

It's not just leached barium sulfate that was dumped at West Lake Landfill. What actually came from the Latty Avenue Site?¹

- Testing by the Nuclear Regulatory Commission and Oak Ridge National Laboratory in the late 1970s through the early 1980s confirmed that the soil at Latty Avenue - which had been previously mixed with leached barium sulfate and dumped at West Lake Landfill in 1973 - still showed high levels of radium, uranium, and thorium radioactive contamination and had to be later remediated by Army Corps of Engineers FUSRAP. The 39,000 tons of soil was actually more radiotoxic than the leached barium sulfate.

In 1996, Senator Christopher "Kit" Bond asserted St. Louis has more off-site contaminated properties above DOE's standards than Rocky Flats, Idaho National Engineering Laboratory, Los Alamos, and Sandia combined.²

Comments and suggestions from the EPA National Remedy Review Board regarding Region 7's 2008 Record of Decision to cap/cover the West Lake Landfill.³

- According to the landfill operator, the radiologically contaminated soil that was dumped in the landfill was used as cover for municipal refuse.
- The Board is concerned that inconsistencies in the waste characterization may have led to significant uncertainties in determining the location and volume of radiologically impacted material (RIM) in the landfill.
- The large uncertainty related to the location and volume of RIM could negatively impact the alternatives evaluation process (including how the cost and feasibility of various implementation options have been evaluated) and lead to a preferred alternative that may not be protective or cost effective.
- Based on the documents provided to the Board, it appears that there are potentially significant amounts of RIM that are highly toxic and the toxicity of this RIM will continue to increase over time.
- The Board is aware of ongoing cleanups in other Regions where the reduction of radiologically-impacted source material is being safely and efficiently undertaken in a manner that is protective both to the workers and the community. The RIM can be sorted out in the field with instruments that provide instantaneous measurements to ensure that only contaminated material is retrieved which, in turn, minimizes disposal costs.
- A reduction in volume may make off-site disposal a more cost-effective alternative.
- Based on the fact that the Agency has safely cleaned up numerous hazardous waste sites with radiological contamination across the country, including many in residential areas, the cleanup work can be done safely without unacceptable risk in accordance with approved health and safety plans and appropriate engineering controls as necessary to ensure that any risks to the community are minimized and mitigated.
- Particularly in light of the long-lived toxic nature of the radioactive contaminants as well as chemical and physical changes over time at the landfill, the Board suggests that a more rigorous evaluation of potential migration to groundwater be undertaken.

**facts continue on back

- Excavation of the RIM will not increase the threat of bird strikes on aircraft at St. Louis Lambert International Airport. There are controls that can be utilized, such as netting or movable tents. FAA Guidance may inform, but does not limit EPA Region 7's authority under CERCLA.

EPA Office of Research and Development analysis of EPA Region 7's 2008 Record of Decision to cap/cover the West Lake Landfill.⁴

- The Office was critical of EPA Region 7 for not considering the possibility of an underground fire occurring in the radioactive area of the West Lake Landfill.
- If an underground fire occurred in the radioactive area of the landfill, people could be exposed to unhealthy levels of radon gas. In addition, more liquid would build up inside the landfill, which could carry radon gas, radioactive waste, and other contaminants into groundwater and out of the landfill.
- In the event of an underground fire in the radioactive area of the landfill, there could be chemical reactions between the radiologically impacted material (RIM) and the non-RIM materials. These reactions could cause a rapid buildup of heat or gas and subsequent reactions or reactive conditions at the landfill.

Both, EPA and Army Corps of Engineers FUSRAP are funded by Congress via appropriations. However, since responsible parties have been identified, they will be required to pay for remediation at West Lake. The Supplemental Feasibility Study states that complete removal of radioactive wastes at West Lake could take 4 years, but under EPA Superfund, the responsible parties are only required to pay a maximum of \$10 million a year up front, which could draw out remediation to lasting 29 years. Whereas FUSRAP provides the funds up front for remediation and then recovers the costs from the responsible parties afterward. Therefore, the Army Corps of Engineers FUSRAP could remedy the radioactive waste in less time than the EPA and recover costs.⁵

To date, the Army Corps of Engineers FUSRAP St. Louis District has safely removed and transported hundreds of thousands of cubic yards of Manhattan Project radioactive weapons waste to a licensed out-of-state nuclear facility via specially designed rail cars.⁶

¹

- ❑ Page 6-7 (4-5)
[INSPECTION-OF-FORMER-ATOMIC-ENERGY-COMMISSION-AEC-SITE-NRC-REPORT-NO.-999-90003front-slash-93030-DRSS.pdf](#)
- ❑ Page 14(1) [ORNL Latty Ave document 1987.pdf](#)
- ❑ <http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/>
+Hazelwood Interim Storage Site (HISS) / Futura / Latty Ave Vicinity Properties/Site History/1981

² [Kit-Bond-Letter-June-3-1996.pdf](#)

³ [National Remedy Review Board Discussions Regarding the Remedy at the West Lake Landfill Superfund Site](#)

⁴ [EPA Office of Research and Development Evaluation of Possible Impacts of a Potential Subsurface Smoldering Event on the Record of Decision](#)

⁵

- ❑ EPA
<http://environmentalarchives.com/download/2011-12-28-executive-summary-supplemental-feasibility-study-radiological-impacted-material-excavation-alternatives-analysis-west-lake-landfill-operable-unit-1/>
- ❑ FUSRAP <http://www.session.com/news/FUSRAPFactSheet.pdf>

⁶<http://www.mvs.usace.army.mil/Missions/Centers-of-Expertise/Formerly-Utilized-Sites-Remedial-Action-Program/>