



U.S. Environmental Protection Agency
10 West 15th Street, Suite 3200
Helena, Montana 59626

How You Can Become Involved in the Decision Process

EPA, in consultation with MDEQ, Lewis and Clark County, and the City of East Helena, will select a final remedy for the site, but only after the public comment period has ended and all information submitted by the area's residents has been reviewed and considered. After that, EPA is required to prepare and issue a Record of Decision before the remedy can be implemented.

Public Meetings. In order to provide information and answer questions about the Proposed Plan, EPA will hold a public meeting on Thursday, January 25, 6:30-8:00 p.m., at the East Helena Fire Hall. Individuals may provide oral or written comments; oral comments will be recorded.

EPA will hold a second public meeting on Thursday, March 1, 2007, 6:30-8:00 p.m., also at the East Helena Fire Hall. Individuals may provide oral or written comments; oral comments will be recorded.

Public Comments. EPA will conduct a formal 60-day public-comment period from **January 16 to March 16, 2007**. Send written comments to: **Scott Brown, USEPA, Federal Building, 10 West 15th Street, Suite 3200, Helena, MT 59626**

EPA Responsiveness Summary. EPA will respond to public comments, both written and oral, in a Responsiveness Summary. EPA may modify the Preferred Cleanup Alternative or select another response action presented in the Proposed Plan based on new information or public comments.

Final Cleanup Decision. A summary of the final cleanup decision will be published in the *Independent Record* and EPA will make copies of the decision summary available to the public after the ROD is signed. EPA anticipates that the ROD will be completed by September 30, 2007

More Information

Documents pertaining to the East Helena Superfund site can be found at:

EPA Records Center
10 West 15th Street, Suite 3200
Helena, MT

MDEQ Records Center
1100 N. Last Chance Gulch
Helena, MT

East Helena Lead Education and Abatement Program office
2 South Morton
East Helena, MT

For more information, call the office at (406) 227-8451.

For more information about this Proposed Plan or the East Helena Superfund site, contact the Montana Office of EPA at (406) 457-5000.

www.epa.gov/region8/superfund/mt/east_helena



EPA Fact Sheet, January 12, 2007. East Helena Superfund Site (Operable Unit No. 2), Lewis and Clark County, MT

EPA Announces Proposed Plan for Final Cleanup of East Helena's Residential Soils and Undeveloped Lands

On January 12, 2007, EPA, after consultation with the Montana Department of Environmental Quality (MDEQ), Lewis and Clark City-County Health Department, and East Helena City Council, announced its Proposed Plan for cleaning up remaining contaminated soils in residential yards and undeveloped lands within the East Helena Superfund site.

The EPA is required to issue a Proposed Plan to affected communities and other interested parties to facilitate public participation in the process of arriving at a final cleanup decision. The Proposed Plan is a document that describes EPA's recommended methods for cleaning up a Superfund site, and it is the final document before the Record of Decision (ROD) – a public document that specifies which cleanup alternatives will be used to address the contamination – is issued. The purpose of the Proposed Plan is to:

- Provide basic site background information,
- Highlight key points from the technical documents,
- Present summaries of remedial alternatives that were considered,
- Describe EPA's preferred cleanup alternative,
- Explain why EPA chose the preferred cleanup alternative,
- Present information about how the public can review and provide comments on the Proposed Plan, and
- Solicit input from the East Helena community during selection of the final remedial alternative.

It is anticipated that the cleanup of qualifying residential properties will be completed within two years after EPA issues the Record of Decision. Cleanup of parcels of undeveloped land will occur as land-use changes are proposed by landowners or developers. This may occur over decades.

