

**Libby Asbestos Superfund Site
DRAFT Sitewide Institutional Control Implementation and
Assurance Plan**

**Operable Units 1, 2, 4, 5, 7 and 8
Lincoln County, Montana**

Prepared for:

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LIST OF ACRONYMS

ABS	activity based sampling
ARP	Lincoln County Asbestos Resource Program
BMP	best management practice
bgs	below ground surface
BOH	City-County Board of Health for Lincoln County
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	contaminant of concern
DEQ	Montana Department of Environmental Quality
ESD	Explanation of Significant Differences
EPA	U.S. Environmental Protection Agency
Grace	W.R. Grace & Co. – Conn
GIS	geographic information system
HI	hazard index
HQ	hazard quotient
IC	institutional control
ICIAP	Institutional Control Implementation and Assurance Plan
ICSC	Institutional Control Steering Committee
IUR	inhalation unit risk
KDC	Kootenai Development Corporation
LA	Libby amphibole asbestos
LASOC	Libby Asbestos Superfund Oversight Committee
LCPA	Lincoln County Port Authority
MCA	Montana Code Annotated
MDT	Montana Department of Transportation
NOEC	notice of environmental condition
NOPEC	notice of potential environmental condition
NPL	National Priorities List
O&F	operational and functional
O&M	operations and maintenance
OU	Operable Unit
PEN	Property Evaluation Notification

RAL	remedial action level
RAO	remedial action objectives
RfC	reference concentration
RME	reasonable maximum exposure
ROD	Record of Decision
ROW	right-of-way
s/cc	structures per cubic centimeter
s/cm ²	structures per square centimeter
VCI	vermiculite-containing insulation
Zonolite	Universal Zonolite Insulation Company

1. INTRODUCTION

This Sitewide Institutional Control Implementation and Assurance Plan (ICIAP) was prepared for Operable Unit (OU) 1, OU2, OU4, OU5, OU7 and OU8 of the Libby Asbestos Superfund Site in Lincoln County, Montana (Figure 1-1). Individual ICIAPs for each OU were previously developed by the U.S. Environmental Protection Agency (EPA) as outlined below:

- *The Former Export Plant OUI Institutional Control Implementation and Assurance Plan, Revision 2* [CDM Federal Programs Corporation (CDM Smith) 2019a]
- *The Former Screening Plant and Nearby Areas OU2 Institutional Control Implementation and Assurance Plan, Revision 3* (CDM Smith 2018a)
- *Final Institutional Control Implementation and Assurance Plan, Operable Units 4 and 7*, (CDM Smith 2020a)
- *The Former Stimson Lumber Mill, Operable Unit 5, Institutional Control Implementation and Assurance Plan*, (CDM Smith 2016a)
- *Highways & Roadways, Operable Unit 8, Institutional Control Implementation and Assurance Plan*, (CDM Smith 2017a)

For consistency and efficiency in implementing ICs sitewide, the plans have been consolidated into this Sitewide ICIAP. For purposes of this document, sitewide will refer to the combined OUs under this plan. A summary of each OU is presented in Section 2

ICs are nonengineered instruments such as administrative, programmatic, and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy (EPA 2012). This plan discusses ICs necessary to maintain the remedy or minimize encounters of Libby amphibole asbestos (LA) sitewide.

During initial development of the ICIAPs, the EPA and the Montana Department of Environmental Quality (DEQ) worked with the community through an established advisory committee to further develop the outlined ICs and the tools that will be used to implement them. The City-County Board of Health for Lincoln County (BOH) assembled an IC advisory committee, the Institutional Control Steering Committee (ICSC), to assist in recommending, developing, and providing guidance on the ability to implement the ICs detailed in this ICIAP.

This ICIAP identifies and documents activities that are designed to implement, maintain, and enforce ICs sitewide, and the organizations responsible for conducting these activities. This ICIAP will help ensure that ICs are properly managed to protect the remedies in place and continue to operate as intended to prevent exposure to LA.

All OUs are in the operations and maintenance (O&M) phase, and oversight of the Sitewide ICs is the responsibility of DEQ.

1.1 ROLES AND RESPONSIBILITIES

The roles and responsibilities listed below are general statements regarding agency and stakeholder roles related to IC development, implementation, and management. Subsequent sections in this plan further discuss roles and responsibilities specific to certain elements of ICs. Additionally, the *Sitewide Operations and Maintenance Plan* (Weston 2022) discusses roles and responsibilities associated with monitoring ICs, scheduling, corrective actions, and reporting.

1.1.1 EPA Roles and Responsibilities

EPA was the lead agency implementing cleanup activities at the Libby Asbestos Superfund Site through the completion of remedial action. EPA was the lead agency in developing the individual ICIAPs, with assistance from DEQ, BOH, BOH's Lincoln County Asbestos Resource Program (ARP), and the ICSC. EPA's primary role with respect to ICs is ensuring they are in place to protect the remedy and remain effective and functioning as designed prior to O&M and during O&M reviews, along with determining any necessary additions or modifications to this ICIAP. EPA formally reviews IC effectiveness during their 5-year reviews.

1.1.2 DEQ Roles and Responsibilities

DEQ is the lead agency responsible for O&M, which includes sitewide IC implementation and maintenance, and tracking ICs to assess if they are working as designed to protect the remedy. Tracking will consist of periodic monitoring (consisting of nonintrusive visual inspections, limited sample collection with analysis, and tracking of IC effectiveness statistics and metrics), and reporting to confirm that ICs are in place to provide protection as intended. Additionally, DEQ is responsible for implementing and managing specific ICs, with assistance from ARP, as further detailed in subsequent sections of this ICIAP. DEQ is also responsible for development of this Sitewide ICIAP and any future updates.

1.1.3 Libby Asbestos Superfund Site Oversight Committee

In 2017, the 65th Montana Legislature passed Senate Bill 315, a law that established a Libby Asbestos Superfund Advisory Team attached to DEQ for administrative purposes. In 2019, House Bill 30 revised the Libby asbestos superfund laws to create the Libby Asbestos Superfund Oversight Committee (LASOC). The LASOC was created to enhance communication with stakeholders and to provide oversight and recommendations to DEQ on matters related to the Libby Asbestos Superfund Site, including administration of the Libby Asbestos Cleanup Trust Fund and DEQ's Libby asbestos settlement accounts. Subject to appropriation by the legislature, money deposited in a state special revenue account must be used for cleanup and long-term sitewide O&M and for the administrative costs of LASOC.

1.1.4 BOH and ARP Roles and Responsibilities

BOH is generally responsible for setting countywide policies and regulations to protect the health of Lincoln County residents. ARP is a program implemented by BOH that is dedicated to informing residents about and helping to reduce exposure to LA. ARP works with the local government and the public to provide LA education, public outreach, and IC implementation, as well as to implement BOH policies and regulations. ARP may coordinate with and provide guidance to the local government in managing potential LA exposure through ICs. The ARP is also responsible for assisting with development of this ICIAP and providing DEQ with information and metrics regarding ICs for O&M reporting.

1.1.5 ICSC Roles and Responsibilities

The ICSC was responsible to assist the BOH with recommendations, development, and guidance on implementing ICs for OUs 4 and 7, along with assisting with development of community-specific ICs. The ICSC developed recommendations that were considered by EPA and are outlined in Section 3 of this Sitewide ICIAP (BOH 2018).

1.1.6 Municipal Government Roles and Responsibilities

Municipal government agencies (i.e., Lincoln County, City of Libby, City of Troy) are responsible for procedures that may support the implementation and management of specific ICs, as further detailed in this ICIAP. ARP coordinates and provides guidance to municipal governments with respect to local government procedures, maintenance of remedies, potential LA exposure, and applicable ICs implemented to protect the public.

1.1.7 Community Roles and Responsibilities

This ICIAP provides IC guidance and procedures for the community (e.g., residents, property owners, contractors) to follow. The community provided feedback and comments on these ICs during previous ICIAP public comment periods. Details on specific ICs, information, and contact information for the public is available in Section 3 and in the Sitewide Best management Practice Manual (BMP) included in Appendix A.

2. SITEWIDE DETAILS

The Libby Asbestos Superfund Site (Superfund Enterprise Management System #MT0009083840) encompasses the cities of Libby and Troy, Montana (Figure 1-1). Libby is the county seat of Lincoln County and is located in the northwest corner of Montana, about 35 miles east of Idaho and 65 miles south of Canada. Troy is approximately 20 miles west of downtown Libby along U.S. Highway 2.

The dominant impact to human health and the environment in the Libby area has been from historical vermiculite mining and processing. The OUs that are the subject of this ICIAP were impacted by contamination such as vermiculite insulation, processed vermiculite ore, and mine wastes associated with the historical local mining, processing, and shipping of vermiculite by W.R. Grace and Company (Grace). The vermiculite deposit that was mined by Grace contains a distinct form of naturally occurring amphibole asbestos, LA, which is the contaminant of concern (COC) at the Superfund Site. EPA initiated an emergency response action in November 1999 to address questions and concerns raised by citizens regarding possible ongoing exposures to LA fibers due to historical mining, processing, and exporting of LA-containing vermiculite. To facilitate a multi-phase approach to remediation at the Libby Asbestos Superfund Site, eight separate OUs were established (Table 2-1).

Table 2-1 Libby Asbestos Superfund Site Operable Units

OU#	Name
1	Former Export Plant
2	Former Screening Plant and Nearby Areas
3	Former Vermiculite Mine, areas adjoining the former mine including forests
4	Libby, Montana – Residential, Commercial, Municipal, and Public Areas
5	Former Stimson Lumber Area
6	BNSF Railway Property
7	Troy, Montana – Residential, Commercial, Municipal, and Public Areas
8	U.S. and Montana state highways and secondary highways

The OUs applicable to the ICIAP are further described in Sections 2.1.1 through 2.1.5.

2.1 SITEWIDE BACKGROUND INFORMATION AND HISTORY

In 1881, gold miners discovered vermiculite 7 miles northeast of Libby. In the early 1920s, Edward Alley initiated mining operations on the vermiculite ore body. Full-scale operations began later that decade under the name Universal Zonolite Insulation Company (Zonolite). This ore body contained a mixture of amphibole mineral fibers of varying elemental composition (e.g., winchite, richterite, tremolite; collectively referred to as LA that were identified in the Rainy Creek complex near Libby, as defined by Meeker et al. (Meeker et al. 2003). Unlike the commercially exploited chrysotile asbestos, commercial use of the LA material never occurred on a wide scale because during the lifespan of the mine, it seemed a byproduct of little or no value. A variety of products

used the commercially exploited vermiculite. These products included insulation and construction materials, a carrier for fertilizer and other agricultural chemicals, and a soil conditioner.

The mining of vermiculite ore used standard strip-mining techniques and conventional mining equipment. An on-site dry mill processed the ore to remove waste rock and overburden material. Once processed, vehicles transported the ore from the mine to the former screening plant, which sorted the ore into five size ranges. After the sorting process, various locations across the U.S. received the material for either direct inclusion in products or for “expansion” prior to use in products. Expansion, also known as “exfoliation” or “popping,” involved heating the ore, usually in a dry kiln, to approximately 2,000 degrees Fahrenheit. This process explosively vaporizes the water contained within the mica structure, causing the vermiculite to expand. The result was the vermiculite material most seen in stores, sold as a soil conditioner for gardens and greenhouses. This material was processed and handled at four main locations:

- OU1: The Export Plant located in Libby on the south side of the Kootenai River, just north of the downtown area
- OU2: The Screening Plant located across Montana Highway 37 from the entrance to Rainy Creek Road, and the railroad loading station located directly across the Kootenai River from the screening plant
- OU3: The mine and the mill located on Rainy Creek Road on top of Zonolite Mountain
- OU5: The Expansion Plant located at the end of Lincoln Road, near 5th Street

In 1963, Grace purchased Zonolite and continued the vermiculite mining operations. A wet milling process, added in 1975, operated in tandem with the dry mill to reduce dust generated by the milling process. The dry mill went offline in 1985. Expansion operations at the export plant ceased in Libby sometime prior to 1981, although this area was still used to bag, and export milled ore until mining operations terminated in 1990. Prior to its closure in 1990, the mine produced about 80 percent of the world’s supply of vermiculite (EPA 2016).

Beginning in 1999, EPA conducted investigation and response action activities to address areas in the Libby Valley contaminated with LA. EPA’s involvement was initiated in response to media articles detailing extensive asbestos-related health problems in the Libby population. While at first the situation was thought to be limited to those with direct or indirect occupational exposures, it soon became clear there were multiple exposure pathways and many persons with no link to mining-related activities were affected. The Libby Asbestos Superfund Site was ultimately added to the National Priorities List in October 2002 because of the threat presented to human health and the environment. In June 2009, EPA and the U.S. Department of Health and Human Services determined that conditions at the Superfund Site constituted a public health emergency due to the fact that asbestos is a known hazardous substance.

Largely, the LA contamination found in the Libby Valley came from one or some combination of source materials (e.g., vermiculite insulation, processed vermiculite ore, mine wastes). LA from these source materials has been found in interior building dust samples and local soils, which in turn act as secondary sources.

Workers at the mine lived in both Libby and Troy and commuted to the mine to work each day. The workers were exposed to LA-contaminated materials at the mine and processing facilities, and they transported LA-contaminated dust to their homes on their heavily contaminated clothing and equipment, unknowingly exposing their families and contaminating their properties.

Vermiculite was transported from the mine for decades, and residents of both Libby and Troy had access to these materials. Waste vermiculite was used for amending soils in gardens, flowerbeds, and lawns; filling in low-lying areas at properties and beneath sidewalks and driveways; backfilling utilities and septic systems; and insulating buildings and houses. Vermiculite-containing insulation (VCI) was used in attics, and to a lesser extent in walls, for insulation. In some cases, VCI was added to existing insulation to increase the insulating capability (R-value) of the insulation.

The Libby Asbestos Superfund Site has been investigated and based on those investigations, removal actions were performed as necessary to protect human health in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the National Oil and Hazardous Substance Pollution Contingency Plan.

Exposure to contamination sitewide has largely been mitigated by removing surface soils. In addition, sitewide response actions involved removing accessible VCI and LA-containing building materials and debris, cleaning contaminated attic and interior spaces and blocking and sealing inaccessible VCI and LA-containing building materials in place have occurred.

OU1 Characteristics

OU1 is known as the former Export Plant and is situated just north of the downtown area of the City of Libby, Montana. From the early 1960s to approximately 1990, the Export Plant was used by Grace for stockpiling and distributing vermiculite concentrate to Grace expansion plants and customers throughout the United States. Ownership was transferred to the City of Libby in the mid-1990s.

The property is bounded by the Kootenai River on the north, Montana Highway 37 on the east, Burlington Northern Santa Fe railroad thoroughfare on the south, and State of Montana property on the west. OU1 has been separated into distinct impact areas which include the former Export Plant (Area 1), Riverfront Park (Area 2), and the embankments of Montana Highway 37 (Area 3). The Montana Highway 37 right-of-way (ROW) adjacent to OU1 was included due to proximity to OU1 and the known contamination in the ROW.

Area 1 is approximately 12 acres and is mostly a landscaped park area with paved access and parking. It is currently owned by the City of Libby, with the exception of a small area used by the David Thompson Search and Rescue on the south side of City Service Road. In 2004, the search and rescue organization constructed a building on the northwest portion of OU1 containing an office and a five-bay garage, which is used for storing search and rescue equipment and vehicles. Several other agencies, including local and state law enforcement, also hold meetings in the main office. Access to the public portions of Area 1 is unrestricted.

Area 2, Riverfront Park, is approximately 4.7 acres. It is also currently owned by the City of Libby and serves a variety of recreational visitors. The main features of the park include two boat ramps, two pavilions, picnic tables, and a pump house. The newer of the two boat ramps is used by recreational boaters and commercial fishing outfitters; the older ramp is not commonly used because of swift current at its approach. Access to Area 2 is unrestricted.

Area 3 is less than 1 acre. It is owned and maintained by the Montana Department of Transportation (MDT). MDT currently performs only periodic maintenance of these embankments as needed. The types of maintenance activities conducted by MDT include application of herbicides, replacement of guardrails and guardrail posts, and replacement and maintenance of roadside light posts. Access to this area is unrestricted.

OU2 Characteristics

OU2 is known as the former Screening Plant and surrounding properties and is located approximately five miles northeast of the city of Libby on the east side of the Kootenai River at the confluence with Rainy Creek. OU2 was historically owned and used by Grace for stockpiling, staging, and distributing vermiculite and vermiculite concentrate to vermiculite processing areas and insulation distributors outside of Libby.

OU2 has been separated into distinct impacted areas. These areas include the former Screening Plant (Subarea 1), the Flyway (Subarea 2), a privately-owned property (Subarea 3), and the Rainy Creek Road frontages (Subarea 4). The contaminated portion of Montana Highway 37 ROW adjacent to OU2 is considered part of Subareas 1, 2, and 3. With the exception of the MDT ROW, Kootenai Development Corporation (KDC), a subsidiary of Grace, owns the four Subarea properties.

Subarea 1, the former Screening Plant, is approximately 21 acres, and is bordered by Montana Highway 37 to the northeast, privately owned property to the southeast, Flyway property to the south, and the Kootenai River to the west. From 1975 to 1990, the Screening Plant was used by Grace to screen mined vermiculite by size and grade. The vermiculite was transported from the mine to OU2 by truck, sorted, and bulk stored in two sheds at the facility. The vermiculite was then loaded onto a conveyor system and transported across the Kootenai River to a conveyor unloading station. Once the vermiculite was transported across the river, it was either trucked to the local Export Plant (currently OU1) for processing and shipping or loaded onto rail cars for

transportation and distribution to expansion plants outside of Libby. The property has outbuildings that are used by Grace contractors.

