

Proposed Plan for Record of Decision Amendment

Upper Aquifer Component of Operable Unit 2 Libby Groundwater Contamination Superfund Site, Libby, MT



Region 8 - Denver, CO

August 2019

This proposed plan presents the U.S. Environmental Protection Agency's (EPA's) proposed changes to the existing 1988 Record of Decision (ROD), as amended in 1993 and 1997, for cleanup of groundwater in the upper aquifer of the Libby Groundwater Superfund Site (the Site; Exhibit 1). It has been prepared by EPA, the lead agency for the Site, in consultation with the Montana Department of Environmental Quality (DEQ), the support agency. The plan is required as part of EPA's public participation responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended (CERCLA or Superfund) and National Oil and Hazardous Substance Pollution Contingency Plan 40 *Code of Federal Regulations* Part 300. The Part 300 regulations are the federal regulations that guide the Superfund program and are known as the National Contingency Plan (NCP).

Why Changes Are Needed

Remediation of soil and upper aquifer groundwater has been ongoing at the Site since 1988. The current primary source of groundwater contamination is wood-treating fluid and wastes that remain in the upper aquifer in the form of nonaqueous phase liquid (NAPL) and chemicals in the NAPL that have dissolved in the groundwater.¹

Early actions, including excavation and treatment of contaminated soil, extraction of NAPL, and treatment of contaminated groundwater, were taken to mitigate risks to human health until groundwater cleanup could be achieved.

EPA's 1986 ROD described a city ordinance that prohibits well drilling for human consumption or irrigation. The city ordinance is still in place today, and International Paper (IP), who acquired the Site remediation responsibilities upon its merger with Champion International Corporation in 2000, still subsidizes a portion of the city water cost for residents.

¹ *The deeper aquifer was determined to be technically impracticable to clean up in the 1993 Explanation of Significant Differences. The deeper plume is monitored regularly to ensure the extent of contamination does not increase.*

Currently, there is no known use of impacted groundwater for human consumption inside or outside of the Libby city limits. Thus, EPA concluded in its *2015 Five-Year Review* that the current Site remedy is protective of human health and the environment because no known completed exposure pathway to the groundwater contamination exists. Nevertheless, changes to the existing remedy are needed, as explained in the following paragraphs.

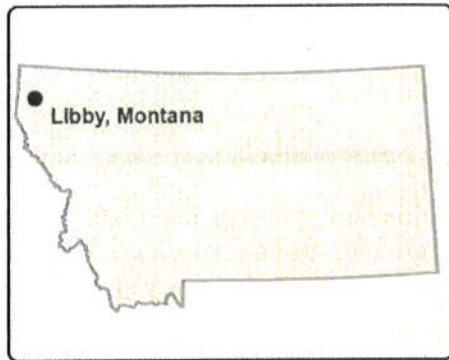
Although over 40,000 gallons of NAPL have been removed from the subsurface, prior remedial efforts at the Site have not been successful in meeting groundwater cleanup goals in certain portions of the upper aquifer - in particular those that contain NAPL. Thus, EPA and DEQ are proposing a revised cleanup strategy that addresses NAPL-impacted portions of the upper aquifer with the highest contaminant of concern (COC) concentrations, the highest potential for releasing dissolved COCs to the groundwater, and the greatest potential risk to human health.

The purpose of this proposed plan is to explain the proposed changes to the existing groundwater remedy and to solicit public comment. An overview of background, scope and results of previous activities, a summary of risks, and a description of EPA's preferred alternative for cleanup is also included. EPA will select a final remedy after consulting with DEQ and after reviewing and considering all information received during a 30-day period for public comments (see page 13). If compelling new information is received during the comment period, it could result in the selection of a final remedy that differs from the preferred alternative described in this plan.

What Would Change?

EPA proposes to:

1. Replace the current source area extraction and treatment system with in situ biosparging in the NAPL source area (**Area 1**).
2. Add in situ biosparging to the area downgradient of the NAPL source area (**Area 2**).
3. Continue monitored natural attenuation to the dissolved plume area (**Area 3**).



0 500 1,000 2,000
Feet

Aerial Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Exhibit 1. Libby Groundwater Contamination Superfund Site Location

Site Background

The Site is a former lumber mill and wood-treating operation located on Highway 2 in the City of Libby, Montana. Historical operating practices and the release of wood-treating fluids at the Site resulted in impacts to soil and the underlying groundwater. During early site investigation, the Site was divided into two operable units (OUs) to help accelerate the cleanup process. The first OU (OU1) addressed immediate public exposure to contaminated groundwater and required the development of institutional controls to prevent domestic use of the contaminated groundwater. The second OU (OU2) consists of soil and groundwater impacted by wood-treating operations and releases, and required remediation of the soils and the upper aquifer contaminated groundwater. Soil and groundwater remediation has been ongoing at the Site since the late 1980s under the direction of the EPA and DEQ. Exhibit 2 shows the timeline of historical wood-treating activities at the Site.