Proposed Plan Public Meeting

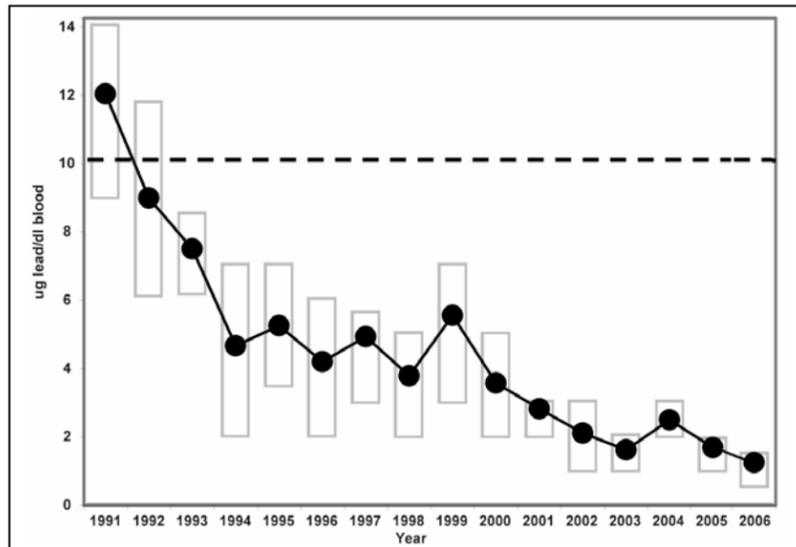
The first public meeting to provide additional information about the Proposed Plan is scheduled for 6:30-8 p.m., Thursday, January 25, 2007, at the East Helena Fire Hall.

To obtain a copy of the Proposed Plan, or for other public participation opportunities, See page 4.

Site Background

The East Helena Superfund site consists of the smelter, all of the City of East Helena, nearby residential subdivisions, numerous rural developments such as farms and homes, and surrounding undeveloped land. This Proposed Plan addresses only the effects of smelter emissions on surface soils of residential areas and undeveloped lands (Operable Unit No. 2).





East Helena children's blood lead levels (1991-2006)

Summary of EPA's Preferred Cleanup Alternative

EPA examined several cleanup alternatives before arriving at the Preferred Alternative. The major components of the Preferred Alternative are:

- Continue the existing East Helena Lead Education and Abatement Program for as long as necessary to protect children from lead;
- Complete the cleanup of the existing, qualifying residential yards and vacant lots within two years after the Record of Decision is issued;
- Complete the cleanup of unpaved streets, aprons, and alleys in existing residential areas;
- Complete the cleanup of historic irrigation ditches and water spreading channels if they are located within or adjacent to residential areas;
- Clean up the portion of the railroad right-of-way that is adjacent to residential areas;
- Establish institutional controls that will enable the Lewis and Clark City-County Board of Health to adopt and enforce regulations to prevent disturbances of remaining contaminated soils and dust;
- Define requirements and specifications for land use changes, for example, when undeveloped lands are proposed for residential, recreational, or commercial development;
- Ensure cleanup actions based on lead also protect against soil arsenic concentrations greater than risk-based levels for specified uses; and
- Complete a required EPA review of the final remedy at least once every 5 years after the remedy is implemented.

The Preferred Alternative recommended by EPA is a combination of remedial strategies designed to reduce risk from the principal threat – lead-contaminated soils – for both residential areas and undeveloped land.

What are the Human-Health Risks?

The primary concern driving the cleanup is exposure to remaining elevated concentrations of lead. The most recent data and risk calculations support the conclusion that arsenic in soils is no longer a source of concern. By cleaning up remaining soils in residential areas and by establishing procedures for allowing changes of use of undeveloped lands, associated health risks will be reduced to acceptable levels.

What Remains to be Cleaned Up Under the Preferred Alternative?

- 100-110 existing residential yards and 9 vacant lots
- 40 sections of road aprons or alleys
- Approximately 7 acres of railroad right-of-way
- Approximately 1.8 acres of channels and ditches
- Undeveloped, privately-owned lands undergoing a change in land use.

Will My Yard be Cleaned Up?

Yards and other properties within residential areas qualify for cleanup when any sampling section/ quadrant, is above 1,000 ppm lead. Once a yard qualifies, all other sections above 500 ppm lead will also be cleaned up. In addition, if blood-lead levels in a child test above 10 ug/dl and an environmental assessment demonstrates that exposure to lead in the soils of the child's yard is responsible, then that yard qualifies for immediate remedial action regardless of soil lead concentrations. In the unlikely circumstances where a yard average soil arsenic concentration exceeds 176 ppm, the yard qualifies for remedial action regardless of soil lead concentrations.

How Will Cleanup Be Done?