Subarea 2, the Flyway, is comprised of approximately 19 acres northeast of Libby, and is bounded by Montana Highway 37 to the northeast, a residential subdivision (River Runs through It) to the south, the Kootenai River to the southwest, and the former Screening Plant and private property to the north. The Flyway is accessed through a gated entrance to the adjacent private property off Montana Highway 37. For this plan, this property includes the Montana Highway 37 ROW adjacent to the west side of Montana Highway 37. The Flyway housed a pump that was used during vermiculite mining operations to convey water from the Kootenai River to the mine site. The pump house, located close to the Kootenai River, has since been abandoned and the pump is no longer functional. The Flyway is currently used by Grace contractors to stage equipment. The property contains undeveloped land.

Subarea 3 consists of an approximate 1-acre parcel situated between the former Screening Plant and the Flyway and bordered by Montana Highway 37 to the northeast. For this plan, this private property includes the Montana Highway 37 ROW adjacent to the west side of Montana Highway 37. The property is currently vacant, undeveloped land. During mine operation, the property was likely used for vermiculite mining-related activities such as the storage or staging of equipment and materials. In recent history, portions of the property were used for equipment decontamination during remediation work at the former Screening Plant and the Flyway (the property was vacant and not in use at the time of cleanup activities).

Subarea 4, Rainy Creek Road Frontages, are two areas that lie immediately north and south of Rainy Creek Road adjacent to Montana Highway 37. Approximately 45,000 square feet of land comprises the north frontage; approximately 39,000 square feet comprises the south. The Rainy Creek Road frontages are currently vacant, undeveloped land.

OU4/OU7

OU4 includes the residential, commercial, and public properties such as schools and parks in and around Libby while OU7 that includes the residential, commercial, and public properties such as schools and parks in and around Troy that were impacted by contamination from activities associated with mining, processing, and shipping of vermiculite by Grace.

OU5

OU5 is defined geographically by the parcel of land that included the former Stimson Lumber Mill, which is now primarily owned and managed by Lincoln County Port Authority (LCPA). OU5 is bound by the high bank of Libby Creek to the east, the Burlington Northern Santa Fe railroad to the north, and residential/commercial/industrial property within OU4 to the south and west. The OU is approximately 400 acres in size and is currently occupied by various vacant buildings and multiple operating businesses (lumber processing, log storage, excavation contractor, etc.). The Libby Groundwater Superfund Site is co-located within OU5.

OU8

OU8 is comprised of the U.S. and Montana State highways and secondary highways that lie within the boundaries of the Libby Asbestos Superfund Site. OU8 encompasses 30 miles of U.S. Highway 2, Montana Highway 37, State Secondary Highways (S-482 [Farm to Market Road], S-567 [Pipe Creek Road], and S-260 [Kootenai River Road]). During the time the former vermiculite mine operated, U.S. Highway 2, Montana Highway 37, and the State Secondary Highways included in OU8, were used to transport vermiculite and vermiculite products from the mine to Grace's former Screening Plant and Export Plant, and other mining-related areas. They were also used by workers and industries servicing the mine. LA-contaminated materials may also have been used as fill in some instances, to build or repair the road embankments and road base along Montana Highway 37.

2.1.1 Contaminant of Concern

The vermiculite deposit that was mined by Grace and the COC and the medium for potential exposure to the public, users, or owners at the Libby Asbestos Superfund Site has been termed by EPA as LA, a distinct form of naturally occurring amphibole asbestos comprised of a range of mineral types and morphologies and found in the Rainy Creek complex near Libby (Meeker et al. 2003). The term LA is used in this document to identify the mixture of amphibole mineral fibers of varying elemental composition (e.g., winchite, richterite, tremolite, etc.). LA is considered a hazardous substance and forms durable, long, and thin structures that are generally respirable, and can reasonably be expected to cause disease; therefore, LA is classified as the COC at the Superfund Site.

Because vermiculite mined from Libby was found to be contaminated with LA, EPA initiated an emergency response action in November 1999 to respond to public requests to investigate the potential exposure to asbestos related to the former mine operations and vermiculite processing (EPA 2016). EPA established an inhalation unit risk (IUR) value and reference concentration (Rfc) value for exposure to LA at the Libby Asbestos Superfund Site. Information on the IUR and Rfc values for exposure to LA is detailed in the *Final Sitewide Human Health Risk Assessment* (CDM Smith 2015a).

Impacted Media

Extensive investigations and response actions have been conducted. Upon conclusions of response actions, LA is known to be present in the following media within the OUs:

- **Subsurface Soil (OU1)** – There are no areas of OU1 with LA-contaminated soils remaining at the surface (0-6 inches below ground surface (bgs)). Subsurface soil is known to contain vermiculite and LA at levels ranging from non-detect to greater than 1 percent.

- **Surface and Subsurface Soil (OU2)** – Specific sources of contamination include surface soil (0-2 inches bgs) containing visible vermiculite and LA at non-detect, trace, or less than 1 percent levels and subsurface soil containing visible vermiculite and LA.
- **Surface and Subsurface Soil (OUs 4, 5, and 7)** – Surface soil (i.e., 0 to 6 inches bgs for specific use areas [driveway] or 0 to 3 inches bgs for non-specific use areas [yard]), is known to contain LA at non-detect and trace (greater than non-detect and less than 0.2 percent [by mass]) levels in investigated areas. Subsurface soil is known to contain levels of LA ranging from non-detect to greater than 1 percent. Properties in OU4 and OU7 exist with known LA above remedial action levels (RALs) (e.g., spatial extent of the trace soils area is more than 25 percent of the total soil exposure area at a property) where owners have refused remedial action.
- **Surface Soil (OU5)** – Surface soil (i.e., 0 to 6 inches below ground surface [bgs] for specific use areas [driveway] or 0 to 3 inches bgs for non-specific use areas [yard]), is known to contain LA concentration ranges of non-detect to less than 1 percent.
- **Surface and Subsurface Soil (OU8)** – Surface soil (i.e., 0 to 6 inches bgs for specific use areas [driveway] or 0 to 3 inches bgs for non-specific use areas [yard]), is known to contain LA concentration ranges from non-detect to less than 1 percent in investigated areas. It is possible for subsurface (i.e., at or below excavation depth) levels within the ROW to contain LA concentrations from non-detect to greater than 1 percent.
- **Building materials (OUs 4, 5 and 7)** – VCI is likely to remain within portions of interior and exterior walls, attics, and other areas of buildings within the sitewide OUs. Inaccessible VCI within buildings may be, intentionally or not, currently sealed in place. For OUs 4 and 7, properties exist with known LA above RALs (e.g., uncontained VCI present) where owners have refused remedial action.
- **Indoor Air and Dust (OUs 4 and 7)** – A wide range of indoor air (aggressive air clearance) and dust sampling (micro-vacuum dust sampling) was completed within OUs 4 and 7. Indoor dust sampling concentrations ranged from non-detect to 113,000 structures per square centimeter (s/cm²). Properties with dust sample results greater than or equal to 5,000 s/cm² were identified for interior removal and/or interior cleaning. For properties where interior cleanups have been performed, interior living space clearance air samples were required to have an average total LA air concentration less than 0.005 structures per cubic centimeters before the removal was considered complete.
- **Activity-based Sampling (ABS) Air (OU8)** – ABS is considered to be the most direct way to estimate potential exposures from inhalation of asbestos. ABS activities for ATV riding, brush hogging and grass cutting were conducted along OU8 corridors and are discussed further in the *Final Remedial Investigation Report, Operable Unit 8* (HDR 2013). LA was not detected in air during grass cutting activities. However, LA was detected during ATV riding and brush hogging. Concentrations associated with these activities ranged between <0.0020 LA structures per cubic centimeter (s/cc) to 0.0180 s/cc (HDR 2013).

- **Ambient Air (OU8)** – Stationary sampling included ambient air proximal to a person or piece of equipment conducting ABS activities. Such stationary air samples were collected to represent conditions in the breathing zone as a surrogate for a personal air sample (e.g., a person walking on the sidewalk during roto-milling operations on the adjacent street) (HDR 2013). Of the 52 inner perimeter field samples collected, LA was detected in one of samples at a concentration of 0.0030 s/cc (HDR 2013). Detection limits ranged from 0.0017 s/cc to 0.0247 s/cc (HDR 2013).

Record of Decision

The Record of Decisions (RODs) for each of the OUs defined the need for ICs and potential IC objectives and examples, but this ICIAP provides specific ICs that will fulfill the overall objective of minimizing the potential for exposure and/or protect the integrity of a completed remedy.

Since OU1 And OU2 remedial actions were completed prior to the sitewide risk assessment, the *ROD for Libby Asbestos Superfund Site, The Former Export Plant, Operable Unit 1* (EPA 2010a) and the *ROD for Libby Asbestos Superfund Site, The Former Screening Plant, Operable Unit 2* (EPA 2010b) identified that the agencies will re-evaluate the remedy once the sitewide risk assessment is complete in accordance with the review requirements at CERCLA Section 121(c). This sitewide, quantitative risk assessment was completed for the Libby Asbestos Superfund Site in 2015 (CDM Smith 2015a). Based on the findings of the sitewide risk assessment, the OU1 and OU2 remedies were considered protective as long as residual contaminated subsurface soils are not disturbed. The ICs established for OU1, as described in this ICIAP, are therefore necessary for protection of the remedy. However, no changes to the ICs for OU1 were necessary based on the findings of the sitewide risk assessment.

The *ROD for Libby Asbestos Superfund Site, Libby and Troy Residential and Commercial Properties, Parks and Schools, Transportation Corridors, and Industrial Park, Operable Units 4–8* (EPA 2016) determined the remedy for OUs 4-8. The remedy more broadly determined that the preferred remedial alternatives for contaminated soil and contaminated building materials was appropriate. The overall remedy consisted of partial excavation/disposal and backfill for exteriors, partial removal/disposal, encapsulation, and interior cleaning for interiors, Institutional Controls (ICs), and monitoring as described in the respective RODs. Because ICs are part of the remedy selected sitewide, the ICs described in this ICIAP are integral to help “minimize the potential for exposure to contamination and/or protect the integrity of a response action.”

2.1.2 Risk Exposure Pathways

Activity-based sampling soil and air investigations were conducted to evaluate LA concentrations in air during various outdoor and indoor disturbance scenarios. While these studies were used to evaluate potential exposures under specific scenarios to assist with the human health risk assessment (HHRA), aid in making risk management decisions, and help determine if remedial

alternatives were sufficient, they were not used on an individual property-basis to determine whether remedial action was necessary.

Based on investigations outside of the individual properties, LA is known to be present in the following media sitewide: outdoor air, groundwater, surface water, sediment, porewater, bark, and duff. While LA is known to be present in these media types, exposure risk is below a level of concern as discussed in the final sitewide HHRA (CDM Smith 2015a). It is also important to note that detectable levels of LA exist in background soils within the Kootenai Valley and originated from normal geologic and geomorphic processes unrelated to mining and milling of vermiculite ore from Vermiculite Mountain (EPA 2016). However, estimated risks of LA within background soils are below a level of concern and do not contribute significantly to a human health hazard or cancer risk (CDM Smith 2015a).

The risk exposure pathways for each OU are described below.

2.1.2.1 OU1 Risk Exposure Pathways

Although an OU-specific human health risk assessment was conducted for OU1, it did not include LA-specific toxicity values. In the absence of established quantitative, risk-based cleanup levels, EPA removed and/or capped all visible vermiculite and any detectable LA, thereby breaking complete exposure pathways and reducing future potential risk for LA exposure.

There are two potential receptor populations that may be exposed to LA during soil disturbance activities at Riverfront Park in OU1: recreational visitors and outdoor (park maintenance) workers. Visitors to the park may engage in a variety of activities such as picnicking in the pavilion and recreating on the lawn areas. Park maintenance workers are responsible for maintaining the lawn areas and landscaping at Riverfront Park. In 2013, outdoor ABS was conducted on City of Libby workers that maintain the park to evaluate possible exposures during disturbances of soil, specifically during lawn mowing and weed trimming. The purpose of the 2013 ABS investigation was to collect data to support a post-construction risk assessment of the effectiveness of the OU1 remedy. The mowing scenario was considered a conservative surrogate for the recreational visitor exposure scenario. The results indicated that the estimated reasonable maximum exposure (RME) and central tendency exposure (CTE) cancer risks are less than 1E-06 and the non-cancer hazard quotient is less than 0.1 for both worker exposure scenarios, and thus the recreational visitor scenario, based on post-construction conditions (CDM Smith 2015a).

However, if future excavation or construction activities occur in areas of OU1 where residual contamination remains at depth, several potential exposure scenarios might become complete due to the subsurface soil contamination. Disturbances of residual LA contamination in subsurface soils in OU1 have the potential to result in unacceptable exposures and risks.

2.1.2.2 OU2 Risk Exposure Pathways

There are two receptor populations that may be exposed to LA during soil disturbance activities at the Flyway—visitors that recreate or trespass (either intentionally or inadvertently) along the Kootenai River, and outdoor workers that maintain the ROW along Montana Highway 37. A summary of post-construction ABS conducted at OU2 and post-ROD risk assessment information is provided in Section 3.3.2.

2.1.2.3 OU4, OU5, and OU7 Risk Exposure Pathways

The ROD for OUs 4-8 (EPA 2016) discusses the conceptual site model (CSM), which incorporates the primary mechanisms that lead to release of contaminants from source materials, migration routes of contaminants in the environment, exposure pathways, and human and ecological receptors. The CSM from the ROD lists the exposure pathways, and Table 5-2 from the ROD (included in this ICIAP as Appendix B), summarizes the exposure locations and general types of disturbances that may occur for each of the nine-exposure media identified in the CSM. These exposure pathways and affected media informed the decisions to include ICs to minimize potential for exposure to contamination after remedy completion.

2.1.2.4 OU8 Risk Exposure Pathways

For OU8, exposures from driving on roads in Libby and Troy resulted in estimated RME hazard quotient (HQs) at or below 0.3, even when based on upper bound exposure estimates. These results indicate risks from this scenario alone are below a level of concern and not likely to be an important contributor to cumulative risks (EPA 2016).

Exposures to recreational visitors while riding all-terrain vehicles along the ROW and to outdoor workers during brush-clearing, mowing, and rototilling activities in OU8 resulted in estimated RME HQs ranging from 0 to 0.9, with brush-clearing activities resulting in the highest exposures. As discussed in the sitewide HHRA, because ABS activities were conducted on smaller segments of the ROWs in OU8, it was necessary to extrapolate ABS results to ROW segments that had not been sampled using ABS. This was done by assessing the degree to which soil results from the ABS areas were similar to the soil results for areas without ABS data. The sitewide HHRA concluded that, because the segments selected for ABS were selected to be representative of the highest soil concentrations potential risks along the ROW in segments without ABS, where LA soil concentrations are lower, are likely to be lower (EPA 2016).

2.1.3 Response Action Summary

Many sitewide investigation and response action events occurred from 1999 through 2018. The activities associated with investigations and response actions are detailed in the following reports:

- **OU1:** *Final Remedial Investigation Report, Operable Unit 1 – Former Export Plant Site, (EPA 2009a); Final Remedial Action Report, Libby Asbestos Superfund Site, the Former Screening Plant and Surrounding Properties, Operable Unit 1 (CDM Smith 2013)*
- **OU2:** *Final Remedial Investigation Report, Operable Unit 2 – Former Screening Plant and Surrounding Properties (EPA 2009b); Final Remedial Action Report, Operable Unit 2 – Former Screening Plant and Surrounding Properties, Libby Asbestos Superfund Site (CDM Smith 2012)*
- **OU4/OU7:** *Remedial Investigation Report, Residential and Commercial Properties. Operable Unit 4, Libby, Montana (CDM Smith 2014); Final Remedial Action Completion Report, Libby Asbestos Superfund Site, Operable Units 4 and 7 (CDM Smith 2020b)*
- **OU5:** *Final Remedial Investigation Report, Operable Unit 5 (HDR 2013a); Final Remedial Action Report, Libby Asbestos Superfund Site, the Former Stimson Lumber Mill, Operable Unit 5 (CDM Smith 2016b)*
- **OU8:** *Final Remedial Investigation Report, Operable Unit 8, (HDR 2013b); Final Remedial Action Report, Libby Asbestos Superfund Site, Highways and Roadways, Operable Unit 8 (CDM Smith 2017b)*

2.1.3.1 OU1 Response Actions

Response actions at OU1 were completed in 2012 and included removal (excavation and disposal) and containment (with soil covers) of LA and LA source materials. These activities were conducted by the EPA or by Grace under EPA's oversight. Response actions at OU1 are summarized in Table 2-2 below.

Table 2-2 Summary of Response Actions at OU1

Year	Material Removed	Summary of Response Action
Area 1 - Former Export Plant		
July 2000 – January 2001	Vermiculite and contaminated dust, soil, and debris	Removal and cleaning inside historic buildings per unilateral administrative order between EPA and Grace
September – October 2001	Contaminated soil and building debris	Demolition of historic buildings and removal of contaminated soil
October – December 2002	Contaminated soil and building debris	Demolition of remaining historic building and removal of additional contaminated soil
September 2006	Contaminated soil	Removal of soil as part of city waterline installation
September 2011 – June 2012	Contaminated soil	Removal of contaminated soil, backfill, and site restoration
Area 2 - Riverfront Park		
October – November 2003	Contaminated soil	Removal of contaminated soil
July 2007	Contaminated soil	Removal of contaminated soil and placement of rock cover in areas of observed vermiculite
May 2008	Contaminated soil	Site work for placement of pavilion footers
July 2008	Contaminated soil	Removal of contaminated soil

February/March 2012	Contaminated soil	Removal of contaminated soil and placement of riprap
Area 3 – Embankments		
August 2011	Contaminated soil	Removal of contaminated soil
April 2012	Contaminated soil	Removal of contaminated soil, backfill, and site restoration

Exposure to the contamination has been mitigated by various response actions to remove accessible source materials, and the placement of extensive cap during response activities. The main construction component of the final remedial action (conducted during 2011 and 2012) was the excavation and off-site disposal of contaminated soil. After contaminated soil was removed, an orange construction barrier was placed on the subgrade soil prior to placing clean imported soil. The marker barrier was installed as a visual means of identifying the interface between the subgrade and imported soils.