The Site was added to EPA's National Priorities List (NPL) in 1983, under Superfund authority. The St. Regis Paper Company was identified as the primary potentially responsible party, and an initial investigation began in 1983. Champion International Corporation purchased and merged with the St. Regis Paper Company in 1985 and became the responsible party under EPA's order. Champion continued remedial investigation activities until IP merged with Champion in December 2000 and assumed Champion's liabilities. Since 1985, Champion, and now IP, have been actively involved in the investigation and cleanup of the Site, as follows:

1. **Interim Remedy for OU1 (1986 ROD).** The 1986 OU1 interim remedy consisted of:
 - Champion's Buy Water Plan, in which Libby residents were paid to use municipal water for

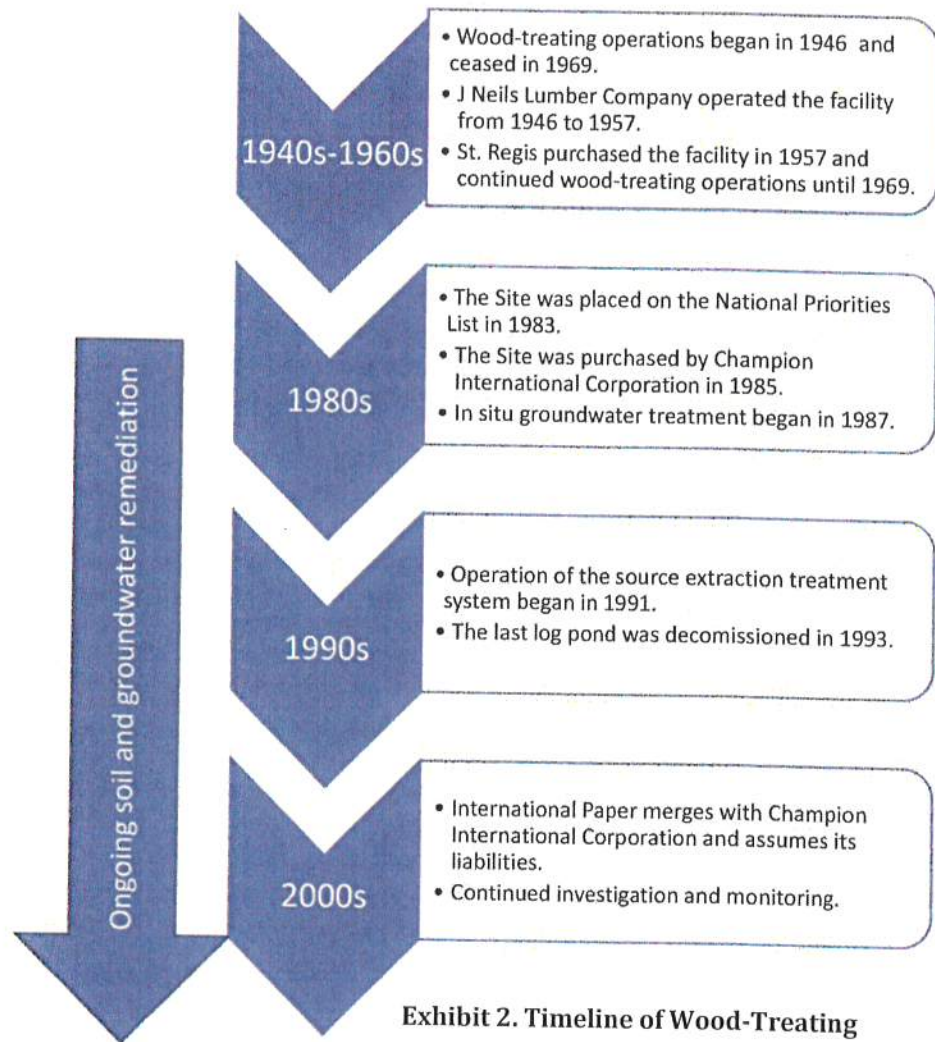


Exhibit 2. Timeline of Wood-Treating

- irrigation and drinking water instead of contaminated private water wells.
 - An ordinance preventing the installation of new water wells for human consumption or irrigation in the upper and lower aquifers within the corporate limits of the City of Libby.
2. **Remedy for OU2 (1988 ROD).** The 1988 OU2 ROD remedy consisted of:
 - Excavation and consolidation of contaminated soils from identified source areas (i.e., the waste pit area, the former butt dip area, and the former tank farm).
 - Soil treatment by a two-step biodegradation process: an initial treatment phase in the waste pit area and a second treatment phase in a lined and capped land treatment unit.
 - Insertion of language into property records identifying the locations of hazardous substance

disposal and treatment areas, and land use restrictions for these areas.

- Degradation of organic contaminants in groundwater beneath the waste pit area using in situ bioremediation treatment processes.
 - NAPL recovery wells (historically referred to as oil recovery wells) to collect highly contaminated groundwater, followed by treatment prior to reinjection.
 - Creation of an ordinance to prohibit drilling new water supply wells within the corporate limits of the City of Libby, within both the upper and lower aquifers. (This was also part of the ROD for OU1.)
 - Monitoring activities to assess the performance of the remedy components during remedial activities at the Site.
3. **1993 Explanation of Significant Differences (ESD).** In September 1993, EPA modified the OU2 remedy through an ESD in accordance with the NCP. EPA, in consultation with DEQ, determined that active remediation in the lower aquifer was technically infeasible. As a result, the final remedy for the lower aquifer consists of the continuance of both institutional controls prohibiting installation of new water supply wells for consumption or irrigation within the City of Libby and the long-term groundwater monitoring program initiated by Champion. In addition, the ESD removed the soil cleanup goals established in the 1988 ROD for pyrene, naphthalene, and phenanthrene.
4. **1997 ESD.** Following the first Five-Year Review in 1995, EPA, in consultation with DEQ, determined that the remediation levels in the 1988 ROD needed to be reviewed and updated to include criteria that were developed since the ROD was issued. The 1997 ESD modified cleanup levels for the upper aquifer to address updated federal Maximum Contaminant Levels (MCLs) and risk assessment practices.

