

Revisiting Superfund Sites

On November 15, 2022, I had a conversation with EPA senior policy advisor Kathryn Cerise about what can be done at Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) sites if there is a concern that the remedy is not protective. This is a summary of our conversation and some reading I have done on this topic.

- CERCLA authorizes two kinds of response actions:
 - Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response. An example of such a site in the Spokane watershed is the Former Kaiser Smelter in Mead.
 - Long-term remedial response actions, that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted at sites listed on EPA's National Priorities List (NPL), through the Superfund Alternative approach, or under a CERCLA order. The General Electric Spokane Apparatus Service Shop site on East Mission Avenue is an NPL site.
- Five-year reviews are required for CERCLA cleanup sites when hazardous substances remain on site above levels that permit unlimited use and unrestricted exposure. Remedies at such sites typically rely on use restrictions and/or physical or engineered barriers.
 - The five-year review process provides an opportunity for the public to provide information to EPA about site conditions and any concerns. A public notice is made available stating that there is a five-year review and inviting the public to submit comments to the Agency. The results of the review and the report are made available at the Site information repository.
 - Remedies can be considered not protective under the following circumstances:
 - An immediate threat is present (e.g., exposure pathways that could result in unacceptable risks are not being controlled);
 - Migration of contaminants is uncontrolled and poses an unacceptable risk to human health or the environment;
 - Potential or actual exposure is present or there is evidence of exposure (e.g., institutional controls are not in place or not enforced and exposure is occurring); or
 - The remedy cannot meet a new cleanup level and the previous cleanup level is outside of the risk range.
 - To assess the protectiveness of the remedy the RPMs should evaluate human health and ecological risks and the general performance of the selected remedy. The FYR should evaluate the following:
 - Is the remedy functioning as intended in the decision document?
 - Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives used at the time of the remedy selection still valid?
 - Has any other information come to light that could call into question the protectiveness of the remedy?

Further Reading

- Superfund Overview
<https://www.epa.gov/superfund/superfund-cercla-overview>
- Superfund: Five-year Reviews
<https://www.epa.gov/superfund/superfund-five-year-reviews>
- Clarifying Protectiveness <https://semspub.epa.gov/work/HQ/174829.pdf> Superfund Today:
Focus on Five-Year Reviews Involving the Community (December 2009)
<https://semspub.epa.gov/work/HQ/175190.pdf>
- Superfund Alternative Approach
<https://www.epa.gov/enforcement/superfund-alternative-approach>
- Rules of Thumb for Superfund Remedy Selection
<https://semspub.epa.gov/work/HQ/174931.pdf>
- Five-Year Review Process in the Superfund Program (April 2003)
<https://semspub.epa.gov/work/HQ/174760.pdf>