Most of OU1 was restored by backfilling excavations (minimum 18 inches) using clean backfill utilizing cover materials brought from borrow source areas outside the Libby valley. Above the backfill, clean topsoil was placed and hydroseeded for erosion control. In the roads and parking areas, road base and asphalt were placed above the backfill. A portion of OU1 along the Kootenai River in Area 2 is covered with riprap as an erosion control measure. In certain areas including the Montana Highway 37 embankments, erosion control coconut matting was used for erosion control prior to the growth of vegetation.

There are no areas of OU1 with LA-contaminated soil remaining at the surface. However, because buried residual LA source materials and LA-contaminated subsurface soil remain at OU1, ICs are in place that restrict subsurface activities (e.g., construction activities that involve soil excavation or earthwork) to mitigate potential future exposures from contamination left at depth. The location and depth of contamination left in place at OU1 are shown on Figures 2-1 and 2-2.

2.1.3.2 OU2 Response Actions

Response actions at OU2 were completed in 2010 and included removal (excavation and disposal) and containment (with soil covers) of LA-containing source materials. These activities were conducted by the EPA or by Grace under EPA oversight. Response actions at OU2 are summarized in Table 2-3 below.

Table 2-3 Summary of Response Actions at OU2

Year	Material Removed	Summary of Response Action
Subarea 1 - Former Screening Plant		
August - October 2000	Contaminated soil and building debris	Removal of contaminated soil and demolition of buildings
August – November 2001	Contaminated soil and building debris	Removal of contaminated soil and demolition of long shed
August - October 2002	Contaminated soil and debris	Trees, vegetation, and contaminated soil removal along lower reach of Rainy Creek and decontamination pad

2002	None – Placement of agricultural fill (Restoration)	Agricultural fill placed and compacted above the existing common fill and structural fill placed in 2000 and 2001. Topsoil placed above the agricultural fill as coordinated with the property owners. Restoration work plan implemented, as negotiated between the EPA and property owners.
March – April 2003	None – Potable water well installation	Attempts to drill a new potable water well. Preliminary wells were never utilized due to LA contamination and elevated fluoride concentrations.
September 2003 – August 2004	Contaminated soil	Removal of contaminated soil along the west ROW of Montana Highway 37, 350 feet south to 270 feet north of the former Screening Plant entrance
July 2005 – May 2006	None – Potable water well installation	New well was completed in the alluvial aquifer
Subarea 2 – Flyway		
September 2001	Contaminated soil	Removal of contaminated soil
July – November 2004	Contaminated soil	Contaminated soil excavated from the northern portion of the Flyway and the Kootenai riverbank along the southern portion of the Flyway
June 2005	Contaminated soil	Contaminated soils in the ROW excavated and a stockpile of contaminated soil removed
September 2010	Contaminated soil	Removal of contaminated soil along the Montana Highway 37 ROW
Subarea 3 – Private Property		
June 2005	Contaminated soil	Removal of contaminated soil
Subarea 4 – Rainy creek Road Frontages		
August – October 2004	Contaminated soil	Removal of contaminated soil
August 2006	Contaminated soil	While excavating to repair a damaged water line at the north frontage, a contractor observed vermiculite. The contaminated soil was excavated, and the damaged water line was repaired.

In 1999, when the EPA first visited the property, the Flyway was found to contain several vermiculite piles. One portion of the property had been covered with imported fill and it was suspected that vermiculite-containing material had been moved from the former Screening Plant and used as fill to level parts of the Flyway where drainages existed. Following investigation work performed by the EPA as part of the Libby emergency response, a portion of the Flyway was remediated in 2001 by Grace at the direction of the EPA. In 2003, remediation at OU2 was performed by the EPA; in 2004, additional remediation was performed by Grace at the direction of the EPA; and in 2005, the Montana Highway 37 ROW was remediated by the EPA. Details of investigation and remediation activities conducted at the Flyway are explained in the OU2 ROD (EPA 2010). The location and depth of contamination left in place at OU2 is shown on Figure 2-3 and the location of protective covers and remedy components at OU2 is shown on Figure 2-7.

2.1.3.3 OU4/OU7 Response Actions

Many OU4 and OU7 investigation and response action events occurred from 1999 until the signing of the OU4-OU8 ROD in 2016. Additional response actions followed the signing of the ROD and continued through 2019 in OUs 4 and 7. The general goal of the sampling investigations at OUs 4 and 7 was to provide information about the presence of LA and LA source materials at individual properties. Based upon that information and the response action levels detailed in the *Libby Asbestos Site Residential/Commercial Action Level and Clearance Criteria Technical Memorandum* (EPA 2003) and amendments (EPA 2011, 2014), the *Libby Asbestos Site Troy Operable Unit 07 Residential/Commercial Cleanup Criteria Specific Use Area Visible Vermiculite Action Level Technical Memorandum* (DEQ 2009), and the OU4-OU8 ROD (EPA 2016), EPA was able to categorize each property and determine the appropriate level of response based on the current and reasonably anticipated future use. Response actions at OU4 and OU7 are summarized in Table 2-4 below.

Table 2-4 Summary of Response Actions at OU4 and OU7

Year	Material Removed	Summary of Response Action
2001	Contaminated soil and building debris	Completed 10 residential/commercial remedial actions including removal of contaminated soil and building debris
2002	Contaminated soil and building debris	Completed 20 residential/commercial remedial actions including removal of contaminated soil and building debris
2003	Contaminated soil and building debris	Completed 122 residential/commercial remedial actions including removal of contaminated soil and building debris
2004	Contaminated soil and building debris	Completed 147 residential/commercial remedial actions including removal of contaminated soil and building debris
2005	Contaminated soil and building debris	Completed 188 residential/commercial remedial actions including removal of contaminated soil and building debris
2006	Contaminated soil and building debris	Completed 196 residential/commercial remedial actions including removal of contaminated soil and building debris
2007	Contaminated soil and building debris	Completed 187 residential/commercial remedial actions including removal of contaminated soil and building debris
2008	Contaminated soil and building debris	Completed 166 residential/commercial remedial actions including removal of contaminated soil and building debris
2009	Contaminated soil and building debris	Completed 186 residential/commercial remedial actions including removal of contaminated soil and building debris
2010	Contaminated soil and building debris	Completed 233 residential/commercial remedial actions including removal of contaminated soil and building debris
2011	Contaminated soil and building debris	Completed 167 residential/commercial remedial actions including removal of contaminated soil and building debris
2012	Contaminated soil and building debris	Completed 197 residential/commercial remedial actions including removal of contaminated soil and building debris
2013	Contaminated soil and building debris	Completed 141 residential/commercial remedial actions including removal of contaminated soil and building debris
2014	Contaminated soil and building debris	Completed 101 residential/commercial remedial actions including removal of contaminated soil and building debris
2015	Contaminated soil and building debris	Completed 132 residential/commercial remedial actions including removal of contaminated soil and building debris

Year	Material Removed	Summary of Response Action
2016	Contaminated soil and building debris	Completed 192 residential/commercial remedial actions including removal of contaminated soil and building debris
2017	Contaminated soil and building debris	Completed 122 residential/commercial remedial actions including removal of contaminated soil and building debris
2018	Contaminated soil and building debris	Completed 96 residential/commercial remedial actions including removal of contaminated soil and building debris
2019	Contaminated soil and building debris	Completed 8 residential/commercial remedial actions including removal of contaminated soil and building debris

Specific locations of response actions and any known LA-containing material left in place following response actions were documented and provided to property owners upon completion of activities as final as-builts. As-builts for each property are stored electronically for access by ARP and DEQ in the DEQ Response Manager database or on hard drives, and hard copies are stored at EPA's records center located in Denver, Colorado. Sampling locations and associated evaluations regarding required response actions were based on current and reasonably anticipated future use.

2.1.3.4 OU5 Response Actions

Multiple investigation, pre-removal, and removal events have occurred at OU5 between 2001 and 2014. A majority of these activities were conducted by the EPA; however, some response actions at OU5, particularly removals completed prior to 2005, were conducted by the property owner at the time of the response. Response actions at OU5 are summarized in Table 2-5 below.

Table 2-5 Summary of Response Actions at OU5

Year	Material Removed	Summary of Response Action
November 1999	Contaminated building materials	Removal of building materials at Plywood Plant and Truck Shop
May 2000	Contaminated building materials	Removal of building materials at Finger Joints lunchroom and bathroom
December 2002	Contaminated building materials	Removal of building materials in Dry Kiln tunnel
May through June 2003	Contaminated building materials	Removal of building materials in Central Maintenance Building
July through August 2003	Contaminated building materials	Removal of building materials in Dry Kiln tunnel
December 2003	Contaminated building materials	Removal of building materials in Central Maintenance Building
February 2005	Contaminated building materials	Removal of building materials at Finger Joints lunchroom
Summer 2005	Contaminated building materials	Removal of building materials at Central Maintenance Building
May 2009	Contaminated soil	Removal of contaminated soils in OU5 Re-Development Area
August 2009	Contaminated soil and rip rap	Removal of rip rap and contaminated soils along Libby Creek with replacement of rip rap

Year	Material Removed	Summary of Response Action
September through October 2009 and January 2010	Contaminated building debris and soils	Quick Response at Central Maintenance Building – removal of building debris and soils
August through September 2010	Contaminated building materials	Quick Response at Central Maintenance Building and Valve House at Finger Joints Building – removal of building materials
August through November 2011	Contaminated soil	Quick Response at Former Popping Plant – removal of contaminated soils to required depth
November 2011 and February 2012	Contaminated building debris	Quick Response at Central Maintenance Building – removal of building debris from roof maintenance
April through May 2012	Soil	Quick Response at Port Authority Building – removal of soils to revegetate demonstration plots
June through July 2012	Contaminated soil and building demolition	Removal of contaminated soils to required depth at Former Tree Nursery and demolition of small shed
April 2013	Contaminated soil	Removal of contaminated soils at proposed fishing pond location (Former Tree Nursery)
October 2013	Contaminated soil	Quick Response at International Paper Lean-to – removal of contaminated soils
October through November 2013	Contaminated building materials	Quick Response at Central Maintenance Building – removal of building materials

2.1.3.5 OU8 Response Actions

Multiple investigation, pre-removal, and removal events have occurred within OU8. Systematic soil sampling was performed along the ROW. The EPA addressed some parts of OU8 along with response actions for other OUs. Portions of MT Highway 37 adjacent to OUs 1 and 2 have been addressed as part of their respective removal and remedial actions. In addition, response actions performed in other OUs sometimes extended onto highway rights-of-way and thus OU8. These response actions are discussed in more detail in the Remedial Action Report for the respective OU for which the response action was performed. For residential and commercial properties abutting the county, state and federal highway corridors, investigation and response actions were performed based on the residential and/or commercial use of the property, which sometimes extended into the highway ROW. These investigations and response actions will be documented in the OU4 and OU7 *Final Remedial Action Completion Report* (CDM Smith, 2020b). Response actions at OU8 are summarized in Table 2-6 below.

Table 2-6 Summary of Response Actions at OU8

Year	Material Removed	Summary of Response Action
Residential and Commercial Encroachment (OU4/OU7 Properties)		
2003-2013	Contaminated soil	Removal of contaminated soil in OU8 Corridor ROW
OU1		

August 2011, April 2012	Contaminated soil	Removal of contaminated soil and backfill of MT Highway 37 Embankments
OU2		
September 2003 through August 2004	Contaminated soil	Removal of contaminated soil along the west ROW of MT Highway 37, 350 feet south to 270 feet north of the former Screening Plant entrance
June 2005	Contaminated soil	Contaminated soils in the ROW excavated and a stockpile of contaminated soil removed

2.1.4 Boundary Conditions

Boundary conditions exist and are defined as features or conditions that limit the ability to further remediate LA contamination because of physical or technical constraints, and the related lack of accessibility the boundary conditions present. Boundary conditions include the following:

- Presence of building foundations that could be compromised by the response action
- Presence of pavement that is relatively permanent (e.g., roadways and sidewalks)
- Presence of large tree root systems
- Presence of bedrock
- Presence of groundwater that is not seasonal or perched and thus cannot be readily avoided
- A preset maximum vertical extent of three feet below ground surface, due to limited future accessibility of subsurface soils under typical residential, commercial, park and school activities
- A maximum horizontal extent to the adjacent property boundary where cleanup occurred or where other boundary conditions (e.g., pavement, bedrock) existed

Additionally, some buildings, soil areas, parking surfaces, and roads did not have required response actions because of boundary conditions or physical constraints to remove, block, or encapsulate contaminated material. Due to boundary conditions and physical constraints on implementing the remedy, ICs are integral to protect potential LA exposures from contamination beyond the boundaries of remedies, as discussed further in Section 3.

2.1.5 Cleanup Objectives

Remedial action objectives (RAOs) are medium- and source-specific goals to be achieved through completion of a remedy that is protective of human health and the environment. These objectives are typically expressed in terms of the contaminant, the concentration of the contaminant, and the exposure routes and receptors.

The following RAOs for OU1 and OU2, as stated in the OU1 and OU2 RODs, were based on anticipated future recreational, commercial, and/or light industrial use of the site:

- Break the exposure pathways for inhalation of LA fibers that would result in unacceptable cancer risk or non-cancer hazard.
- Control erosion of contaminated soil by wind and water from source locations to prevent exposures and the spread of contamination to unimpacted locations.
- Implement controls to prevent uses of the site that could pose unacceptable risks to human health or the environment or compromise the remedy.

The RAOs for OUs 4-8, as stated in the OU4-8 ROD (EPA 2016), were developed to restrict or mitigate, through management, the continued release and migration of LA from contaminated soil and building materials, thus protecting human receptors from unacceptable exposure to LA. The RAOs include:

- Minimize the inhalation of LA during disturbances of soil contaminated with LA such that the resulting exposures result in cumulative cancer risks that are within or below EPA's acceptable risk range of 10^{-6} to 10^{-4} and cumulative noncancer hazard index (HIs) that are at or below 1.
- Minimize the inhalation of LA during disturbances of building materials contaminated with LA such that the resulting exposures result in cumulative cancer risks that are within or below EPA's acceptable risk range of 10^{-6} to 10^{-4} and cumulative noncancer HIs that are at or below 1.

Meeting remedy RAOs, in combination with ICs, minimizes the potential for exposure to remaining LA contamination and is critical to risk management during O&M (EPA 2016).

2.1.6 Institutional Control Objectives

2.1.6.1 OU1 and OU2

The following were the main objectives of the ICs in place at OU1 and OU2 as outlined in each OU ICIAP (CDM Smith 2019b; CDM Smith 2018a):

1. Notify future landowners of the presence of subsurface contamination and IC requirements
2. Mitigate the potential for inhalation exposures to LA fibers that would result in excess cancer risks that exceed the EPA's acceptable cancer risk range of $1E-06$ to $1E-04$ (one in one million to one in ten thousand) or non-cancer hazard quotients greater than 1.
3. Control dispersion/erosion of contaminated soil by wind and water from source locations to prevent the spread of contamination to un-impacted locations and media.
4. Implement controls to prevent uses of OU1 and OU2 that could pose unacceptable risks to human health or the environment or compromise the remedy.
5. Implement controls to prevent uses of OU1 and OU2 that could spread contamination to un-impacted or previously remediated locations and media.

2.1.6.2 OU4, OU5, OU7 and OU8

The following were the main objectives of the ICs in place for OUs 4, 5, 7, and 8 as outlined in the OU4-OU8 ROD and ICIAPs (EPA 2016; CDM Smith 2020a; CDM Smith 2017a):

1. Soil – Prevent LA fibers that may remain in soil sitewide after meeting remedial criteria for the land use category, or at undeveloped properties, from becoming a future source of unacceptable risk.
2. Building Materials – Prevent LA fibers that may remain in currently inaccessible building materials from becoming a future source of unacceptable exposure.
3. Land Use – Track changes in land use and develop a notification system (e.g., property evaluation notification [PEN] regulation, real estate disclosure) for property owners, prospective property owners, and workers so they can be made aware of remaining or potential remaining LA, which could become a future source of unacceptable exposure.

These IC objectives are implemented consistent with the adaptive management approach adopted for O&M of the selected remedies. Adaptive management during O&M continues in order to ensure that property-specific considerations are evaluated for each IC implementation with the IC objectives as the basis for the decisions (EPA 2016).

2.1.7 Current and Reasonably Anticipated Future Land Use

The ICS are expected to allow for the current and reasonably anticipated future land uses.. ICs serve to control any potential disturbance of any protective remedy through the specific ICs defined in Section 3. As additional ICs are established or existing ICs require modification, this plan will be updated by DEQ.

2.1.7.1 OU1

The ICs in place at OU1 are expected to allow for the current and reasonably anticipated future land uses of recreational and maintenance activities.