Site Characterization

The COCs with associated cleanup levels identified in the 1988 ROD are pentachlorophenol (PCP), polycyclic aromatic hydrocarbons (PAHs), benzene, and arsenic. The 1988 ROD identified cleanup requirements for these COCs in the upper aquifer. The 1997 ESD updated several of these cleanup standards. Based on recommendations in the 2010 Five-Year Review, additional groundwater characterization work for the upper aquifer was undertaken that included an investigation to better delineate the extent of the dissolved-phase plume, a

source area characterization to better understand the nature and extent of NAPL in the upper aquifer, an evaluation of newer remedial technologies, and development of a numerical groundwater flow and transport model.

To gather information to support a focused feasibility study (FFS) aimed at developing a more effective remedial strategy, additional work was conducted by IP that included:

- Conducting a vapor intrusion investigation to assess vapor as a potential exposure pathway (see Summary of Site Risks).
- Re-evaluating groundwater cleanup levels.
- Conducting laboratory treatability studies to evaluate hot water (HW)/steam-enhanced extraction (SEE) and in situ biosparging (ISB) technologies for removing NAPL and reducing dissolved-phase COCs in groundwater.
- Conducting a field pilot study for ISB to determine specific parameters related to how well it might work at the Site.
- Collecting additional NAPL and groundwater samples needed to support conceptual design and development of remedial alternatives for the FFS.

All of this information was compiled in a comprehensive FFS. Completed in April 2018, the FFS considered supplemental data pertaining to source area investigation, groundwater monitoring, and technology evaluations at both the bench and field pilot scale. With a refined understanding of source distribution and the feasibility of subsurface treatment, the FFS identified a range of remedial alternatives capable of further addressing the nature and extent of contaminants encountered at the Site. The alternatives address possible remedial actions in three specific areas of the site (Exhibit 3), as follows:

- Area 1 (2.7 acres) includes the former waste pit source area that contains predominantly residual (immobile) NAPL and the highest groundwater contaminant concentrations.
- Area 2 (33 acres) includes the former tank farm source area and residual NAPL that historically migrated away from the former sources.
- Area 3 (98 acres) includes the area containing only dissolved-phase COC contamination in the Upper Aquifer (beyond the extent of observed NAPL).

