

WEST LAKE LANDFILL SUPERFUND SITE BRIDGETON, MISSOURI

March 6, 2018 Proposed Plan Public Meeting



Proposed Plan Public Comment Meeting

- Welcome and Ground Rules Pam Avery
- Welcome Jim Gulliford
- Opening Remarks Albert "Kell" Kelly
- Presentation on Proposed Plan Mary Peterson and Tom Mahler
- Public comment session Moderated by Pam Avery



Superfund Law and Process

- Enacted in 1980
- Authority to respond to releases of hazardous substances
 Authority to investigate and cleanup sites
 Authority to issue orders
- Implementing Regulation National Contingency Plan
 - Sets forth the process for addressing sites
 - Investigation, Remedy Selection, Cleanup, and beyond
 - Criteria for remedy selection
 - Public Involvement

Progress Timeline



Remedy Selection phase

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Site Map





3D Geostatistical Models of RIM – Area 1



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Alternatives Evaluated



Summary of Alternatives

- 1 No Action-Required by NCP as a baseline for comparison
- 2 Engineered Cover (cap) Modified 2008-ROD Selected Remedy
- 3 Engineered Cover (cap) UMTRCA Engineered Cover



- 5 Excavation of RIM Greater Than 1,000 picocuries per gram Plus Engineered Cover
- 6 Risk Based Excavation of RIM Plus Engineered Cover
- 7 Excavation of RIM Greater Than 7.9 picocuries per gram with Off-Site Disposal in Engineered Cell
- 8 Excavation of RIM Greater than 7.9 picocuries per gram with Disposal in an On-Site Engineered Cell



Alternative 1 - No Action

Required for all feasibility studies to evaluate the risks posed by the contaminants at the Site if no action is taken.

Future risks exceed the Superfund risk range

Not protective of overall human health and the environment

Serves as a baseline for evaluation of the other alternatives

Alternative 2 - Modified 2008-ROD Selected Remedy



- EPA issued a ROD in 2008 to leave all the RIM in place at the Site and construct an engineered cover
- Cost: \$71 million
- Time to implement: 2.8 years





- Alternative 3 would also leave all RIM in place at the Site
- Requires a low permeability layer that is 100 times less permeable than Alternative 2
- Cost: \$90 million
- Time to implement: 2.8 years



Alternative 4 – Excavation of 52.9 pCi/g down to 16 feet (Preferred Alternative)



- □ Cost: \$236 million
- Time to implement:5 years
- Radioactivity
 removed: 67%
- Plus the engineered cover from Alternative 3





Alternative 5 – Excavation greater than 1,000 pCi/g

- Cost: \$287 million
- Time to implement:8.3 years
- Radioactivity
 removed: 63%
- Plus the engineered
 cover from
 Alternative 3





Alternative 6 – Risk Based Excavation

Cost: \$165 million □ Time to implement: 4.1 AREA 2 years AREA Radioactivity LOT 2A2 **removed:** 1.3% □ **Plus** the engineered cover from Alternative 3

Alternative 7 – Full Excavation with Off-Site Disposal



□ **Cost:** \$455 million □ Time to implement: 14.6 years AREA 1 Radioactivity LOT 2A2 removed: close to 100% Plus a solid waste landfill cover

Alternative 8 – Full Excavation with On-Site



Disposal

- Cost: \$391 million
- Time to implement:14.8 years
- Radioactivity removed and encapsulated onsite: close to 100%
- Plus a solid waste landfill cover





Alternative 4 represents the best balance of long-term effectiveness, short-term effectiveness, implementability, and cost in comparison to the other alternatives.



- Alternative 4 requires excavation of all RIM greater than 52.9 picocuries per gram (pCi/g), anywhere within 16 feet below the surface.
- Excavated material will be disposed of in an OFF-SITE facility.
- Upon completion of excavation to 16 feet, an UMTRCAcompliant engineered cover will be placed on Areas 1 and 2 of Operable Unit 1.



- Excavation of the majority of the radioactivity (67%) in conjunction with installation of an engineered cover system reduces the long-term risks posed by the RIM remaining at the Site to the lower end of the Superfund risk range.
- Installation of the engineered cover will minimize the potential for leaching of radioactive materials to groundwater



Does not require excavating newer wastes from the Bridgeton Landfill

- Limits the potential for oxygen intrusion and a subsequent subsurface heating event or landfill fire
- Limits the impacts to the community from odors, fugitive dust, and construction traffic





- The EPA is seeking comment on all alternatives presented in the Final Feasibility Study and Proposed Plan.
- The EPA is specifically soliciting comments related to the depth and concentration criteria, (16 feet depth limit and the 52.9 pCi/g concentration) established as a baseline for Alternative 4.
- The EPA is also soliciting comments related to the selection of different depths and concentration criterion between Area 1 and Area 2.
- The EPA is soliciting comments on on-site versus off-site disposal for Alternative 4.



Public Comment Period

The public comment period runs from February 6 through April 23. (Extended 30 days from March 22 after request)

Comments may be submitted verbally tonight, submitted in writing tonight or via mail, or submitted electronically:

Via Mail:

Ben Washburn EPA Region 7 Office of Public Affairs 11201 Renner Boulevard Lenexa, KS 66219 EPA West Lake Landfill Website (comment form): https://www.epa.gov/mo/west-lake-landfill

Email:

R7_WestLakeLandfillPublicComments@epa.gov