2.1.7.2 OU2

For all subareas of OU2, the ICs have been developed based on current land use, which is also the anticipated future land use (land use is not anticipated to change). Subarea 1, the former Screening Plant is being used by Grace contractors. Subarea 2, the Flyway, contains undeveloped land that is currently used by Grace contractors to stage equipment. Subarea 3 is currently vacant, undeveloped land. Subarea 4 includes the Rainy Creek Road Frontages, which are currently vacant, undeveloped land. Subareas 2 and 3 include the Montana Highway 37 ROW adjacent to the subareas. The ROW is used and maintained by MDT.

2.1.7.3 OU4/OU7

The ICs in place at OUs 4 and 7 are expected to allow for the current and reasonably anticipated future land uses of residential, commercial, parks, and schools. While OUs have been used at the

Libby Asbestos Superfund Site to organize investigation and response action work, EPA has determined that categories related to current and future land use are more consistent with the risk management approach for the non-OU3 areas evaluated within the Sitewide Feasibility Study (CDM Smith 2015b). Thus, OUs 4 and 7 were evaluated by land use categories, including residential/commercial and parks/schools, and frequency of use categories during investigation and remedy evaluation (i.e., prior to O&M, frequently used areas were investigated differently than infrequently used areas). A description of these land use categories is included in the ROD (EPA 2016). The specific land use category will not affect the implementation of the ICs defined herein (Section 3).

2.1.7.4 OU5

For all areas of OU5, the ICs are expected to allow for the current and reasonably anticipated future land uses of industrial, commercial, parks (recreational), and maintenance activities. The current and reasonably expected land uses for particular properties in OU5 are noted below.

- Kootenai Business Park is currently owned by the LCPA, and it is anticipated that the property will continue to be used for Industrial development and recreational purposes.
- Motocross Track is currently owned by the Millpond Motocross Association, and it is anticipated that the property will continue to be used for recreational purposes.
- International Paper is owned by the International Paper Company, and it is anticipated that the property will continue to be used for industrial purposes.
- Flathead Substation is currently owned by the Flathead Electric Cooperative, and it is anticipated that the property will continue to be used for industrial purposes.

2.1.7.5 OU8

For all transportation corridor areas of OU8, the ICs are based upon the current land use, which is the reasonably anticipated future land use.

2.1.8 Property Ownership/Occupancy Information

The listed property ownership information is presented for each of the OUs. The listed property (parcel) ownership information for OUs 1, 2, 5, and 8 were obtained from Montana Cadastral at the following web link: <http://svc.mt.gov/msl/mtcadastral/>. Due to the number of properties with various ownership in OUs 4 and 7, property information is maintained in the DEQ Response Manager database.

2.1.8.1 OU1

The listed parcel ownership information is presented for those entities responsible for maintaining the three areas of OU1.

Areas 1 and 2 Parcel Contact Information

Owner: City of Libby

PO Box 1428
Libby, MT 59923-1428

Area 3 Parcel Contact Information

Owner: State of Montana
2701 Prospect Avenue
Helena, MT 59601-9746

2.1.8.2 OU2

Listed parcel ownership information is presented for those entities responsible for maintaining the four Subareas at OU2.

Subareas 1, 2 and 4 Parcel Contact Information

Owner: Kootenai Development Corporation
Mail to WR Grace Tax Account Manager
Columbia, MD 21044-4009

Subarea 3 Parcel Contact Information

Owner: W.R. Grace & Co. – Conn
7500 Grace Dr.
Columbia, MD 21044-4009

2.1.8.3 OU4/OU7

Based on EPA’s Response Manager database for managing property information, which considers publicly available information, OUs 4 and 7 are comprised of 8,112 properties. There are 6,635 properties within OU4 and 1,477 within OU7. Following remedial action completion, all property ownership information from EPA’s Response Manager database was migrated into the new DEQ Response Manager database developed by DEQ for use during O&M activities. Property ownership, response action information, and response action status is available through the DEQ Response Manager database and within other electronic files provided to DEQ by EPA.

2.1.8.4 OU5

Listed parcel ownership information is presented for those entities responsible for maintaining OU5.

Kootenai Business Park Parcel Contact Information

Owner: Lincoln County Port Authority
PO Box 1071
Libby, MT 59923

Motocross Track Parcel Contact Information

Owner: Millpond MX

PO Box 1000
Libby, MT 59923

International Paper Company Parcel Contact Information

Owner: International Paper Co
PO Box 2118
Memphis, TN 38101

Flathead Substation Parcel Contact Information

Owner: Flathead Electric Cooperative Inc.
2510 US Highway 2 E
Kalispell, MT 59901

Kootenai Tec Parcel Contact Information

Owner: Kootenai Tec
PO Box 800
Saint Francisville, LA 70775

2.1.8.5 OU8

The listed parcel ownership information is presented for those entities who are responsible for maintaining the respective highway corridors. The MDT maintains an interactive map gallery showing maintenance responsibilities for roadways in Montana; this information can be accessed at <http://www.mdt.mt.gov/publications/map-gallery.shtml>. State Secondary highways are maintained by MDT, however not all land associated with these highway ROWs are owned by MDT.

Although ownership and maintenance responsibilities within OU8 are listed as that of the state of Montana, as mentioned previously, there is a patchwork of federal, state, and local land ownership along these highway corridor ROWs. Residential and commercial properties abutting the county, state and federal highway corridor ROWs, have undergone investigation and response actions. Therefore, those residential and commercial properties may impact the insurance of carrying out ICs in those areas.

Montana Highway 37, US Highway 2, County Roads, and County Highway 567 [Pipe Creek Road])

Majority Owner: State of Montana
2701 Prospect Avenue
Helena, MT 59601-9746

2.1.9 Responsible Parties and Stakeholders

The persons, organizations, and/or agencies responsible for performing and or managing implementation of ICs are detailed in Section 3 and listed in Table 3-1. Responsible practices by property owners, tenants, residents, and contractors are essential to successfully protect the remedy. It is the goal of the O&M program that responsible parties and stakeholders will utilize the resources offered to support them through the IC program, and thus help ensure activities at properties do not disturb the physical protective remedy in place. The specific ICs, resources available, and contact information available to responsible parties and stakeholders is discussed in Section 3.3.

2.1.10 Local Government Information

Prior to the start of O&M, BOH entered into a cooperative agreement with EPA, which resulted in the creation of ARP. Under direct supervision of BOH, ARP was developed to assist in educating the public and managing risks associated with asbestos exposure, including implementing initiatives (e.g., ICs) to reduce the risk of LA exposure. During O&M, DEQ is responsible for developing and implementing Memorandums of Agreement with local agencies (e.g., BOH) and stakeholders and administering contracts, as necessary, to assist with implementing ICs and protecting the physical remedy during O&M. Additionally, funds are administered by EPA to DEQ through a cooperative agreement grant during O&M, which includes implementing, managing, and evaluating ICs. BOH assisted in developing the ICs (Section 3).

2.1.11 Identification of Available IC Funding

ICs play a critical role in O&M and protection of the physical remedy. A settlement fund was set up for the Libby Asbestos Superfund Site. From the settlement fund, \$11 million was placed into a separate interest-bearing account that will be used to help pay for future O&M (all OUs except OU3 and OU6) including implementation and management of ICs. Currently, the funds in that account are approximately \$12 million. The cost of the O&M program will be evaluated help minimize uncertainty associated with those costs. The funds are administered by EPA to DEQ through a cooperative agreement grant and are subject to EPA eligibility requirements. Further guidance regarding funding for remedy maintenance activities during the O&M period are discussed in the *Guidance for Management of Superfund Remedies in Post Construction* (EPA 2017).

In addition to this settlement fund, under Montana Code Annotated (MCA) 75-10-743(10)(c) and 75-10-704(4)(j)(I), starting July 1, 2018, DEQ receives an appropriation of \$600,000 annually from an orphan share transfer. The subsequent MCA 75-10-1601 provided a framework on how this money could be used and established a permanent trust fund to pay exclusively for costs to the state of cleanup and long-term O&M for Libby. From this account, \$480,000 is allocated annually for oversight and support of the advisory team (i.e., Libby Asbestos Superfund Oversight Committee). As of June 2022, the trust fund balance was approximately \$2 million. DEQ also

received approximately \$5 million as part of the 2008 bankruptcy settlement with Grace. Under recommendation by LASOC and approval by DEQ, these funds could also be used to support O&M activities including implementation and management of ICs.

3. INSTITUTIONAL CONTROL IMPLEMENTATION

3.1 INSTITUTIONAL CONTROL ELEMENTS

ICs are used to ensure that any future encounters with residual contamination are managed appropriately. ICs include governmental controls and informational devices. Below is the list of ICs currently in place to satisfy the remedial alternatives discussed in the respective RODs during O&M. Detailed descriptions of the IC instruments and each of these ICs are provided in Section 3.3.

- Proprietary Controls
 - Environmental covenants for OU1, OU2 Subarea 2, and OU5 (Appendix C)
- Governmental Controls
 - PEN regulation – BOH (Appendix D)
- Informational Devices
 - Sitewide O&M Plan
 - Riverfront Park excavation application
 - MDT encroachment permit application and addendum (Appendix E)
 - Notices of environmental conditions (NOECs) and notices of potential environmental conditions (NOPECs) for properties that refused EPA inspection and/or remedy (OUs 4 and 7 only)
 - Montana utility locate service (Montana 811)
 - ARP program educational and resource pillars
 - BMP awareness for the public
 - Contractor awareness for LA
 - Educational outreach at schools and businesses
 - Property transaction awareness
 - Health fairs and a public outreach campaign
 - City of Libby and City of Troy procedure coordination
 - *City utility maintenance and repair*
 - *City building property maintenance and repair*
 - Lincoln County departmental procedures (with review and LA information provided by ARP and BOH)
 - *Subdivision review planning and coordination*

- *Septic and on-site wastewater system review planning and coordination*
- *Landfill services and material acceptance criteria coordination*
- *Business license request coordination (e.g., review potential land use changes)*
- *Planning department land use coordination*
- Libby Asbestos Superfund Site – Sitewide BMP Manual (Appendix A)
- Data and Administrative Record Sources
 - Property information database managed by DEQ (Response Manager) and integrated geographic information system (GIS) data
 - Property information repositories (on hard drives)
 - Libby Asbestos Superfund Site administrative record
 - EPA Libby Asbestos Superfund website

3.2 INSTRUMENT DURATION

ICs are critical to the protection of the remedies and human health and the environment sitewide. All IC instruments set forth for the sitewide are expected to be in-place in perpetuity based on the availability of funding mechanisms. The only condition for termination of other individual IC instruments will be the complete removal and proper disposal of all LA-contaminated soil and building materials within the OUs. As noted in the respective RODs, ICs and O&M will continue to ensure protectiveness of the remedy despite delisting or deletion of an OU or the Superfund Site from the National Priorities List (NPL).

3.3 INSTRUMENT CATEGORIES

ICs are typically divided into four distinct types of controls: proprietary, governmental, informational devices, and enforcement documents. The following sections identify the IC instruments associated with the OUs under each of these categories.

3.3.1 Proprietary Controls

Proprietary controls involve private agreements that place restrictions on or otherwise affect the use of property or related resources. An example of a proprietary control is an environmental covenant. DEQ has implemented environmental covenants pursuant to MCA 75-10-727 at OU1, OU2 Subarea 2, and OU5 which are intended to notify future landowners of previous remedial action completed in those OUs, the known LA contamination within soil in those OUs, and IC requirements. The landowner must agree to place the environmental covenant on the property.

Under MCA Section 75-10-727, EPA and/or DEQ are third-party beneficiaries of the environmental covenant with enforcement rights.

3.3.2 Governmental Controls

The governmental controls at OUs 1, 2, 4, 5, and 7 include updating codes, ordinances, and regulations within Lincoln County. The PEN regulation has been adopted by Lincoln County to inform the public of the possibility of exposure to LA as a result of applicable activities. Applicable activities defined as activities related to real property include:

1. Excavation, grading, and landscaping;
2. Interior or exterior demolition, repair, modification, disturbance of material, or remodeling to permanent or temporary structures;
3. Transfer of real property regardless of whether any comfort letter has been issued by EPA or any other agency;
4. Change in Land Use Category or Property Use Area; and
5. Any dividing of land, including through subdivision, family transfer, Court-ordered division, or other division of land. In addition to the applicable activities, other activities that require a PEN are include in the regulation.

This PEN regulation focuses on providing property information regarding LA, data, education, and evaluations to protect the public in relation to the PEN-applicable activities. Prior to performing any PEN-applicable activities at a property within BOH's defined jurisdiction, a person is required to notify ARP of the proposed applicable activities through the PEN process. Based on adaptive management practices, the information provided through the PEN process may be used to provide additional assistance, information, or ICs. Assistance may include monitoring contamination and evaluating it using RALs and RAOs in the ROD (EPA 2016), providing resource materials and BMPs, providing contractor referrals, facilitating the removal of contamination, and providing funding information and guidance. A copy of the PEN regulation is included as Appendix C.

3.3.3 Informational Devices

Currently, informational devices include MDT encroachment permit application and addendum, Montana 811, ARP educational outreach and resource program, DEQ's Response Manager database, a BMP manual, and the EPA administrative record. In addition, OUs 4 and 7 have NOEC or NOPEC informational devices. All informational devices are discussed below.

Sitewide O&M Plan: This plan is the management tool used to protect the remedy and prevent exposure by providing the requirements for inspecting, operating, and maintaining the remedial actions for the sitewide OUs.

MDT Encroachment Permit Application and Addendum: All individuals and organizations intending to perform work within the ROW of the OU8 corridor must apply for an encroachment permit with MDT. Any permit application along the OU8 ROW must also be accompanied by an addendum, which notifies the permittee to take precautions to guard against potential exposure to LA contamination. Although the Administrative Rules of Montana (ARM) 18.7.102 defines MDT encroachment application permits, and statutory rules exist that dictate associated violations, the addendum that accompanies any such permit along the OU8 corridor is site-specific and acts as an informational device. The addendum serves to inform the permittee of confirmed presence of LA within areas of the MDT ROW. The addendum furthermore acts as a hold harmless agreement to protect, defend, and indemnify the State of Montana, MDT, its agents, and employees against claims and causes of action from activities conducted under the permit. No specific enforcement or penalty currently exists relating to the protection of a remedy placed within the OUs specific to this encroachment permit application and addendum. A copy of the MDT encroachment application permit and addendum is included as Appendix E.

Montana 811: When the Montana 811 call center is notified of ground-disturbing activities (e.g., excavation, fence installation) planned sitewide, Montana 811 will notify ARP. ARP will review historic data and analytical results and provide guidance on how to address left-in-place contamination or potential LA encounters. If disturbance is required, guidance and resources may be obtained from ARP. In addition to providing advice and instruction, ARP may assist in managing or providing scope services for encountered contamination, as necessary. Assistance in managing contamination may include providing resource materials and BMPs, providing contractor referrals, and facilitating the removal of contamination.

NOECs and NOPECs (OU4/OU7): NOECs and NOPECs were filed by EPA with the Lincoln County Clerk and Recorder office for any property whose owner has refused to complete investigation and/or cleanup efforts. These are intended to provide notice concerning the presence (NOEC) or potential presence (NOPEC) of contamination at a specific property and to precaution interested parties against using the property in any manner that may increase the risk of exposure to the contamination and result in an imminent and substantial endangerment to public health, welfare, or the environment. A subsequent withdrawal notice is filed for properties where investigation data and/or proof of remediation, as applicable, are completed and submitted to EPA and DEQ. The request and associated investigation and/or remediation documentation to obtain a withdrawal notice are the responsibility of the property owner. ARP, in coordination with DEQ, will assist NOEC and NOPEC property owners in understanding the process and evaluation of the data/report/response quality and applicability of the request for a withdrawal notice, as necessary.

Riverfront Park Excavation Application (OU1): The Riverfront Park excavation application is a document used by the City of Libby to evaluate any excavation work anticipated to be performed within OU1. All individuals and organizations performing excavations are required to complete

the application. A copy of the Riverfront Park excavation application is included in this document as Appendix F.

Sitewide BMP Manual: A Sitewide BMP Manual, attached as Appendix A to this ICIAP, was developed as a means of providing the best practices when working with or near LA or potential LA exposure areas. The manual, when used in combination with the other layers of developed ICs and BMPs provided by ARP, provides guidance to owners, land users, tenants, and visitors for the prevention or reduction in the release of and/or exposure to LA. BMPs will be updated and adapted as necessary throughout O&M.

ARP: ARP is a program under the Lincoln County government that is currently staffed in Libby, Montana. ARP was developed as a program to educate the public regarding the remaining risks of LA exposure and provide resources to manage risks associated with LA exposure, including implementing initiatives or regulations to reduce or prevent future LA exposure. Assistance in managing contamination risk may include providing resource materials and BMPs, identifying contractors educated in LA-specific abatement practices, administering the PEN regulation, monitoring LA exposure during O&M, facilitating the removal and disposal of LA contamination, and reducing the potential for exposure to LA. ARP was funded by EPA through Operational and Functional (O&F) and is funded by a cooperative agreement with DEQ during O&M, as appropriate. The public is encouraged to contact ARP at (406) 291-5335 or visit the ARP website at <https://lcarp.org/> for more information. ARP program components are outlined below:

- *Libby and Troy Residents:* Most disturbance activities in Libby and Troy will need to request a Montana 811 or PEN. Through the Montana 811 or PEN, ARP will contact the person(s) involved in the project and provide property status, BMPs, options for available resources when necessary, and precautions for workers.
- *Educational Programs for Managing LA Exposure:* Educational and resource programs are central pillars of ARP. The ICs rely on the public to be knowledgeable about recognizing LA and LA source materials and employ BMPs to ensure that potential for LA exposure is limited. ARP strives to make sure the public is aware of what to look for and how to deal with LA and LA source materials prior to or when they may encounter it on their property.
- *BMP Awareness:* A large part of ARP's educational program focuses on BMP awareness. ARP teaches the public what to look for and what to do if someone encounters vermiculite in their yard or VCI within their house. ARP makes site visits to schools, construction sites, and homes to help the public manage LA contamination. ARP developed brochures that contain BMPs and information about reducing exposure, working in exterior and interior conditions, demolition activities, recommended steps for do-it-yourself projects, and yard work and gardening.