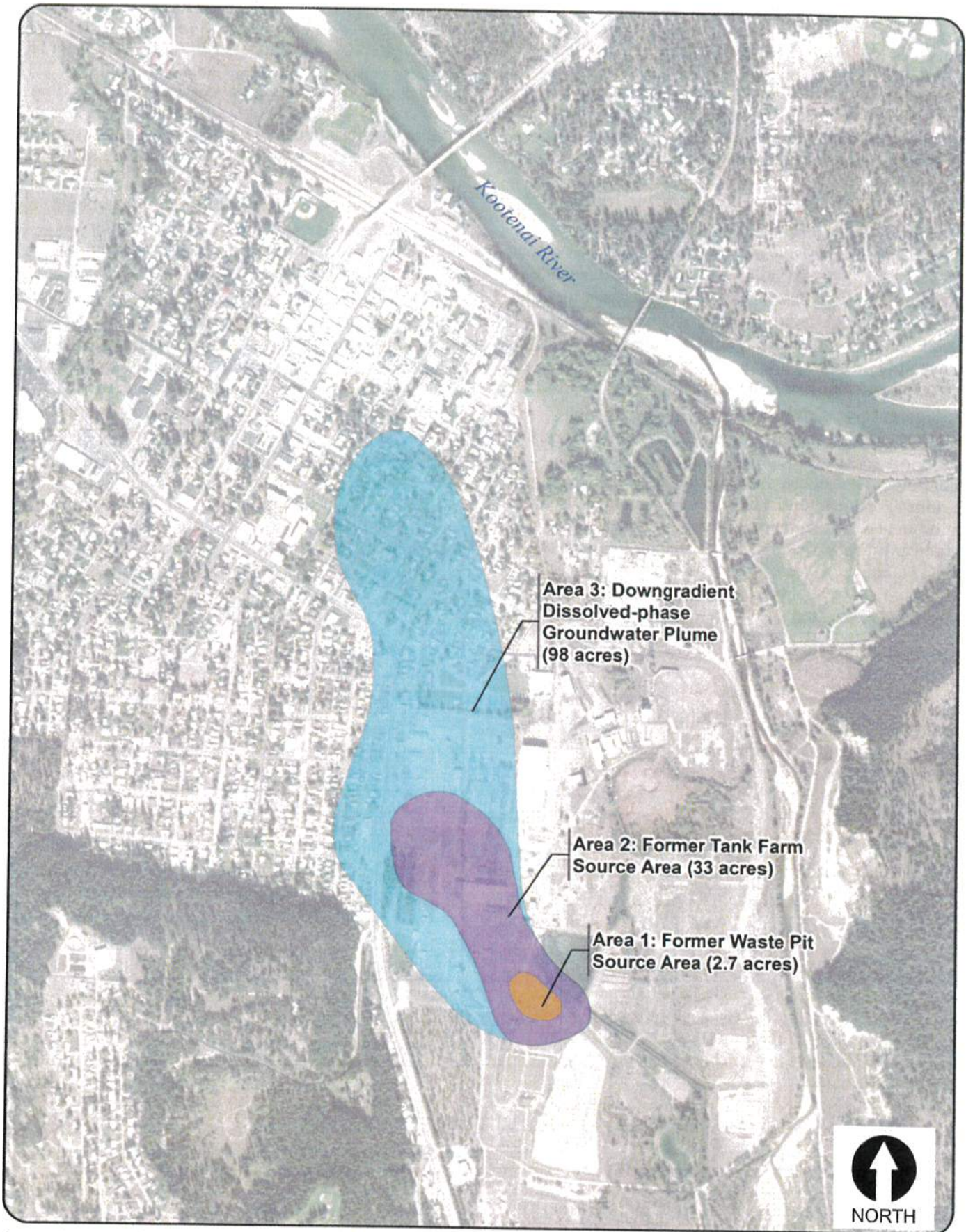


Exhibit 3. Proposed Remediation Areas

Summary of Site Risks

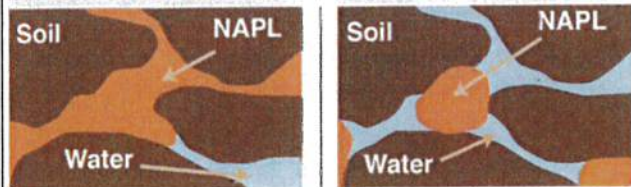
A baseline human health risk assessment was prepared in 1986 that included an assessment of the current and future human health risks from groundwater contaminated primarily with PCP and PAHs in the upper aquifer.

No new upper aquifer groundwater risk assessment evaluation has been performed. Risks posed to human health and the environment by current conditions are expected to be comparable to those described in the 1988 ROD and the 1986 baseline human health assessment. At that time, EPA determined that exposure to groundwater for residential domestic use would result in unacceptable human health risks and therefore cleanup actions were required under the CERCLA law and NCP.

Samples collected from soil vapor, indoor air, and outdoor air between 2011 and 2013 were more recently used to assess the potential for vapor intrusion into buildings. Data collected during the study provided no evidence of the potential for vapor intrusion and thus no additional risk assessment was conducted. However, the study did suggest that if order-of-magnitude increases in site contaminants occurred, or if complaints were made about indoor air quality, that the vapor intrusion pathway should be reassessed at that time.

What are NAPLs?

Nonaqueous phase liquids (NAPLs) are contaminants like oil, gasoline, and petroleum products that do not dissolve in or easily mix with water. Dense NAPLs (DNAPLs) are liquids denser than water and will sink in water or groundwater. Light NAPLs (LNAPLs) are liquids that are less dense than water and will float on water or groundwater.



Mobile NAPL

Immobile Residual Phase NAPL

NAPLs can be found in two different forms: mobile, or free phase, which is a continuous mass of NAPL that can migrate through the saturated soil; and immobile, or residual phase, which is NAPL sorbed to soil particles that will continue to dissolve into the aquifer and is difficult to physically remove without removing soil.

Source: Interstate Technology & Regulatory Council. 2015. Integrated DNAPL Site Characterization and Tools Selection. www.itrcweb.org/DNAPL-ISC_tools-selection

Remedial Action Objectives

This proposed plan addresses upper aquifer groundwater contamination at the Site. The following remedial action

objectives (RAOs) were updated for the upper aquifer based on recent site characterization information and recommendations in EPA's 2010 Five-Year Review:

- Prevent ingestion of upper aquifer groundwater with Site-related COCs that exceed preliminary revised groundwater cleanup levels.
- Protect human health and the environment by reducing Site-related COCs in upper aquifer groundwater to preliminary revised groundwater cleanup levels.

The Site groundwater COCs were established in the 1988 ROD and the 1997 ESD. The preliminary revised groundwater cleanup levels are federal MCLs promulgated under the Safe Drinking Water Act for the COCs that have MCLs; for COCs without MCLs, Montana's *Circular DEQ-7* numeric groundwater quality standards are listed (Exhibit 4). The preliminary revised groundwater cleanup levels will be officially established when the ROD is amended to reflect the selection of the new remedial alternative for the upper aquifer.

Exhibit 4. Preliminary Revised Groundwater Cleanup Levels for the Upper Aquifer

| COC | Preliminary Revised Groundwater Cleanup Level—Upper Aquifer | Units |
|--|---|-------|
| PAHs | | |
| Acenaphthene | 70 | µg/L |
| Anthracene | 2,100 | µg/L |
| Fluoranthene | 20 | µg/L |
| Fluorene | 50 | µg/L |
| Naphthalene | 100 | µg/L |
| Pyrene | 20 | µg/L |
| Benz(a)anthracene | 0.5 | µg/L |
| Benzo(a)pyrene* | 0.2 | µg/L |
| Benzo(b)fluoranthene | 0.5 | µg/L |
| Benzo(k)fluoranthene | 5 | µg/L |
| Chrysene | 50 | µg/L |
| Dibenz(a,h)anthracene | 0.05 | µg/L |
| Indeno(1,2,3-c,d)pyrene | 0.5 | µg/L |
| Other Compounds | | |
| Pentachlorophenol* | 1 | µg/L |
| Benzene* | 5 | µg/L |
| Arsenic | 10 | µg/L |
| Notes: | | |
| *Cleanup level is based on MCL. All other cleanup levels are based on DEQ-7 groundwater quality standards. | | |
| COC – contaminant of concern | | |
| DEQ – Montana Department of Environmental Quality | | |
| PAH – polynuclear aromatic hydrocarbon | | |
| µg/L – micrograms per liter | | |

Summary of Alternatives

This proposed plan presents the existing remedy for groundwater, the new treatment alternatives considered, and EPA's preferred alternative to enhance and replace the existing remedy.