EPA has developed protocols, in coordination with Asarco, for residential yard cleanup. Contaminated soil is removed using earthmoving equipment, and by hand shovels close to structures, trees, etc., and disposed at the East Fields soil repository. Excavated areas are backfilled with clean soil and graded, and removed vegetation and structural items, such as fences, are replaced. Homeowners are consulted in advance to discuss details of cleanup, which are agreed upon in writing before construction starts. EPA's on-site representative will help with questions or concerns during construction. Participation in the cleanup is voluntary, and there is no cost to the property owner for cleanup.

Summaries of the Remedial Alternatives that were Evaluated

Alternatives Considered for Existing Residential Areas

The remedial alternatives for existing residential areas are:

Alternative 1R - No Further Action • Cost: \$284,000 • Time to Implement: 0 year • No further action other than blood lead monitoring for children and limited environmental monitoring. Superfund requires this alternative be used as a comparison against other alternatives.

Alternative 2R - Selected Soil Removal (1,000/500 ppm lead), continuing community education, and institutional Controls • Cost: \$10 million • Time to Implement: 2 years after EPA issues the Record of Decision • Complete the residential soil cleanup according to protocols that are currently in place for the ongoing removal action.

Alternative 3R - Selected Soil Removal (500 ppm lead), continuing community education, and institutional controls • Cost: \$38 million • Time to Implement: 5 to 7 years after EPA issues the Record of Decision • Yards and all other properties would qualify for cleanup when the property average lead concentration is above 500 ppm. If a property qualifies, the entire property would be cleaned up.

Alternatives Considered for Undeveloped Lands

Remedial alternatives include:

Alternative 1U - No Further Action • \$118,000

Alternative 2U - Soil Removal and Replacement • Est. Cost for Ditches and Railroad Right-of-Way: \$1.5 million; Est. Cost for Future Developments: \$40,700/acre • Excavate, backfill, revegetate. Implement institutional controls.

Alternative 3U - Capping • Est. Cost for Future Developments: \$36,400/acre • Place a cap, or cover, of soil, gravel, or pavement over surfaces, and implement institutional controls. Capping can be protective when the intended new use is industrial, commercial, or recreational.

Alternative 4U - In Place (In-Situ) Treatment • Est. Cost for Future Developments: \$4,800/acre • Deep tillage of contaminated surface and near-surface soils with cleaner subsurface soils to reduce contaminant concentrations. Most after-treatment lead concentrations would be 100-300 ppm.



A typical play area at a residential yard before and after cleanup.

Why EPA Recommends a Combination of Alternatives

EPA recommends the Preferred Cleanup Alternative for the following reasons:

- Existing residential areas - Alternative 2R, Selected Soil Removal, is patterned after the residential soil removal action that has been in place since 1991, which EPA believes has proven to be safe, effective, and protective of children's health; will be completed within two years; will cause minimal disruption in the community; and will cost significantly less.
- Undeveloped areas that require remedial action before being developed - Alternative 4U satisfies EPA's statutory preference for treatment as a principal element of the remedy, is cost-effective, and the environmental consequences associated with implementation are minimal.
- Ditches and channels and the railroad right of way - Alternative 2U has been shown to be more effective and permanent, albeit more costly, than in-place treatment or capping.
- Although the preferred remedy for undeveloped lands to be developed in the future is generally Alternative 4U, implementation of the other alternatives, either singly or in combination, may prove the most appropriate remedy for development that may occur decades into the future.

EPA's Evaluation Criteria for Choosing a Preferred Alternative

- Overall Protection of Human Health and the Environment.
- Compliance with federal and state laws, regulations, and requirements that pertain to the site.
- Long-term Effectiveness/Permanence.
- Reduction of Toxicity, Mobility, or Volume of Contaminants.
- Short-term Effectiveness (considers the time needed to implement an alternative and the risks it poses to workers, residents, and the environment during implementation.)
- Implementability (considers technical and administrative feasibility.)
- Cost (includes estimated capital and annual operations and maintenance costs as well as the total cost.)
- State/Support Agency Acceptance.
- Community Acceptance.

View the Proposed Plan and other East Helena Site Information at

www.epa.gov/region8/superfund/mt/east_helena