- *Contractor Awareness of LA:* ARP works closely with local contractors. During Montana 811 and PEN call backs, ARP reviews BMPs with contractors. Current training opportunities available from DEQ and local professional organizations will be shared with contractors on the ARP website.
- *Educational Outreach:* ARP participates at STEM Day annually at the local high school. In the past, ARP has given lectures to high school students about the history of the mine, LA and LA source materials, and the role of ARP. ARP also organizes activities for students to explain how LA is quantified. ARP takes advantage of educating the public when responding to do-it-yourself homeowners that call Montana 811 or initiate a PEN. These programs are modified as necessary to best meet community needs.
- *Health Fairs and Public Outreach Campaign:* ARP participates in an annual health fair in Libby. ARP provides informational packets on BMPs, shows examples of LA and LA source materials, explains what to look for within soil and buildings to identify LA and LA source materials, and provides ARP contact information in a variety of formats. ARP utilizes the local newspapers and publishes hotline information in the paper using outreach materials such as stickers. This outreach material has ARP contact information and can be removed from the newspaper and placed on a hard surface (e.g., refrigerator).
- *Lincoln County and Cities of Libby and Troy Department Procedure Coordination:* ARP provides status updates and information of work done on properties. The Lincoln County Department of Environmental Health and the Cities of Libby and Troy can make a request to ARP for information. ARP will review property files and provide LA property information, data, and education to any department representative. As part of the informational ICs, the following coordination activities are facilitated between the ARP and the specific Lincoln County department:
 - *Subdivision Planning/Septic Review and Coordination:* Most activities falling under this category will need to request a Montana 811 request and are PEN-applicable activities; however, preplanning activities for developers or business license applicants are available to help assess LA contamination. Through the Montana 811 request, ARP will contact the person(s) involved in the project and provide property status, BMPs, options for available resources when necessary, and precautions for workers. Through subdivision and planning services, ARP will contact the property owner and/or developer to provide property status, monitoring, and support. A pamphlet of ARP contact information is mailed with every license granted.
 - *City of Libby Business License Information Request:* Currently, to get a business license in the City of Libby, approvals are required from the city planning department, fire marshal office, city building inspector, and county department of health. Requests for

information from any of these departments can be made to ARP about where a new business is planning to reside within the city limits. A request can be made to ARP for information on city property, BMPs, and available resources. The City of Libby has seven different zoning districts. Amendments to zoning restrictions are currently being reviewed to limit types of businesses and land uses within specific city districts. More information on City of Libby zoning districts can be found at the following:

- http://library.municode.com/mt/libby/codes/code_of_ordinances?nodeId=TIT17ZO_CH17.08DIGE
- *City of Troy Business License Information Request:* There are no extra approvals needed to obtain a City of Troy business license. ARP examines current and past use of a property to evaluate historic and potential land use changes and if the past LA assessments and sampling analytical results are applicable to the proposed business or land use. This information is provided to the business license office and the applicant. The City of Troy does not have zoning districts. A building plan review must be submitted and reviewed by the city building inspector. A public works and sewer system are established in the city. More information on City of Troy zoning districts and building codes can be found at the following:
 - https://library.municode.com/mt/troy/codes/code_of_ordinances?nodeId=TIT9BURE_CH1BUCORE_9-1-1TECOREAD
- *Asbestos Disposal Program Coordination:* ARP coordinates with the Lincoln County Solid Waste division to provide appropriate information for contractors and homeowners for disposal of asbestos-containing material or material potentially containing asbestos, including LA. The landfill operators are trained and oversee the acceptance of material at the Libby landfill and the program provides guidance on the county's Asbestos Disposal Program (not specific to LA), references to the DEQ Asbestos Control Program (not specific to LA), and coordination with ARP (LA-specific). The Asbestos Disposal Program, in conjunction with the Lincoln County Solid Waste division, and ARP may provide no-cost disposal at the Libby landfill for LA and LA source materials. In addition, the County has trained staff with current Hazardous Waste Operations and Emergency Response training and asbestos contractor/supervisor certification to operate the landfill asbestos cell. The County also has the following available to the landfill operator to manage the landfill asbestos cell, including: a skid steer dedicated for work within the asbestos cell; appropriate storage and decontamination, which includes a decontamination trailer, water supply tanks, and misting tent; rental of Kootenai Disposal roll-off truck; staging area for materials that follows National Emission Standards for Hazardous Air Pollutants solid waste regulations; data management system for manifest tracking; and scheduled time of operation/dumping events.

For information, handouts, resources, contractor guidance and referrals, or additional resources, individuals may contact ARP at the following:

ARP

503 California Avenue

Libby, MT 59923

(406) 291-5335

<https://www.lcarp.org/>

Data and Administrative Record Resources:

- *DEQ's Response Manager and Libby GIS Viewer:* DEQ has adapted EPA response and remedy data into a database of property information on LA assessments, remedies, sample analytical data, and land use applicable to LA remedies. DEQ continues to integrate that database with GIS mapping capabilities to provide geodata for locations of LA-asbestos related information. Response Manager is a multi-user database administered by DEQ for tracking and reporting purposes. DEQ and ARP have access to Response Manager and the GIS Viewer in order to provide up-to-date information and assessments of properties with respect to past LA-related investigation and response activities. Individual property information and data are available through ARP as requested by the public.
- *Property Information Hard Drives (OUs 4 and 7):* All hard copy property information recorded and collected by EPA was scanned and delivered to DEQ and ARP at the completion of remedial action. The information captured on the property information hard drives provides additional mechanisms for obtaining property-specific information related to past LA-related investigation and response activities. Individual property information and data are available through ARP as requested by the public.
- *Libby Asbestos Superfund Site Administrative Record:* The Libby Asbestos Superfund Site administrative record is a set of nondeliberative documents EPA considered, directly or indirectly, in determining the final RODs. The record includes all factual, technical, and scientific material or data considered in making the final RODs, whether those materials or data supported the decision. The EPA administrative record is available at the Lincoln County and Troy libraries. The administrative record may be accessed by the public to be informed on EPA's responses, remedies, and decisions for the Libby Asbestos Superfund Site.

The full administrative record is housed at the EPA Superfund Records Center in Denver, Colorado. Contact information is as follows:

EPA Superfund Records Center

1595 Wynkoop Street

Denver, CO 80202-1129

Hours: Monday through Friday from 8:00 a.m. to 5:00 p.m.

To request copies of administrative record documents, call:
(303) 312-7273 or (800) 227-8917 ext. 312-7273 (toll free Region 8 only)

Local information repositories include the Lincoln County Public Library branches. Contact information is as follows:

Lincoln County Public Library - Main Branch, Libby
220 W 6th Street
Libby, MT 59923
(406) 293-2778

Hours: Monday through Friday from 9:00 a.m. to 5:00 p.m.; Saturday from 10:00 a.m. to 2:00 p.m.

Lincoln County Public Library - Troy
207 3rd Street
Troy, MT 59935
(406) 295-4040

- *EPA Libby Asbestos Superfund Website:* The EPA website may be accessed by the public to be informed on EPA's responses, remedies, and decisions for the Libby Asbestos Superfund Site. www.epa.gov/superfund/libby-asbestos

3.3.4 Enforcement Documents

There are currently no enforcement documents in place with institutional components related to the any of the OUs. If enforcement documents with IC components are developed in the future, this plan will be revised to incorporate them.

Table 3-1 Status of Institutional Control Implementation

Instrument Name	Riverfront Park Excavation Application ^a	Environmental Covenant ^b	PEN Regulation	MDT Encroachment Permit Application and Addendum	NOECs/NOPECs	Montana 811	ARP/Educational and Resource Pillars	Data and Administrative Record Sources	Sitewide O&M Plan	BMP Manual
Additional Tools Under Instrument	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	<ul style="list-style-type: none"> BMP awareness for public Contractor awareness Educational outreach (schools/business) Property transaction awareness Health fairs and public outreach Financial awareness City of Libby/Troy Coordination Lincoln County Departments procedure coordination 	<ul style="list-style-type: none"> DEQ Response Manager and GIS data integration Property information hard drives Libby Asbestos Superfund Site Administrative Record EPA Libby Asbestos Superfund website 	Not applicable	Not applicable
Instrument Category	Informational Device	Proprietary Control	Governmental Control	Informational Device	Informational Device	Informational Device	Informational Device	Informational Device	Informational Device	Informational Device
IC Objectives^d	1	1,2,3	1, 2, 3	1	1, 2, 3	1	1, 2, 3	1, 2, 3	1,2, 3	1, 2
Use to Maintain Protectiveness of Remedy	Penetration of the protective cover, disturbance and transportation of potentially contaminated sub-surface soil	Penetration of the protective cover, disturbance and transportation of potentially contaminated sub-surface soil and building materials.	Prevent penetration of the protective physical remedy, disturbance, transportation, and disposal of potential contaminated subsurface soil						Best Management Practices and Engineering Controls	Not Applicable
Implementation Status	Already in place	Already in place	Already in place	Already in place	Already in place	Already in place	Already in place	Already in place	Already in place	Already in place
Person or Organization Responsible for Performing Implementation	City of Libby	DEQ	BOH/ARP	MDT	EPA	DEQ/ARP	DEQ/ARP	DEQ/ARP/EPA	DEQ/ARP/EPA	DEQ/ARP
Instrument Lifespan	In perpetuity	In perpetuity	In perpetuity	In perpetuity	In perpetuity; superseded by EPA letter upon adequate characterization and response as appropriate	In perpetuity	In perpetuity	In perpetuity	In perpetuity	In perpetuity
Conditions for Termination of IC	Complete removal and disposal of all LA contamination									

^aApplies to OUI only

^bEnvironmental covenants in place for OUI, Subarea 2 of OU2, and OU5

^cApplies to OU5 only

^dIC Objectives:

1. Soil – Prevent LA fibers that may remain in soil within OUs 4 and 7 after meeting remedial criteria for the land use category from becoming a future source of unacceptable risks.
2. Building Materials – Prevent LA fibers that remain inaccessible building materials from becoming a future source of unacceptable exposure.
3. Land Use – Track changes in land use and develop a notification system to ensure that property owners, prospective property owners, and workers are aware of remaining or potential LA, which could become a future source of unacceptable exposure.

4. INSTITUTIONAL CONTROL MAINTENANCE

IC maintenance consists of periodic monitoring and reporting to confirm that ICs are in place and providing protection as intended. Maintenance activities consist of DEQ and ARP evaluation of current ICs and their applicability and effectiveness. The IC maintenance will also be assessed during O&M annual inspection activities outlined in the *Sitewide O&M Plan* (Weston 2022) and may include a periodic O&M review of a representative subset of properties and the effectiveness of ICs by the implementing agency, entity, or organization.

Monitoring of ICs will be conducted in accordance with the Sitewide O&M Plan, which details the roles and responsibilities, schedule, corrective actions, and reporting requirements. In general, reports summarizing O&M activities, which include verifying the integrity or effectiveness of ICs, will be prepared by DEQ and submitted to the EPA Remedial Project Manager on an annual basis. The ARP will assist in providing ongoing input on the efficacy of the ICs and recommendations for revising or modifying them as necessary.

Currently, ARP uses Response Manager to report information related to response and inspection activities. Reported information typically contains addresses, unique geospatially-tied property identifiers, contacts, access and property statuses, and other property-specific response information.

In addition, special reports may be prepared by DEQ to document unforeseen events or conditions. An example of a special report is an incident report, which is used to document unusual events such as fires, floods, weather damage, or other incidents as required by the Sitewide O&M Plan. Another example of a special report is a record of modification or amendment to governing sitewide documents. These special reports should be made available to EPA and other interested parties in a timely manner.

Periodic monitoring is described in the Sitewide O&M Plan and may consist of annual investigations at a subset of properties, and annual public outreach campaign or assessment of public outreach IC activities to remind the public of the presence and requirements of the ICs. The O&M periodic monitoring will assess for changes in the effectiveness of ICs, evidence of tracking land use changes, evaluation of ICs during property transfers, and failure or inefficiency of any implemented ICs or remedies. ICs will be evaluated and updated, if necessary, based on these annual evaluations. Details regarding site inspections, which include the monitoring of ICs currently in place, are included within the Sitewide O&M Plan (Weston 2022).

The routine and critical evaluation of ICs will assess:

1. Whether the selected IC instruments are effective, based on each IC's use or other applicable metrics.
2. Whether the selected IC instruments will remain in place.
3. Whether the ICs are able to meet the stated objectives and performance goals and provide protection as defined in their RODs.

Public education can serve as a critical tool for IC maintenance. A well-informed public can provide extra monitoring during O&M. If a member of the public identifies a potential issue, ARP is locally available to the community to respond to concerns, provide information and guidance. The public can also directly contact DEQ with potential LA exposure concerns.

5. INSTITUTIONAL CONTROL ENFORCEMENT

IC enforcement consists of methods for addressing issues related to improper or incomplete implementation of ICs, maintenance of ICs, and breaches of ICs¹. If enforcement is not properly implemented, the EPA has the authority to request compliance, and if necessary, impose penalties for lack of compliance or in cases of ongoing non-compliance. For OU1, OU2 Subarea 2, and OU5 the only current IC that requires enforcement is the environmental covenants. Enforcement of MCA Section 75-10-727 for an environmental covenant is an administrative process that can be supported by legal action if necessary. There are currently no enforcement documents with IC components related to OUs 4 and 7 that are managed by EPA/DEQ, nor are they anticipated.

Local governmental controls, such as ordinances or regulations, may have their own enforcement clauses or contingencies associated with that particular IC instrument. If local entities have enforcement clauses in their governmental control ICs, those enforcement provisions will supersede this ICIAP's discussion on enforcement. Informational ICs are generally not an enforceable component, but if the responsible entity has failed to implement the ICs outlined, legal action may be used to ensure the ICs are implemented and maintained as designed.

Guidance recommends that the most effective method of enforcement is early problem identification and communication. This can include site visits and issuing letters or notices to provide documentation of the problem, and information or resources to help the public address those issues.

¹ An IC breach means a violation of a use restriction or any other provision set forth within an IC instrument, or any other situation that may interfere with the effectiveness of the IC.

6. INSTITUTIONAL CONTROL MODIFICATION AND TERMINATION

Modification of ICs may be required for further development of ICs or modification of existing ICs to improve effectiveness. If an event occurs leads to a modification, this plan will be reviewed and revised accordingly to ensure the ICs continue to provide adequate protection and to meet IC objectives per the respective RODs. EPA in coordination with DEQ is responsible for modification of this ICIAP plan and this can be done at any time. In addition, DEQ will accept public comment on this ICIAP once it has been developed and prepare a modification to the ROD known as an explanation of significant differences (ESD). The ESD will reference this ICIAP and identify the IC requirements and tools used to implement the ICs. Appendix G provides a responsiveness summary prepared to address comments from the public comment period for the Final Sitewide ICIAP.

Termination of ICs may occur if all remaining contamination at the OUs is removed to a level below that which poses an unacceptable risk to human health and the environment. As noted in Section 3.2, IC instruments are expected to be in-place in perpetuity based on the availability of funding mechanisms. The only condition for termination of other individual IC instruments will be the complete removal and proper disposal of all LA-contaminated soil and building material. EPA and DEQ, per MCA 75-10-727, are responsible for termination of ICs. As noted in the respective RODs, ICs and O&M will continue to ensure protectiveness of the remedy notwithstanding delisting or deletion of an OU or the Libby Asbestos Superfund Site from the NPL

7. REFERENCES

BOH 2018. *Report of Recommendations*, Institutional Control Steering Committee, Libby Asbestos Superfund Site. 2018.

CDM Smith 2020a. *Final Institutional Control Implementation and Assurance Plan, Operable Units 4 and 7*, Libby Asbestos Superfund Site. Libby Montana. March 2020.

CDM Smith 2020b. *Final Remedial Action Completion Report, Operable Unit 4 and 7*, Libby Asbestos Superfund Site, Lincoln County, Montana. Report prepared for EPA. June 2020.

CDM Smith 2019a. *The Former Export Plant, Operable Unit 1, Institutional Control Implementation and Assurance Plan, Revision 1*. Libby Asbestos Superfund Site. Libby Montana. July 2019.

CDM Smith 2019b. *The Former Export Plant Site. Operable Unit 1, Operations and Maintenance Plan. Revision 2*, Libby Asbestos Superfund Site. Lincoln County, Montana. July 2019.

CDM Smith 2018a. *The Former Screening Plant and Surrounding Properties, Operable Unit 2, Final Institutional Control Implementation and Assurance Plan, Revision 3*. Libby Asbestos Superfund Site. Libby Montana. March 2018.

CDM Smith 2017a. *Highways & Roadways, Operable Unit 8, Institutional Control Implementation and Assurance Plan*, Libby Asbestos Superfund Site. Libby Montana. 2017.

CDM Smith 2017b. *Final Remedial Action Report, Highways and Roadways, Operable Unit 8*, Libby Asbestos Superfund Site. Libby Montana. September 2017.

CDM Smith 2016a. *The Former Stimson Lumber Mill, Operable Unit 5, Institutional Control Implementation and Assurance Plan*, Libby Asbestos Superfund Site, Lincoln County, Montana. Revision 0, August 2016.