Current Remedy

Major components of the existing Site remedy for upper aquifer groundwater identified in the decision documents are as follows:

- Soil removal
- Onsite soil treatment (land treatment units, treatment nearly complete)
- In situ bioremediation systems (injection of clean oxygenated water into the upper aquifer, discontinued in 1997)
- Source area extraction and treatment systems (operating since 1991 in various configurations, offsite incineration of recovered NAPL, onsite treatment, and reinjection of groundwater)

The City ordinance described above is still in place today, and IP still subsidizes a portion of the City water cost for residents.

New Treatment Alternatives Considered

The FFS evaluated five new alternatives (including "no action") to better address NAPL and COCs in the upper aquifer at the Site. The five new alternatives are summarized in the following subsections.

Alternative 1—No Action with Institutional Controls

Estimated Capital Costs: \$400,000
Estimated O&M Costs: \$500,000
Total Estimated Present-Value Costs: \$900,000
Estimated Construction/Operation Duration: 0 years
Estimated Time to Achieve RAOs: 145 years

As required under Superfund, a "no action" alternative is evaluated to compare cleanup alternatives with baseline Site conditions. Under Alternative 1, current remedial actions would be stopped for the upper aquifer. Current and additional institutional controls, including well drilling and deed restrictions, would be retained. Limited groundwater monitoring would be conducted.

Alternative 2—Hydraulic Containment (Area 1), In Situ Biosparging (Area 2), and Monitored Natural Attenuation (Area 3)

Estimated Capital Costs: \$5,120,000
Estimated O&M Costs: \$94,680,000
Total Estimated Present-Value: \$99,800,000

Estimated Construction/Operation Duration: 145 years

Estimated Time to Achieve RAOs in Area 1: 145 years¹

Alternative 2 includes the following components:

- Groundwater extraction from six wells, aboveground treatment, and reinjection of treated groundwater to hydraulically contain impacted groundwater in the former waste pit area (Area 1) and limit the mass flux from Area 1 into Area 2.
- ISB near the downgradient extent of NAPL in Area 2 (24 injection wells).
- Monitored natural attenuation (MNA) in Area 3.

Institutional controls will also be a component of Alternative 2. Groundwater would be monitored to verify that the remedy is performing as intended (that is, concentrations of COCs are decreasing over time).

Alternative 3—In Situ Biosparging (Areas 1 and 2), and MNA (Area 3)

Estimated Capital Costs: \$2,350,000
Estimated O&M Costs: \$4,660,000
Total Estimated Present-Value: \$7,010,000
Estimated Construction/Operation Duration: 41 years
Estimated Time to Reach RAOs in Area 1: 6 years

Alternative 3 includes the following components:

- ISB in Area 1 by injecting compressed air through approximately 44 shallow and 11 deep injection wells.
- ISB in Area 2, same as Alternative 2.
- MNA in Area 3, same as Alternative 2.

Institutional controls will also be a component of Alternative 3. Groundwater would be monitored to verify that the remedy is performing as intended.

Alternative 4—Steam-Enhanced Extraction/In Situ Biosparging (Area 1), In Situ Biosparging (Area 2), and MNA (Area 3)

Estimated Capital Costs: \$33,490,000
Estimated O&M Costs: \$4,480,000
Total Estimated Present-Value: \$37,970,000
Estimated Construction/Operation Duration: 41 years
Estimated Time to Achieve RAOs in Area 1: 5 years

Alternative 4 includes the following components:

- Application of SEE followed by ISB to address NAPL and impacted groundwater in the waste pit area (Area 1). SEE will increase NAPL mobility and

¹Treatment time is not reduced from Alternative 1 because hydraulic control prevents contaminant migration but does not treat the source.

stripping of COCs using multi-phase extraction wells and soil vapor extraction wells.

- ISB in Area 2, same as Alternative 2.
- MNA in Area 3, same as Alternative 2.

Institutional controls will also be a component of Alternative 4. Groundwater would be monitored to verify that the remedy is performing as intended.

Alternative 5—In Situ Geochemical Stabilization (Area 1) and In Situ Biosparging (Area 2)

Estimated Capital Costs: \$20,330,000
Estimated O&M Costs: \$4,030,000
Total Estimated Present-Value: \$24,360,000
Estimated Construction/Operation Duration: 41 years
Estimated Time to Achieve RAOs in Area 1: 1 year

Alternative 5 includes the following components:

- Application of in situ geochemical stabilization by injecting a proprietary modified-permanganate solution into Area 1 through approximately 600 injection points, which will encapsulate NAPL and oxidize organics.
- ISB in Area 2, same as Alternative 2.
- MNA in Area 3, same as Alternative 2.

Institutional controls will also be a component of Alternative 5. Groundwater would be monitored to verify that the remedy is performing as intended (that is, concentrations of COCs are decreasing over time).

