

Lockwood Solvent Ground Water Plume Superfund Site Fact Sheet

Lockwood Site History

The Lockwood Solvent Ground Water Plume Superfund Site, or Lockwood Site, is a 580-acre area on the outskirts of Billings, Montana. Much of the ground water at this site is contaminated with volatile organic chemicals (VOCs) including tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE), and vinyl chloride (VC). These chemicals were found to be present in the soil at the source areas: the Beall Trailers, Inc. facility and the Soco West facility. The chemicals leached into soil and ground water from these two sources on the Lockwood Site.

The chemicals can also disperse as vapor from shallow ground water, enter the indoor air of buildings and be inhaled. This can pose long-term risks to public health since these chemicals are known to be human health hazards.

The Environmental Protection Agency (EPA) defines specific areas within Superfund sites as Operable Units. The Lockwood Site Operable Unit 1 (OU1) is the approximate location of the Beall Trailer source area and associated ground water plume. The Operable Unit 2 (OU2) area defines the approximate area of the Soco West source area and associated ground water plume. These areas are often referred to as OU1 and OU2, rather than the Beall Trailer or Soco West areas of the site. (See map)

This site became an EPA-designated Superfund site on December 1, 2000. The EPA and the Montana Department of Environmental Quality (MDEQ) identified a remedy in August 2005. This remedy will permanently treat the chemicals of concern, remediating the contaminants in soil and ground water.

Is My Water Safe?

Yes. The EPA extended the public drinking water supply system to provide safe drinking water for area residents that were using the contaminated ground water for their homes.

What's a Remedy?

A remedy for environmental contaminants, like the VOCs in the soil and ground water at the Lockwood site, is the process by which they are removed or mitigated.

Update on the Lockwood Remedy

Since 2005, the EPA and MDEQ have been working with the facility operators to begin the clean up. The site is currently in remedy design. The remedy design is a series of engineering reports, documents, specifications, and drawings that detail the steps to be taken to clean up the site. The remedy design requires sampling so that scientists and engineers can understand the specifics of on-site contamination in soil, water, and air. They will use this information to develop the best remedy process possible. Sampling activities will begin in spring of 2012 and continue through 2013. Sampling will require personnel and equipment on the Lockwood site. You may notice personnel, trucks, and drilling activities on various areas of the site, including the Beall Trailers facility and around the Soco West property as sampling activities are performed.

What are VOCs?

VOCs are a type of chemical that are contaminants of concern because they tend to be toxic to humans and persist in the environment. TCE is a chemical solvent used to clean metal machinery and in some industrial and consumer manufacturing processes. PCE is widely used in dry cleaning and other industrial processes. Both chemicals are used in everyday products like automotive brake cleaners. DCE and VC are chemicals that are produced in the breakdown process of TCE and PCE and, themselves, pose a risk to human health and the environment.

New Chemical Information at the Lockwood Site

Recently, the EPA released new and more stringent health effect (toxicity) information for PCE and TCE. *This new information is important because it is a determination on the human health effects of PCE and TCE and has the potential to change aspects of the remedy design at the Lockwood site.* After a comprehensive review process and years of scientific research on the human health effects of PCE and TCE, the EPA has updated their assessment on the harmful effects that these chemicals are likely to cause. The EPA has recognized PCE and TCE as likely carcinogens (cancer-causing agents) and has set measurable values for human exposure to PCE and TCE. These values are compared to PCE and/or TCE concentration levels in soil, water, and air. This helps determine the health risks that a person can have if exposed to these chemicals above certain amounts.

EPA assessments are based on years of independent scientific research and the assessment process includes: EPA agency review, independent review, interagency review, public comment, and external peer review. All major review comments have been addressed. The EPA keeps a database on chemicals called the Integrated Risk Information System (IRIS) and this database is available on the web.

What the New Toxicity Assessments Mean to the Lockwood Remedy

The new information on the toxicity values of PCE and TCE allows the EPA to determine remedies that will more effectively protect people and communities from exposure to PCE and/or TCE in soil, water, and air.

The EPA will use the new toxicity information to review the existing remedy to better guide the soil, water, and air cleanup processes related to the Lockwood Site. A human health toxicologist will perform a review of the remedy for the Lockwood Solvent Ground Water Plume Site to determine whether the existing remedy is still protective of human health, given that PCE and TCE toxicity is now better understood.

After this review is performed, the EPA will determine what, if anything, should change about the planned remedy to continue to assure the protection of human health. If changes should be made to make the remedy more effective, those changes will be implemented and the community will be informed.

More information on the Lockwood Site, the community meeting, EPA contact information, and related web links are provided on the next page.



Community Meeting Information

There will be an open house to discuss the Lockwood Site, the remedy, and how new toxicity values relate to the site and to the remedy. EPA, Montana State, and Facility representatives will attend to lead the discussion and answer questions.

- **April 24, 2012**
- **Lockwood School, 1932 Highway 87 East in the Middle School Commons**
- **6:30 p.m. to 8:30 p.m.**

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Web Links

More information on the Lockwood Site:
http://www.epa.gov/region8/superfund/mt/lockwood_solvents/index.html

More information on the Lockwood Chemicals:
<http://www.atsdr.cdc.gov/toxfaqs/index.asp>

More information on IRIS:
<http://www.epa.gov/IRIS>

This Sheet Contains Important Facts about:

- ✓ *The Lockwood Solvent Ground Water Plume Superfund Site History*
- ✓ *New information about PCE and TCE, chemicals of concern at the Lockwood Site*
- ✓ *New Information about Site Activities Related to the Remedy*
- ✓ *Ways to learn more about the Lockwood Site and related topics*
- ✓ *Contact Information for your EPA representative*
- ✓ *Web Links to more information*



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