CDM Smith 2016b. *Final Remedial Action Report, Operable Unit 5 – Former Stimson Lumber Mill*, Libby Asbestos Superfund Site, Lincoln County, Montana. September 2016.

CDM Smith 2015a. *Final Sitewide Human Health Risk Assessment*, Libby Asbestos Superfund Site, Libby, Montana. Prepared for EPA, Region 8. 2015.

CDM Smith 2015b. *Site-Wide Feasibility Study*, Libby Asbestos Superfund Site, Libby, Montana. Prepared for EPA, Region 8. 2015.

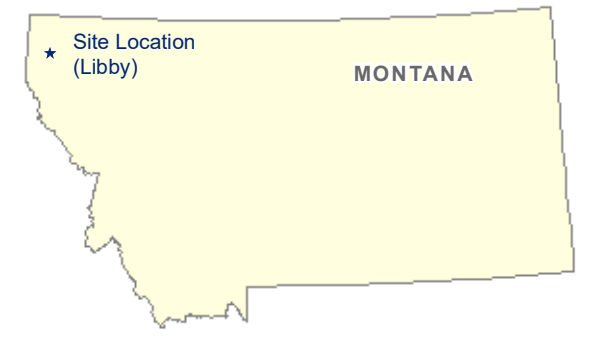
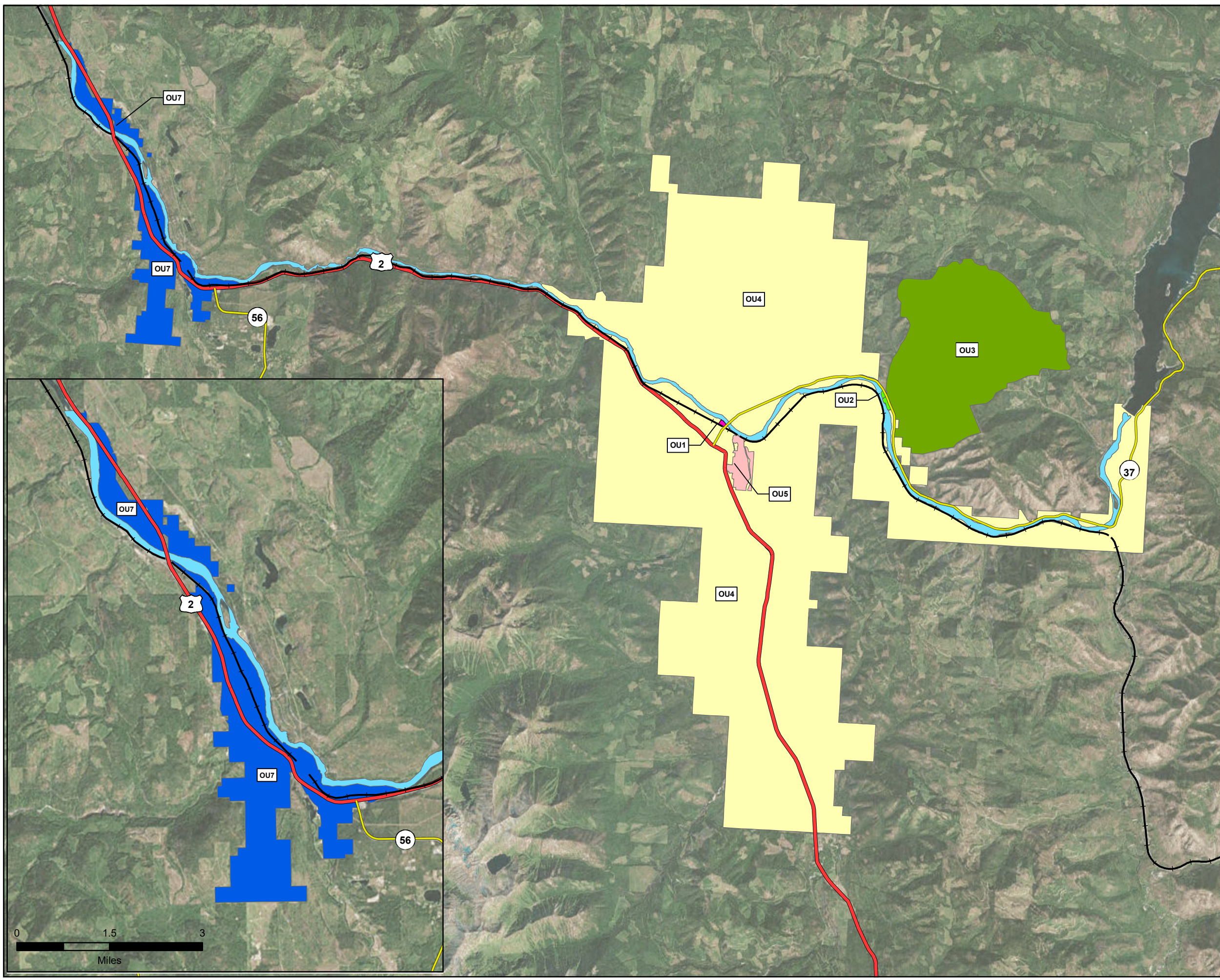
CDM Smith 2014. *Remedial Investigation Report, Residential and Commercial Properties, Operable Unit 4, Libby, Montana*. Prepared for EPA, Region 8. 2014.

CDM Smith 2013. *Final Remedial Action Report. Operable Unit 1 – Former Export Plant Site*. Libby Asbestos Superfund Site. Lincoln County, Montana. July 2013.

- CDM Smith 2012. *Final Remedial Action Report. The Former Screening Plant and Surrounding Properties, Operable Unit 2*. Libby Asbestos Superfund Site. Lincoln County, Montana. April 2012.
- DEQ 2009. Libby Asbestos Site Troy Operable Unit 07 Residential/Commercial Cleanup Criteria Specific Use Area Visible Vermiculite Action Level Technical Memorandum. 2009.
- EPA 2017. *Guidance for Management of Superfund Remedies in Post Construction*. Office of Solid Waste and Emergency Response (OSWER) 9200.3-105. EPA Office of Superfund Remediation and Technology Innovation. 2017.
- EPA 2016. *Record of Decision for Libby Asbestos Superfund Site, Libby and Troy Residential and Commercial Properties, Parks and Schools, Transportation Corridors, Industrial Park. Operable Units 4–8*, Lincoln County, Montana. February 2016.
- EPA 2010a. *Record of Decision for Libby Asbestos Superfund Site, The Former Screening Plant and Surrounding Properties, Operable Unit 2*. Lincoln County, Montana. May 2010.
- EPA 2010b. *Record of Decision for Libby Asbestos Superfund Site, The Former Export Plant and, Operable Unit 1*. Lincoln County, Montana. May 2010.
- EPA 2012. *Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites*, OSWER 9355.0-89. Prepared by the EPA Office of Solid Waste and Emergency Response and Office of Enforcement and Compliance Assurance. December 2012.
- EPA. 2009a. *Final Remedial Investigation Report, Operable Unit 1 – Former Export Plant Site, Libby Asbestos Site, Libby Montana*. U.S. Environmental Protection Agency, Region 8. 2009.
- EPA 2009b. *Final Remedial Investigation Report, Operable Unit 2 – Former Screening Plant and Surrounding Properties, Libby Asbestos Site, Libby, Montana*. U.S. Environmental Protection Agency, Region 8. 2009.
- EPA 2003. *Libby Asbestos Site Residential/Commercial Action Level and Clearance Criteria Technical Memorandum*, Libby Asbestos Site. 2003.
- HDR 2013a. *Final Remedial Investigation Report, Operable Unit 8, Local and State Highways in Libby and Troy*, Libby Asbestos National Priorities List Site, Libby, Montana. June 2013.
- HDR 2013b. *Final Remedial Investigation Report, Operable Unit 5, Libby Asbestos National Priorities List Site, Libby Montana*. June 2013.
- Meeker, G.P., A.M Bern, I.K. Brownfield, H.A. Lowers, S.J. Sutley, T.M. Hoeffen, and J.S. Vance. 2003. *The Composition and Morphology of Amphiboles from the Rainy Creek Complex, Near Libby, Montana*. American Mineralogist 88:1955-1969. 2003.

Weston 2022. *Final Draft Sitewide Operations and Maintenance Plan*, Operable Units 1, 2, 4, 5, 7 and 8, Libby Asbestos Superfund Site, Lincoln County, Montana. February 2022.

FIGURES



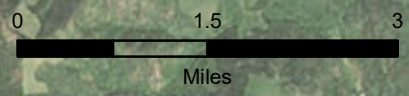
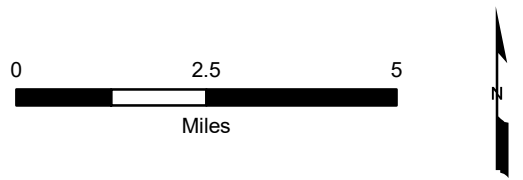
Legend

- OU1 - Former Export Plant
- OU2 - Former Screening Plant
- OU3 - Former Libby Vermiculite Mine
- OU4 - Residential/Commercial Areas within Libby
- OU5 - Former Stimson Lumber Mill
- OU7 - Residential/Commercial Areas within Troy
- Railroad
- US Highway
- State Highway and Route

Note:
 Operable Units (OUs) 6 and 8 are not depicted as separate boundaries on the map instead they are incorporated into the boundaries of OU4 and OU7.
 OU6 - Burlington Northern and Santa Fe Railroad
 OU8 - Highways

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

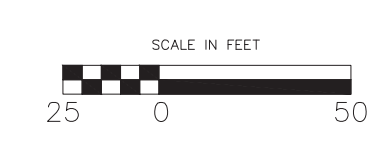
Figure 1-1
 Operable Unit Boundaries
 Libby Asbestos Superfund Site
 Lincoln County, MT





Note: Colored boxes indicate LA remaining below engineered cover (BEC) - engineered cover is minimum of 18"

LEGEND	
	AREA 1 - FORMER EXPORT PLANT
	AREA 2 - RIVERFRONT PARK
	AREA 3 - EMBANKMENTS
	< 1% LA 0" BEC
	< 1% LA 6" BEC
	< 1% LA 12" BEC
	< 1% LA 16" BEC
	< 1% LA 18" BEC
	< 1% LA 24" BEC
	NON DETECT
	2% LA 12" BEC
	2% LA 18" BEC
	3% LA 18" BEC
	EDGE OF PAVEMENT
	ND LA 12" BGS
	< 1% LA 12" BGS
	2% LA 12" BGS

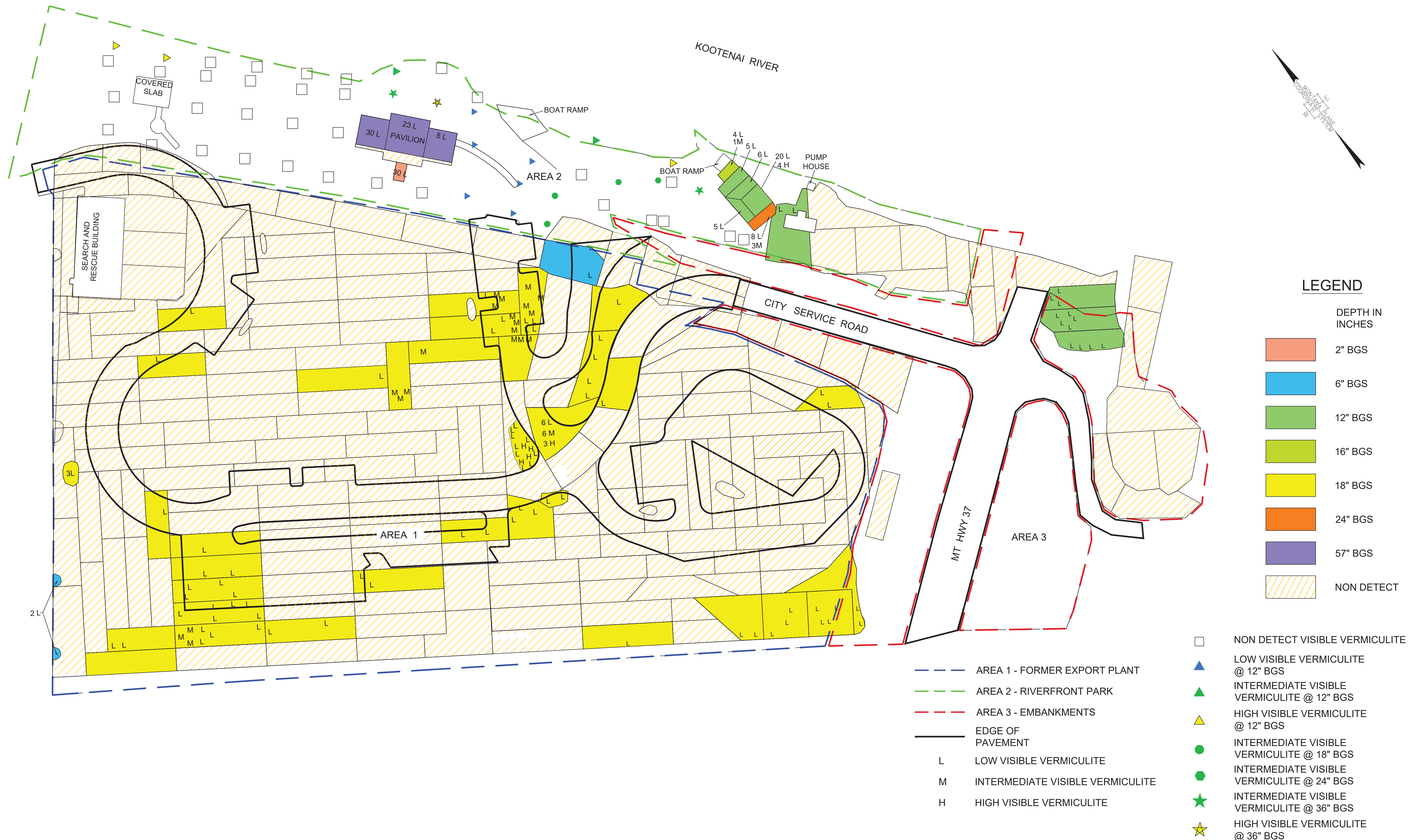


Source: **CDM Smith**

LOCATION AND DEPTH OF LIBBY AMPHIBOLE ASBESTOS AT OPERABLE UNIT 1
 FIGURE 2-1
 LIBBY ASBESTOS SUPER FUND SITE
 LINCOLN COUNTY, MONTANA



Weston Solutions, Inc.
 805 North Last Chance Gulch
 Helena, MT 59601
 406-646-2401
 www.westonsolutions.com



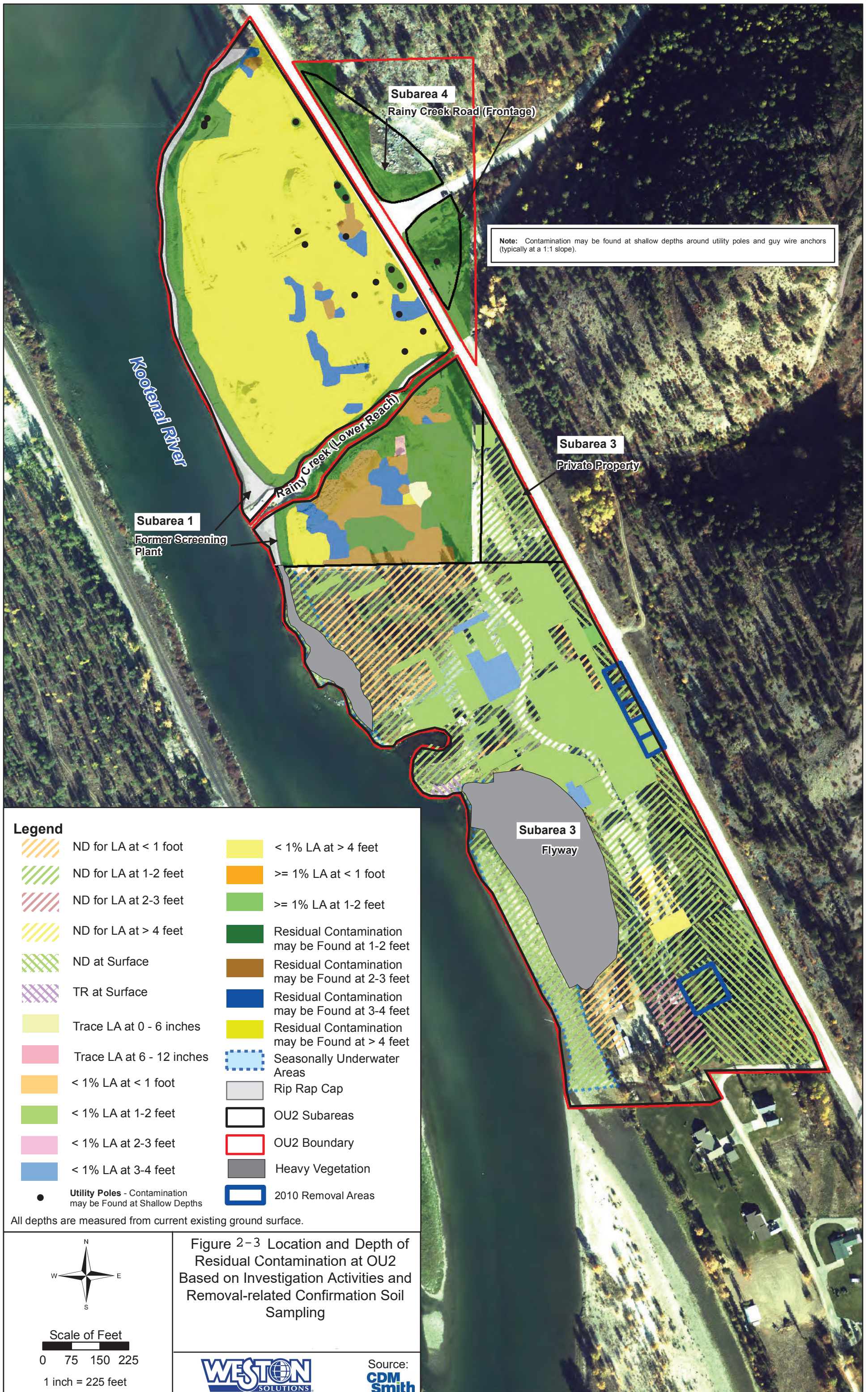
LOCATION AND DEPTH OF VISIBLE VERMICULITE AT OPERABLE UNIT 1
 FIGURE 2-2
 LIBBY ASBESTOS SUPER FUND SITE
 LINCOLN COUNTY, MONTANA



Source: **CDM Smith**



Weston Solutions, Inc.
 805 North Last Chance Gulch
 Helena, MT 59601
 406-646-2401
 www.westonsolutions.com



Note: Contamination may be found at shallow depths around utility poles and guy wire anchors (typically at a 1:1 slope).