Preferred Remedy

EPA's preferred remedy is Alternative 3 (in situ biosparging in Areas 1 and 2 and natural attenuation in Area 3). It replaces the historical groundwater remedy currently in operation at the site, but does not alter the

soil component of the remedy. The preferred remedy includes the following components:

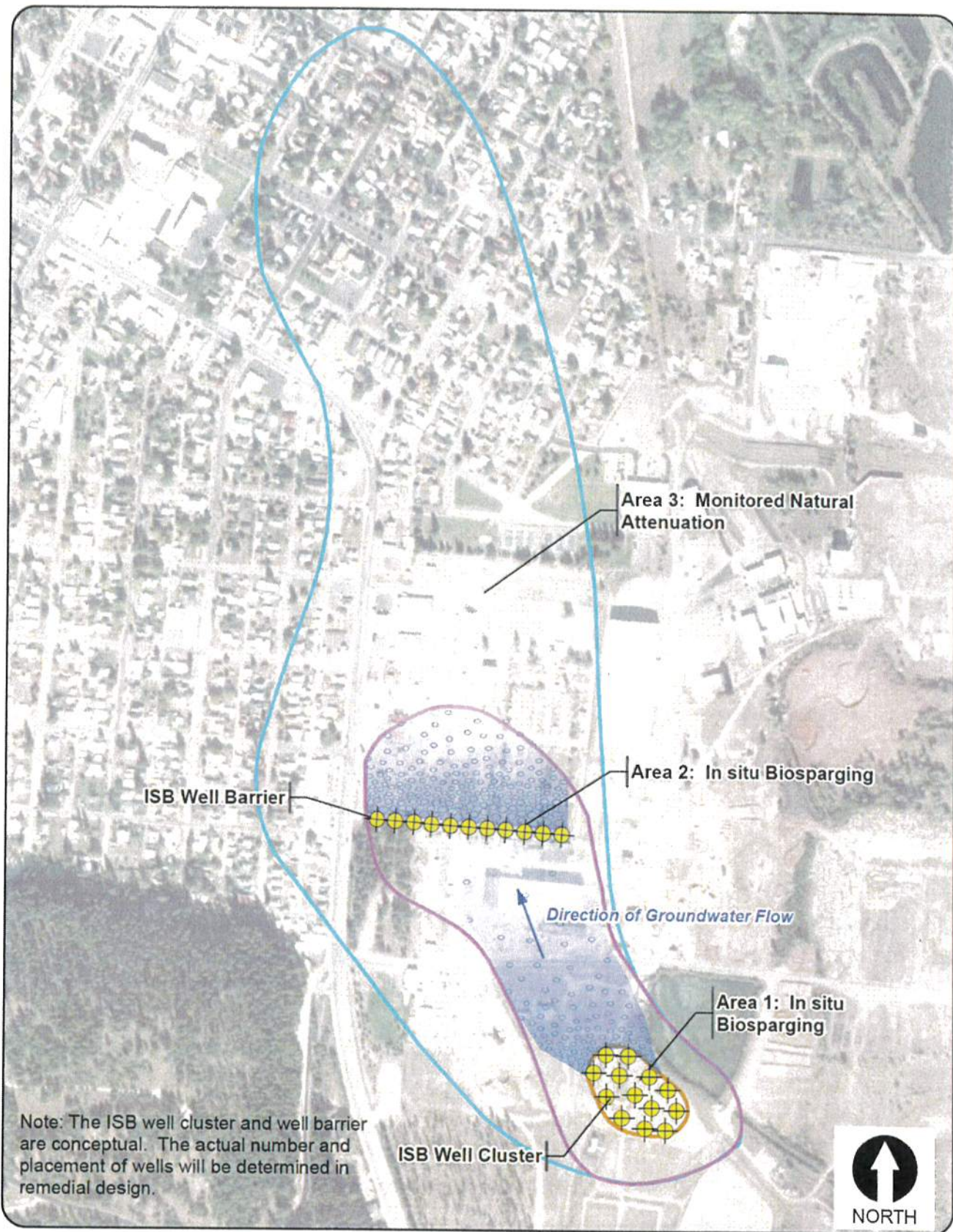
1. **ISB in the waste pit area (Area 1).** This will be accomplished by injecting air through a network of shallow and deep wells to address impacted groundwater and deplete COCs from NAPL.
2. **ISB near the downgradient extent of NAPL (Area 2).** The ISB will treat contaminated groundwater in Area 2 and will propagate a dissolved-oxygen-rich zone to further reduce COC concentrations and prevent dissolved COC migration downgradient of Area 2.
3. **MNA in the area containing only dissolved-phase COC contamination, beyond the extent of observed NAPL (Area 3).** MNA would occur in Area 3 as part of a sitewide monitoring program. The plume in Area 3 is expected to readily attenuate following implementation of ISB in Area 2.
4. **Institutional controls and monitoring,** including well drilling restrictions and property notices, would be retained/improved from the current remedy. Groundwater would be monitored to verify that the remedy is performing as intended (that is, concentrations of COCs are decreasing over time).

Exhibit 5 shows ISB wells installed in Area 1 as part of a pilot study and Exhibit 6 shows the technologies proposed by area for the preferred alternative.

EPA acknowledges the challenge of treating NAPL source areas. As a result, EPA will closely track the progress of the preferred remedy in Area 1. If it appears that the preferred remedy will not be able to achieve RAOs after a period of 6 years, a focused study will be conducted to identify other technologies that might more successfully remediate Area 1. Exhibit 7 presents a decision tree for assessing the effectiveness of the preferred remedy.



