.S. Environmental Protection Agency; it is not part of the U.S. Army Corps of Engineers' Formerly Utilized Sites Remedial Action Program (FUSRAP).