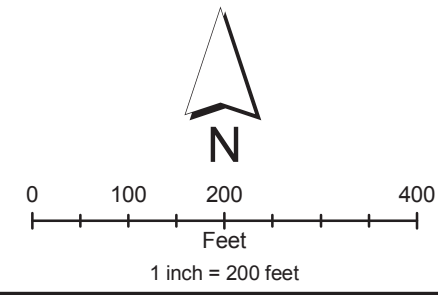
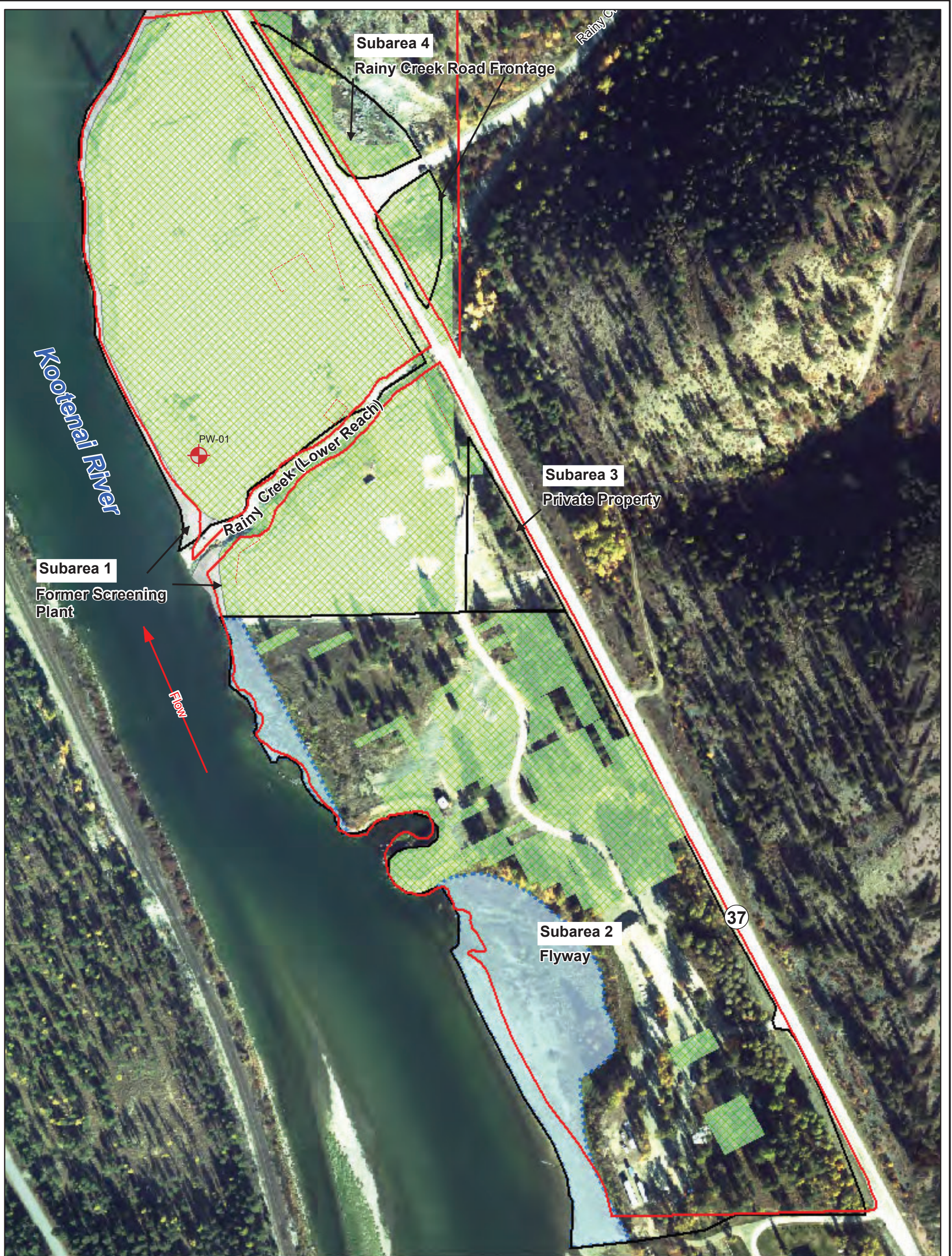
Legend			
	ND for LA at < 1 foot		< 1% LA at > 4 feet
	ND for LA at 1-2 feet		>= 1% LA at < 1 foot
	ND for LA at 2-3 feet		>= 1% LA at 1-2 feet
	ND for LA at > 4 feet		Residual Contamination may be Found at 1-2 feet
	ND at Surface		Residual Contamination may be Found at 2-3 feet
	TR at Surface		Residual Contamination may be Found at 3-4 feet
	Trace LA at 0 - 6 inches		Residual Contamination may be Found at > 4 feet
	Trace LA at 6 - 12 inches		Seasonally Underwater Areas
	< 1% LA at < 1 foot		Rip Rap Cap
	< 1% LA at 1-2 feet		OU2 Subareas
	< 1% LA at 2-3 feet		OU2 Boundary
	< 1% LA at 3-4 feet		Heavy Vegetation
	Utility Poles - Contamination may be Found at Shallow Depths		2010 Removal Areas

All depths are measured from current existing ground surface.

Scale of Feet

 1 inch = 225 feet

Figure 2-3 Location and Depth of Residual Contamination at OU2 Based on Investigation Activities and Removal-related Confirmation Soil Sampling






- | | |
|--|--|
|  Existing Soil Cover |  OU2 Subareas |
|  Seasonally Flooded Areas |  OU2 Boundary |
|  Riprap Cap |  Fence Line |
|  Well Location | |

Figure 2-4
 Location of Protective Covers and
 Remedy Components at OU2
 Libby Asbestos Superfund Site
 Lincoln County, Montana
 Source:
 

APPENDIX A – SITEWIDE BMP MANUAL

Libby Asbestos Superfund Site – Sitewide Best Management Practices Manual

This document has been prepared to outline best management practices (BMPs) for working within the Libby Asbestos Superfund Site, Operable Units (OU)s 1, 2, 4, 5, 7 and 8. Discussion of the contaminant of concern (COC), BMPs, and where to find additional information pertaining to the OUs, including, previous response actions, investigations, institutional controls (ICs), and the Site-wide Human Health Risk Assessment are provided within this document.

Contents

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2	Best Management Practices	2
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Attachment A: BMP Resource Sheets

Revised: March 2023

1 Introduction

Numerous hard rock mines have operated in the Libby area since the 1880s, but the dominant impact to human health and the environment in Lincoln County has been from vermiculite mining and processing. The vermiculite deposit that was mined by W.R. Grace (Grace) contains a distinct form of naturally occurring amphibole asbestos, Libby amphibole asbestos (LA), which is considered the COC at the Libby Asbestos Superfund Site. Since 1999, the United States Environmental Protection Agency (EPA) has conducted response activities, including investigation, sampling, removal, remediation, abatement and disposal, to prevent ongoing exposures to asbestos fibers as a result of historical mining, processing, and exportation of asbestos-containing vermiculite by Grace. OUs 1, 2, 4, 5, 7, and 8 include areas impacted by contamination from those activities.



Exposure to LA and LA containing materials was largely mitigated by removing surface soil and placing clean soil backfill and removing insulation and/or building materials during response activities. This Sitewide BMP manual provides guidance on how to safely mitigate exposures to these LA-contaminated soils.

1.1 Contaminant of Concern

As previously stated, the COC for the site is LA. Asbestos fibers are odorless and tasteless and vary in length, structure, and chemical composition. Fibers are microscopic and environmentally persistent. They do not evaporate, burn, or dry out from heat or degrade in water. The toxicity of different types of asbestos fibers varies, but chronic and acute exposure to any one of them potentially can be fatal. While some chrysotile asbestos is likely present, it is not due to Site-related contamination and is not considered a COC. EPA actions at the Site have not focused on the removal of chrysotile or other forms of asbestos, only LA (EPA 2015).

2 Best Management Practices

For the purposes of this document, BMPs provide guidance to owners, contractors, and land users for the prevention or reduction in the release and exposure to LA when used in combination with developed ICs. The information within this section is grouped by the type of activities anticipated to take place in the OUs which could cause a release and potential exposure to LA.

ARP is available to support property owners and contractors with any pre-planning activities and to provide property information and/or education on LA at any time. In accordance with the Lincoln County Property Evaluation Notification (PEN) Regulation, property owners that plan to conduct any applicable activities as defined in the PEN Regulation must notify ARP. This allows ARP to provide property information and appropriate BMPs for those planned activities to reduce the possibility of exposure to LA. For all activities, property owners, contractors, and/or land users shall obtain most current information on where contamination was removed or may remain at a property prior to implementing any of the activities outlined below. This information is available by contacting the Lincoln County Asbestos Resource Program (ARP) at lcarp.org or calling the ARP hotline at 406-291-5335.

See Attachment A for additional information and guidance contained in BMP Resource Sheets that ARP maintains. Additional resources and information are also contained in EPA developed documents as listed within the Additional Information and Resources section of this document.

2.1 Housekeeping

Housekeeping is defined as activities such as cleaning, routine maintenance of facilities, buildings or grounds on the property. The following BMPs are grouped by indoor (e.g., cleaning, indoor maintenance) and exterior (e.g., mowing, surveying, equipment storage) types of activities.

BMP Guidance

Indoors

1. Maintain a clean building by periodically cleaning with a high-efficiency particulate air (HEPA) filtered vacuum. Follow manufacturer's instructions on how and when to change out bags and filters.
2. Avoid sweeping with a broom during maintenance activities. Utilize a mop and water or wet methods to clean horizontal surfaces.
3. If suspected LA material is encountered during housekeeping activities, property users should be made aware of the potential hazard, and ARP should be contacted immediately for next steps and potential abatement.

Outdoors

1. Ensure equipment is stored on clean surfaces or free from areas where detectable levels of LA are documented to remain at ground surface.
2. When conducting mowing activities, attempt to mow when the area is damp or small amounts of moisture are present to minimize dust generation.
3. Clean and rinse tools after use and prior to storage.
4. Attempt to keep soles of shoes clean after working outdoors and prior to entering

buildings, vehicles, or heavy equipment.

5. If suspected LA material is encountered during housekeeping activities, property users should be made aware of the potential hazard, and ARP should be contacted immediately for next steps and potential abatement

2.2 Building Renovation

Building renovation includes, but is not limited to, any alterations, additions, or improvements to the interior or exterior of buildings or structures located on the property. Scale of renovation is not limited by financial or size of renovation and includes any protrusion into any existing wall system, removal of any wall surfacing material, or removal of any complete or partial wall systems currently in place.

BMP Guidance

1. Prior to conducting work, the appropriate person is required under Lincoln County Property Evaluation Notification ordinance to notify ARP of the building renovation activities.
2. Notify ARP if suspected LA materials are encountered during renovation. Seal off the area with appropriate materials (i.e., poly sheeting) until abatement can occur to prevent further exposure.
3. During any renovation utilize point-of-cut ventilation (POCV) techniques with a HEPA vacuum at point of access and/or wet methods when cutting into any material to minimize dust generation, migration and exposure.
4. Do not attempt to vacuum known or suspected LA contaminated material without a device which contains a HEPA filter system.
5. Common dust or surgical masks are not effective against asbestos fibers! Wearing a respirator with a HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly, or exposure may still occur. For information on respirator requirements, visit OSHA's website: www.osha.gov/SLTC/respiratoryprotection.

2.3 Building Demolition

Building demolition is defined by any complete or partial removal, destruction, or dismantling of any building or structure.

BMP Guidance

Before Demolition

1. Prior to conducting work, the appropriate person is required under Lincoln County's Property Evaluation Notification ordinance to notify ARP of the building renovation activities.
2. Check local, state and federal regulations regarding demolition of buildings.
3. Check with the local landfill to learn if inspection of your debris is required. See [Lincoln County Landfill Demolition Checklist](#) for the demolition project requirements for contractors and homeowners.
4. The entity performing demolition should develop a contingency plan for cases where contamination is encountered during activities.
5. The entity performing demolition should arrange for offsite disposal of any materials prior to beginning demolition activities.
6. Common dust or surgical masks are not effective against asbestos fibers! Wearing a

respirator with a HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly, or exposure may still occur. For information on respirator requirements, visit OSHA's website: www.osha.gov/SLTC/respiratoryprotection.

During and After Demolition

1. Wet building, structure, or area prior to and during demolition; there should be no offsite migration of dust during demolition activities.
2. If a change of condition occurs whereby LA contaminated material is observed, contact ARP for advice on how to manage the material.
3. Keep contaminated material encountered during activities wet.
4. Keep all debris wet and covered with a tarp during transportation.
5. Dispose of debris according to local, state, and federal laws. Lincoln County Landfill information is available at: <http://www.lincolncountymt.us/solid-waste/landfill>.

2.4 Excavation

Excavation for the purpose of this document refers to any action of cutting, digging, or scooping soil, debris, or other materials from the ground surface or below.

BMP Guidance

1. Prior to conducting work, the appropriate person is required under Lincoln County's Property Evaluation Notification ordinance to notify ARP of excavation activities and to notify the Montana One-call (Montana 811) utility locate service prior to any excavation activity. Do not attempt to excavate any area prior to all utilities having been marked.
2. When excavating, keep soil, debris, or other materials wet during work to minimize dust migration or potential exposure to LA.
3. Wear protective clothing while performing excavation activities (i.e., appropriate disposable protective clothing, gloves, and booties.) Dispose of protective clothing appropriately.
4. Common dust or surgical masks are not effective against asbestos fibers! Wearing a respirator with a HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly, or exposure may still occur. For information on respirator requirements, visit OSHA's website: www.osha.gov/SLTC/respiratoryprotection.
5. If a change of condition occurs whereby LA contaminated material is observed, contact ARP for advice on how to manage the material.
6. See details regarding importing and exporting of materials in Sections 2.6 and 2.7.

2.5 New Construction Projects

The following lists BMPs for any new construction projects planned by either the owner, tenant, or contractor involved in the overall construction. New construction refers to any site preparation for and construction of entirely new areas, new buildings, or new structures on the site which would cause a change of condition to the ground surface, regardless of size or scale.

BMP Guidance

1. Prior to conducting work, the appropriate person is required under Lincoln County's Property Evaluation Notification ordinance to notify ARP of excavation activities and to notify the Montana One-call (Montana 811) utility locate service prior to any excavation activity. Do not attempt to excavate any area prior to all utilities having been marked.
2. The entity performing new construction projects should develop a contingency plan for cases where contamination is encountered during construction activities and contact ARP for potential abatement.
3. Follow BMPs for importing and exporting of materials in Sections 2.6 and 2.7.

2.6 Importing of Materials

Importing of materials refers to the hauling or transporting of any material for use, placement or disposal within the boundaries of OUs 1, 2, 4, 5, 7 or 8. Materials include, but are not limited to, soil, rock, mulch, organic or non-organic debris, or building materials.

BMP Guidance

1. The property owner or entity responsible for maintaining control of the site should have a system in place to ensure importation of any materials does not have the potential to increase risk of LA exposure to land users.
2. The property owner or owner's contractor should contact ARP to get information on potential resources available for obtaining material.
3. Any entity importing materials shall notify the property owner when importing materials to the site either through written documentation or in person. Entity shall make available any documentation confirming importation of materials will not have the potential to increase the risk of LA exposure or impact any protective remedy in place on the site.

2.7 Exporting of Materials

Exporting of materials refers to the hauling or transporting of any material for use, placement or disposal from properties located in OUs 1, 2, 4, 5, 7 or 8 to another location. Materials include, but are not limited to, soil, rock, mulch, organic or non-organic debris, or building materials.

BMP Guidance

1. The property owner or entity responsible for maintaining control of the site should have a system in place to ensure exportation of any materials does not have the potential to increase risk of LA exposure to areas outside of their property.
2. The property owner or owner's contractor should contact ARP to get information on potential resources available for obtaining material.
3. Any entity exporting materials should notify the property owner when exporting materials from the site either through written documentation or in person. Entities should make available any documentation confirming exportation of materials will not have the potential to increase the risk of LA exposure or impact any protective remedy in locations outside of their property.
4. Check local, state and federal regulations regarding disposal or transportation of material.

