



# Update on Libby Ground Water Contamination Superfund Site



January 2017

*This flyer provides an update on activities to clean up the Libby Ground Water Contamination Superfund site near Libby, Montana.*

The site is located on a former lumber mill and wood treatment facility on the southeast side of Libby, Montana. The facility treated timbers and poles with creosote and pentachlorophenol (PCP) from 1946 through 1969. These operations also contaminated soils and groundwater with polycyclic aromatic hydrocarbons (PAHs), PCP, dioxins, furans and arsenic. The resulting contaminated groundwater plume is also part of the Superfund site.

## Site Background

The first discovery of well water contaminated with PCP occurred in 1979, when water drawn from a new residential well near the site smelled of creosote. The U.S. Environmental Protection Agency (EPA) added the site to the National Priorities List in September 1983 to address contaminated soil and groundwater.

In 1986, EPA selected an interim remedy requiring monetary compensation to Libby residents to use the municipal water supply instead of contaminated private water wells. The interim solution also called for adoption of an ordinance to prevent the installation of new water wells for human consumption or irrigation in the upper and lower aquifer within the City of Libby's corporate limits.

EPA selected a remedy to address contaminated soil and groundwater in two Records of Decision (RODs) in 1986 and 1988. The remedy was subsequently updated in documents known as an Explanation of Significant Differences (1993 and 1998). Historical operations at the site have impacted two aquifers beneath the site, a shallow aquifer and a deeper aquifer. The cleanup plan includes:

- 1) Excavation and biological treatment of contaminated soil above the water table in the former source areas;
- 2) Extraction of contaminated shallow aquifer groundwater and oil in the former waste pit source area, with oil/ water separation followed by treatment of dissolved contaminants with naturally occurring organisms; and
- 3) Remediation of contaminated shallow aquifer groundwater downgradient of the former contaminant source areas using naturally occurring organisms to break down the contaminants into less toxic substances.

The deeper aquifer was determined to be technically impractical to clean up in the 1993 Explanation of Significant Differences. The deeper plume is monitored on a regular basis to ensure the extent of contamination does not increase. Use of the lower aquifer groundwater is prevented through a city ordinance.

## What is the status of the cleanup?

Remedial efforts have not been completely successful in meeting cleanup goals in portions of the upper aquifer. EPA, Montana Department of Environmental Quality (DEQ), and International Paper (IP) are currently studying the groundwater contamination in the upper aquifer and assessing different technologies that may more effectively clean up groundwater. The study will result in a report called a Focused Feasibility Study, which will look at new alternatives for cleaning up groundwater in the shallow aquifer.

The current remedy protects public health because there are no known pathways of exposure, which could lead to the public being exposed. The city is implementing and enforcing its ordinance that prohibits use of contaminated groundwater within the city limits and we are not aware of anyone using contaminated groundwater outside of city limits. Much of the contaminated soils have been successfully treated. Soils undergoing biological treatment

are located on land controlled by International Paper, and land use restrictions are in place above historical source areas.

For the remedy to be protective in the long-term, the following steps need to be completed:

- Implement additional institutional controls to restrict land and groundwater use and activities which may interfere with final cleanup in all areas where there is remaining waste.
- Assess cleanup levels and residual soil contamination; and
- Modify the final cleanup plan to ensure that contaminants in the upper aquifer are addressed.

Please contact anyone listed on the site contacts below if you have questions or concerns about groundwater use.

## What are the Next Steps?

After EPA, DEQ and IP complete the Focused Feasibility Study, we will develop and distribute a new proposed cleanup plan to community members. The agencies will make a final cleanup decision after considering public comments. This is expected to happen in 2018.

## Site Documents

Site documents are available at EPA's website:

<https://www.epa.gov/superfund/libby-groundwater>

Documents are also available in an information repository in Libby:

Lincoln County Dept. of Environmental Health  
Office of the County Sanitarian  
Lincoln County Annex  
418 Mineral Avenue  
Libby, MT 59923  
406-293-7781

## Questions?

### EPA

Andrew Schmidt, Project Manager, 800-227-8917  
ext. 312-6283, [schmidt.andrew@epa.gov](mailto:schmidt.andrew@epa.gov)

Jennifer Harrison, Community Involvement Coordinator,  
800-227-8917 ext. 312-6813,  
[harrison.jennifer@epa.gov](mailto:harrison.jennifer@epa.gov)

### MDEQ

Lisa DeWitt, Project Officer, 406-444-6420,  
[lidewitt@mt.gov](mailto:lidewitt@mt.gov)

Jeni Flatow, Public Information Officer, 406-444-6469,  
[jflatow@mt.gov](mailto:jflatow@mt.gov)