Exhibit 5. In Situ Biosparging Wells at the Site



0 250 500 1,000 Feet

Aerial Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Exhibit 6. Remedial Technologies by Area

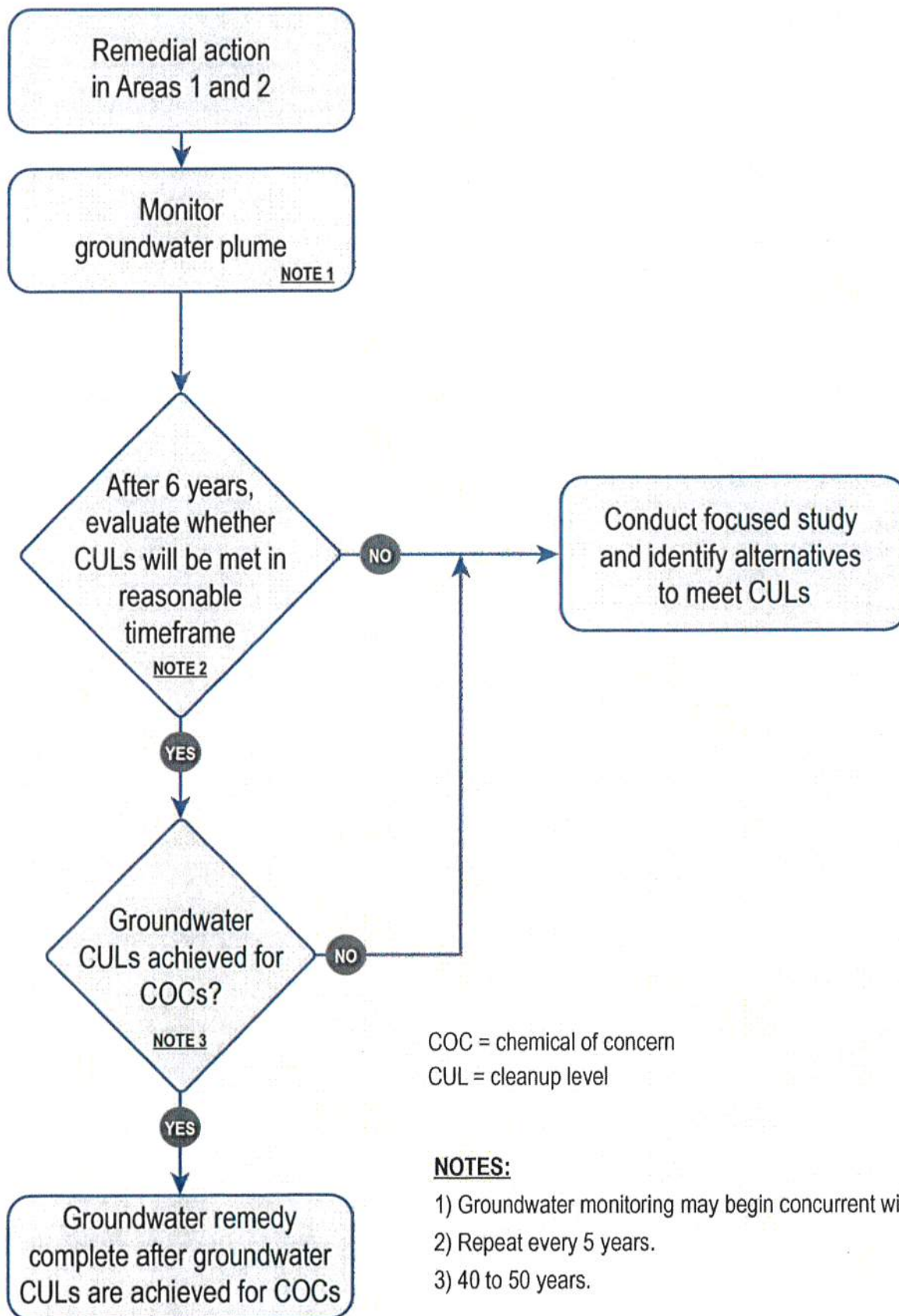


Exhibit 7. Decision Diagram

Evaluation of Alternatives

Nine standard evaluation criteria (Exhibit 8) are used at all Superfund sites to evaluate remedial alternatives in accordance with the NCP. The criteria fall into three groups: threshold, primary balancing, and modifying criteria. The following paragraphs compare the current OU2 remedy and Alternative 3, the preferred remedy.

Overall Protection of Human Health and the Environment

The current remedy and Alternative 3 are both protective, as institutional controls prevent the use of or exposure to contaminated groundwater. However, while the current remedy continues to remove NAPL from the source area, residual NAPL remains, much of it immobile. Under the current conditions, residual NAPL will continue to act as a long-term source of dissolved contaminants in groundwater. The existing remedy for OU2 is not functioning and appears unable to meet RAOs in the intended timeframe (30 years). Alternative 3 will address the residual NAPL sources more fully and is projected to reach cleanup goals in Area 1 more rapidly.

Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)

Both the current remedy and Alternative 3 comply with chemical-, location-, and action-specific ARARs; however, the current remedy will not comply with chemical-specific ARARs for a long period of time.

Long-Term Effectiveness and Permanence

The current remedy and Alternative 3 both provide permanent solutions through in situ treatment or removal of NAPL and groundwater contaminants. Following active in situ treatment, NAPL that remains following implementation of Alternative 3 would be immobilized by physical weathering and biological decomposition; residual contamination that remains will be relatively insoluble. The current remedy is not effectively addressing immobile NAPL, and as a result is substantially less effective in the long-term, as compared to Alternative 3.

Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment

The current remedy has reduced the toxicity, mobility, and volume of groundwater contamination primarily by targeting mobile NAPL; the existing approach is unable to target residual NAPL treatment. However, Alternative 3 can reduce residual NAPL and would be more effective going forward in addressing the

Exhibit 8. Standard Alternative Evaluation Criteria

| Criterion | Description |
|---|--|
| Threshold Criteria | |
| Overall protection of human health and the environment | Does an alternative eliminate, reduce, or control threats to public health and the environment through institutional controls, engineering controls, or treatment? |
| Compliance with ARARs | Does an alternative meet federal, state, and tribal environmental statutes, regulations, and other requirements relevant to the site, or is a waiver justified? |
| Primary Balancing Criteria | |
| Long-term effectiveness and permanence | Does the alternative maintain protection of human health and the environment over time? |
| Reduction of toxicity, mobility, or volume through treatment | Does an alternative use treatment to reduce a contaminant's harmful effects or ability to move in the environment and the amount of contamination remaining after cleanup? |
| Short-term effectiveness | How much time is needed to implement an alternative and the risk the alternative poses to workers, residents, and the environment during implementation? |
| Implementability | What is the technical and administrative feasibility of implementing the alternative, including factors such as the availability of materials and services? |
| Cost | What are the estimated capital and annual operations and maintenance costs, as well as present-value cost? |
| Modifying Criteria | |
| State/Support agency acceptance | Does the state agree with EPA's analyses and recommendations? |
| Community acceptance | Does the community agree with EPA's analyses and preferred alternative? Comments on the proposed plan are an indicator of acceptance. |

Present-value cost = Total cost over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30%.

remaining NAPL source and dissolved plume.

Short-Term Effectiveness

Alternative 3 has fewer short-term impacts than the current remedy, as NAPL will no longer be recovered, handled aboveground, and sent offsite for incineration. Alternative 3 relies on in situ treatment, with less exposure to site workers during remedial activities.

Since the need for offsite transportation and disposal of NAPL are eliminated by Alternative 3, the potential for public exposure to site contaminants is further reduced.

Implementability

Alternative 3 will be easier to implement and operate than the current NAPL and groundwater extraction and treatment system. The preferred approach will consist of approximately 80 ISB injection wells with a projected operating duration of 6 and 41 years in Areas 1 and 2, respectively. There will be some efficiencies shared in operating ISB in both Areas 1 and 2 as part of Alternative 3.

Cost

Of all new alternatives evaluated to replace the current remedy, Alternative 3 offers the lowest-cost approach that provides a similar level of protection, potential for increased contaminant reduction, and greater protectiveness, considering both short and long-term effectiveness concerns.

State and Community Acceptance

The State of Montana supports the selection of Alternative 3 as the preferred remedy. Community acceptance of the preferred alternative will be evaluated after public comment is received.

Protectiveness Summary

Based on information available at this time, EPA believes the preferred alternative will continue to be protective of human health and the environment, comply with ARARs, and will be cost effective. Once public comments are received, EPA, in consultation with DEQ, will make a final decision. EPA will publish a ROD amendment providing the rationale for its decision. It will include a responsiveness summary, which provides EPA's responses to comments received during the public comment period.

Community Participation

Public Meeting

EPA will provide a presentation about the proposed plan at a public meeting in September 2019. It's a great way to learn more about the details. Please join us.

Libby GW Public Comment Meeting

September 10, 2019
6:30 to 8:30 p.m.
Ponderosa Room, City Hall
952 East Spruce Street,
Libby, MT 59923



If you like, you can comment orally at the public meeting, and the meeting stenographer will record your statement.

Contacts

Do you have questions or need help?
Please contact one of the following:

EPA, Region 8

1-800-227-8917 (toll free)

- Andrew Schmidt, Remedial Project Manager, 303-312-6283, schmidt.andrew@epa.gov
- Katherine Jenkins, Community Involvement Coordinator, 303-312-6351, jenkins.katherine@epa.gov

Montana DEQ

- Lisa DeWitt, Project Officer, 406-444-6420, lidewitt@mt.gov

Written Comments

The public has 30 days to comment on this proposed plan. The public comment period runs from August 19 to September 18. You can submit a comment in writing (by mail, email, or at the public meeting where comments will be recorded by a stenographer and submitted to the administrative record).

The mailing address and email address for written comments is:

Andrew Schmidt

EPA, Region 8, 8SEM-RB-SA, 1595 Wynkoop St., Denver, CO 80202, schmidt.andrew@epa.gov

Documents

Background information EPA used to prepare this proposed plan came from several sources. The following are key documents supporting this proposed plan:

- 1986 Record of Decision (OU1)
- 1988 Record of Decision (OU2)
- 1997 *Explanation of Significant Differences*
- 2015 *Five-Year Review Report*
- 2018 *Final Focused Feasibility Study for the Upper Aquifer*

<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0800412>

- EPA Superfund Records Center, 10 West 15th Street, Suite 3200, Helena, MT
- Lincoln County Health Department, 408 Mineral Ave. Libby, MT 59223

This information and other site documents are available in the administrative record located on EPA's Libby Groundwater website (see link above), EPA's office in Helena and at the Lincoln County Health Department (see box). All public project reports and documents are available for viewing on EPA's website or at one of the document repositories. These are also excellent sources for an array of project information (fact sheets, brochures, etc.).