

# NPL Site Narrative for Lockwood Solvent Ground Water Plume

## LOCKWOOD SOLVENT GROUND WATER PLUME

### Billings, Montana

**Conditions at Proposal (May 11, 2000):** The Lockwood Solvent Ground Water Plume site is located in the town of Billings, Yellowstone County, Montana. The site is currently defined as a solvent ground water plume with no identified source. Proposal of the Lockwood Solvent Ground Water Plume site to the National Priorities List (NPL) is based on releases to groundwater of tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE), and vinyl chloride (VC) that have been documented in several residential drinking water supply wells. These releases were detected at concentrations that exceed health-based benchmarks.

The history of ground water contamination at this site dates back to the mid-1980s. Benzene, toluene, xylenes, ethyl benzene, TCE and DCE were detected in the ground water in the vicinity of Lockwood Water Users Association (LWUA) municipal supply wells and in ground water monitoring wells up to one-half mile east of the LWUA wells. Several possible contributors are present in the general vicinity of the plume, however, there is not adequate information to attribute contamination to a specific source or sources.

In June 1998, the Montana Department of Environmental Quality (DEQ) conducted a site investigation and sampled possible source areas upgradient from contaminated monitoring wells that had been previously sampled. Based on findings from June 1998, DEQ conducted a second investigation in winter 1998-99 that focused on identifying the potential sources of PCE in the Lomond Lane area. DEQ concluded that no wastewater systems were contributing to the PCE problem, that three business wells contained contaminants above health standards, and that contamination in residential wells continued to exceed health standards.

DEQ requested that the Agency for Toxic Substances and Disease Registry (ATSDR) provide a Health Consultation in spring 1999, for the Lockwood Solvent Ground Water Plume site to identify any potential health effects from bathing, showering, or watering lawns and gardens with the ground water. ATSDR recommended that agencies provide alternative whole house water supplies to affected residences within one year.

In response, EPA conducted sampling investigations in September and October 1999. EPA found PCE, TCE, cis-1,2-DCE, and vinyl chloride in the ground water. DEQ and EPA are currently supplying ten households with bottled drinking water.

**Status (December 2000):** EPA is considering various alternatives for this site.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.