2.8 Recreational Activities

For the purposes of this document, recreation is defined as, any activity occurring on the site by individuals for enjoyment, relaxation, or exercise. Recreation includes, but is not limited to, walking, jogging, bike riding, motoX activities, and fishing.

BMP Guidance

1. Notify the property owner and ARP if suspected LA materials are encountered during recreation activities. Report unauthorized or suspected illegal activity to the property owner or proper authorities.

3 Additional Information and Resources

The following EPA resources are available to provide information to property owners, tenants, land users, or visitors while conducting activities within OUs 1, 2, 4, 5, 7 or 8.

Record of Decision for Libby Asbestos Superfund Site, Operable Unit 1 (EPA 2010a)

This document discusses the final decision and explains the remediation plan at the end of the detailed investigation and evaluation of conditions at the Site for OU1.

Record of Decision for Libby Asbestos Superfund Site, Operable Unit 2 (EPA 2010b)

This document discusses the final decision and explains the remediation plan at the end of the detailed investigation and evaluation of conditions at the Site for OU2.

Record of Decision for Libby Asbestos Superfund Site, Operable Units 4-8 (EPA 2016)

This document discusses the final decision and explains the remediation plan at the end of the detailed investigation and evaluation of conditions at the Site for OUs 4-8.

Site-Wide Human Health Risk Assessment – Libby Asbestos Superfund Site (EPA 2015) The purpose of this document is to quantify potential human health risks from exposures to LA at the Site under current and future conditions. Results of this risk assessment are intended to help Site managers determine if past removal actions have been sufficient to mitigate risk, if additional remedial actions are necessary to address risks, and if so, which exposure scenarios would need to be addressed in future remedial actions.

Remedial Investigation Report – Operable Unit 1 (EPA 2009a)

This document describes the nature and extent of LA at OU1, focused primarily on investigative measures taken on the site to characterize the level of contamination.

Remedial Investigation Report – Operable Unit 2 (EPA 2009b)

This document describes the nature and extent of LA at OU2, focused primarily on investigative measures taken on the site to characterize the level of contamination.

Remedial Investigation Report – Operable Unit 4 (CDM Smith 2014)

This document describes the nature and extent of LA at OU4, focused primarily on investigative measures taken on the site to characterize the level of contamination.

Remedial Investigation Report – Operable Unit 5 (HDR 2013)

This document describes the nature and extent of LA at OU5, focused primarily on investigative measures taken on the site to characterize the level of contamination.

Remedial Investigation Report – Operable Unit 7 (Tetra Tech 2014)

This document describes the nature and extent of LA at OU7, focused primarily on investigative measures taken on the site to characterize the level of contamination.

Remedial Action Report – Operable Unit 1 (CDM Smith 2013)

This document details the response actions and activities that have taken place at OU1.

Remedial Action Report – Operable Unit 2 (CDM Smith 2012)

This document details the response actions and activities that have taken place at OU2.

Remedial Action Completion Report – Operable Unit 4 and 7 (CDM Smith 2020a)

This document details the remedial actions and activities that have taken place at OU4 and OU7.

Remedial Action Report – Operable Unit 5 (CDM Smith 2016a)

This document details the remedial actions and activities that have taken place at OU5.

Remedial Action Report – Operable Unit 8 (CDM Smith 2017a)

This document details the remedial actions and activities that have taken place at OU8.

Institutional Control Implementation and Assurance Plan – Operable Unit 1 (CDM Smith 2019)

This document identifies activities that are designed to implement, maintain, and enforce ICs at OU1, and the organizations responsible for conducting these activities.

Institutional Control Implementation and Assurance Plan – Operable Unit 2 (CDM Smith 2018a)

This document identifies activities that are designed to implement, maintain, and enforce ICs at OU2, and the organizations responsible for conducting these activities.

Institutional Control Implementation and Assurance Plan – Operable Units 4 and 7 (CDM Smith 2020b)

This document identifies activities that are designed to implement, maintain, and enforce ICs at OU4 and OU7, and the organizations responsible for conducting these activities.

Institutional Control Implementation and Assurance Plan – Operable Unit 5 (CDM Smith 2016b)

This document identifies activities that are designed to implement, maintain, and enforce ICs at OU5, and the organizations responsible for conducting these activities.

Institutional Control Implementation and Assurance Plan – Operable Unit 8 (CDM Smith 2017b)

This document identifies activities that are designed to implement, maintain, and enforce ICs at OU8, and the organizations responsible for conducting these activities.

Operation and Maintenance Plan – Sitewide Operable Units 1, 2, 4, 5, 7, and 8 (DEQ 2022)

This document presents the administrative, financial, and technical details and requirements for inspecting, operating, and maintaining at OUs 1, 2, 4, 5, 7, and 8.

Asbestos Resource Program

418 Mineral Ave
Libby, MT 59923
(406) 291-5335
www.LCARP.com

The EPA Libby Asbestos Superfund Site website:

<http://cumulis.epa.gov/supercpad/cursites/csinfo.cfm?id=0801744>

Additional federal and state websites with information to assist with the managing of asbestos:

<https://www.epa.gov/asbestos/building-owners-and-managers>

<https://www.epa.gov/superfund/asbestos-superfund-sites>

<https://www.osha.gov/SLTC/asbestos/>

<http://deq.mt.gov/Public/asbestos>

4 References

CDM Smith 2020a. *Final Remedial Action Completion Report, Operable Unit 4 and 7*, Libby Asbestos Superfund Site, Lincoln County, Montana. Report prepared for EPA. June 2020.

CDM Smith 2020b. *Final Institutional Control Implementation and Assurance Plan, Operable Units 4 and 7*, Libby Asbestos Superfund Site. Libby Montana. March 2020.

CDM Smith 2019b. *The Former Export Plant, Operable Unit 1, Final Institutional Control Implementation and Assurance Plan, Revision 1*. Libby Asbestos Superfund Site. Libby Montana. July 2019.

CDM Smith 2018. *The Former Screening Plant and Surrounding Properties, Operable Unit 2, Final Institutional Control Implementation and Assurance Plan, Revision 3*. Libby Asbestos Superfund Site. Libby Montana. March 2018.

CDM Smith 2017a. *Highways & Roadways, Operable Unit 8, Institutional Control Implementation and Assurance Plan*, Libby Asbestos Superfund Site. Libby Montana. 2017.

CDM Smith 2017b. *Final Remedial Action Report, Highways and Roadways, Operable Unit 8*, Libby Asbestos Superfund Site. Libby Montana. September 2017.

CDM Smith 2016. *Final Remedial Action Report, Operable Unit 5 – Former Stimson Lumber Mill*, Libby Asbestos Superfund Site, Lincoln County, Montana. September 2016.

CDM Smith 2014. *Remedial Investigation Report, Residential and Commercial Properties, Operable Unit 4, Libby, Montana*. Prepared for EPA. 2014.

CDM Smith 2013. *Final Remedial Action Report. Operable Unit 1 – Former Export Plant Site*. Libby Asbestos Superfund Site. Lincoln County, Montana. July 2013.

CDM Smith 2012. *Final Remedial Action Report. The Former Screening Plant and Surrounding Properties, Operable Unit 2*. Libby Asbestos Superfund Site. Lincoln County, Montana. April 2012.

CDM Smith 2010. *2010 Flyway Investigation, Technical Memorandum*. Prepared for the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency. 2010.

DEQ 2022. *Final Sitewide Operations and Maintenance Plan, Operable Units 1,2, 4, 5, 7 and 8, Revision 0*. Libby Asbestos Superfund Site. Lincoln County, Montana. January 2022

DEQ 2020a. *Operations and Maintenance Manual, Libby and Troy Residential and Commercial Properties, Parks, and Schools, Operable Units 4 and 7*. Libby Asbestos Superfund Site. Lincoln County, Montana. May 2020.

DEQ 2020b. *Operations and Maintenance Sampling Guidance, Operable Units 1, 2, 4, 5, 7 and 8*. Lincoln County, Montana. May 2020.

EPA 2016a. *Record of Decision for Libby Asbestos Superfund Site, Libby and Troy Residential and Commercial Properties, Parks and Schools, Transportation Corridors, Industrial Park. Operable Units 4–8*, Lincoln County, Montana. February 2016.

EPA 2016b. *The Former Stimson Lumber Mill, Operable Unit 5, Institutional Control Implementation and Assurance Plan*, Libby Asbestos Superfund Site. Libby Montana. Revision 0, August.

EPA 2010a. *Record of Decision for Libby Asbestos Superfund Site, The Former Screening Plant and Surrounding Properties, Operable Unit 2*. Lincoln County, Montana. May 2010.

EPA 2010b. *Record of Decision for Libby Asbestos Superfund Site, The Former Export Plant and, Operable Unit 1*. Lincoln County, Montana. May 2010.

Attachment A: BMP Resource Sheets

Indoors:

7

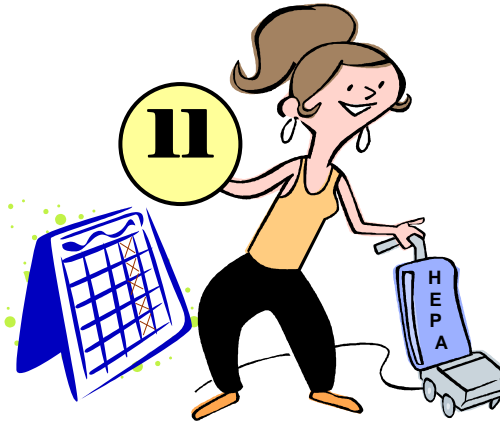


DO wipe your feet and/or take your shoes off at the door and leave them outside, if possible.



DO wash your hands after gardening, playing outdoors, or doing other messy things.

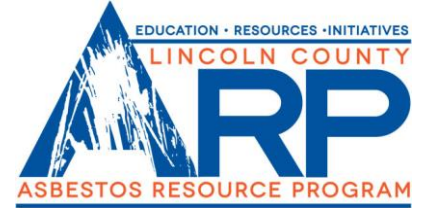
11



DO vacuum frequently, and only use a HEPA* vacuum.

*High Efficiency Particulate Air

13



DO call the **Asbestos Resource Program (ARP)** if you see ANY vermiculite on your property **Libby (406) 291-5335**.

If you are unsure about material you are bringing onto your property, call the ARP to have it sampled first.



DON'T bring dusty or dirty things inside.



DO keep your pets clean.

12



DO use a HEPA vacuum to remove dust from clothing, furniture, drapes, etc.

Un-exfoliated



Exfoliated



Photo of raw (left) and processed (right) vermiculite.

View samples at the
Lincoln County Asbestos Resource Program
503 California Avenue
Libby, MT 59923

**FOR MORE INFORMATION
VISIT OUR WEBSITE
www.LCARP.org**

Don't let an unwanted visitor into your home!!



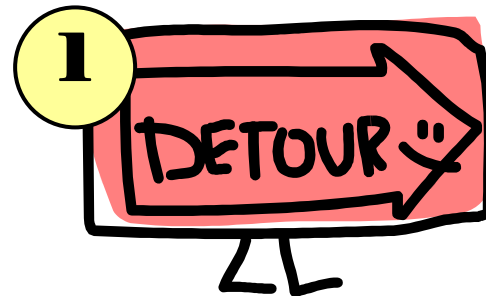
13 simple steps to protect yourself and your loved ones from **Libby Amphibole Asbestos (LA)**

Reducing contact with disturbed, contaminated soil is important in reducing your exposure to LA. LA poses the greatest threat when it is airborne.

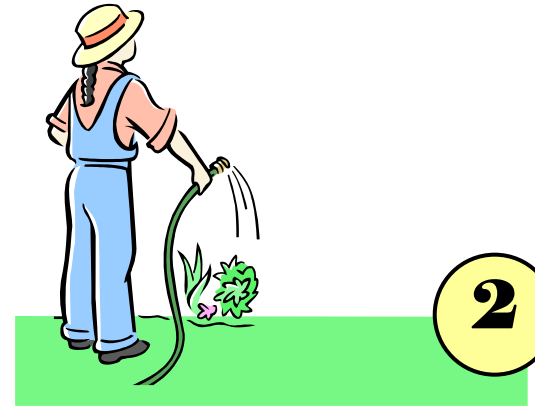
For a lower risk of exposure, focus on keeping contaminated soil from being disturbed in your yard and trapped in your home.

This flyer gives some common sense tips on avoiding exposure to LA on your property.

Outdoors:



DON'T disturb areas where you can see vermiculite (see picture on back). Find other places to play or garden.



DO water often. A healthy lawn reduces dust and contact with bare soil.



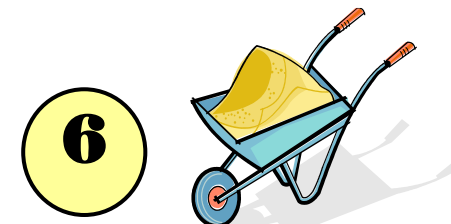
DO mow your lawn when it's damp – not when it's dry and dusty.



DON'T dig, cultivate, or roto-till your garden soil when it is dry and dusty, and do suppress any dust with water.



DO rinse off gardening tools outside.



DON'T buy or accept free topsoil or fill from an unknown source. If you are unsure, call the ARP.

Demolition Activities

What To Do If You Are Tearing Down Structures That Contain Vermiculite or Asbestos

Vermiculite in Libby & Troy

For several decades, vermiculite was commonly used in and around homes in Lincoln County for a variety of applications, including as a soil additive, construction aggregate, and attic insulation. If vermiculite is present, it might contain Libby Amphibole asbestos (LA). Exposure to LA could lead to serious diseases such as asbestosis, lung cancer, and mesothelioma.



It was not possible for EPA to remove (or to even know about) *all* the vermiculite in the area. In some cases, vermiculite might be intentionally left in sealed walls, home foundations, and other relatively inaccessible areas. It is possible to encounter vermiculite during demolition of any existing structure in the Libby/Troy area. It is strongly recommended that you do not disturb the structure in any way that might cause LA to become airborne.



Vermiculite– un-exfoliated (L) and exfoliated (R)

Precautionary Steps to Take So You Can Get on With Your Job Before Demolition:

1. **Contact the Asbestos Resource Program (ARP) for a free assessment of the situation.**
2. Check **local, state and federal regulations** regarding demolition of buildings.
3. Check with the local landfill to learn if inspection of your debris is required.

During Demolition:

1. **Use water to moisten the area being demolished to minimize dust generation.** There should be no offsite migration of dust during demolition activities.
2. **Stop work to assess the volume** of vermiculite. Contact ARP immediately if something unusual is encountered.
3. **Utilize point-of-cut ventilation techniques** when pulling, cutting, or accessing behind boards or wall coverings. Use a HEPA vacuum at the point of access or disturbance to minimize dust migration to lessen potential exposure.
4. **For a small quantity** of vermiculite, such as a very isolated area or a few random flakes, EPA recommends you wet and place it in a sealable plastic bag (remember to rinse any tools used to transfer vermiculite) and put the bag in the trash.

After Demolition:

1. **Keep larger quantities of vermiculite wet** –vermiculite that was used as fill around pipes, in walls, as bulk fill, etc.
2. Keep all debris wet and covered with a tarp during transportation.
3. Dispose of debris according to local, state, and federal laws.



Lincoln County Asbestos Resource Program (ARP)
(406) 291-5335

For more information visit: lcarp.org

Libby Asbestos is Toxic

It should be avoided or handled with extreme care. Exposure to Libby Amphibole asbestos has resulted in disease in workers and non-workers who have had contact with contaminated materials. Take care not to bring any contaminated clothing or material back to your home or business. Treat any asbestos containing material as regulated material and comply with all state and local regulations. The health risk from exposure to all asbestos depends greatly on the amount of asbestos in the material you are disturbing and how long the exposure lasts. **There is no known threshold risk level for asbestos-related materials, and any exposure will increase the risk of asbestos-related disease.** If you take the basic precautions outlined in this fact sheet, your risk from exposure will be less.

Common dust or surgical masks are not effective against asbestos fibers!



Wearing a respirator mask with a P-100 fine particulate HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly or exposure may still occur.

For more information on respirator requirements, visit OSHA's website: www.osha.gov/respiratory-protection

Learn about the risks of asbestos exposure and basic precautions by reviewing the Best Management Practices (BMP) resource fact sheets available at the **Lincoln County Asbestos Resource Program** or on the website: lcarp.org

- **Reducing Asbestos Exposure** – *How to reduce exposure to asbestos when renovating or excavating*
- **Lincoln County Do-It-Yourselfers** – *What to do if you find vermiculite or asbestos*
- **Contractors & Tradesmen Working Outdoors** – *What to do if you find vermiculite or asbestos*
- **Demolition Activities** – *Precautionary steps to take before tearing down structures*
- **Libby and Troy Residents** – *Vermiculite or Asbestos in or around your home or business*
- **Yard Work and Gardening Activities** – *What to do if you find vermiculite or asbestos*
- **13 Simple Steps to Protect from Libby Asbestos** – *How to reduce exposure to asbestos*

Who Can I Contact With Questions About Asbestos?



**ARP
HOTLINE
(406) 291-5335**



**Montana
Asbestos Control
Program
(406) 444-5300**

The DEQ or ARP might send personnel out to inspect a situation involving vermiculite or LA. That guidance might include advising the owner to allow a licensed asbestos contractor or inspector to take samples, conduct cleanup, or take other special measures to reduce the risk of asbestos exposure. A list of licensed contractors and inspectors can be provided by contacting DEQ or ARP.

Montana law requires that employers hire a licensed inspector to determine if asbestos is present before doing any work. Asbestos that is not associated with the Libby vermiculite mine is still regulated by the Montana DEQ. If non-Libby asbestos is found, it should be dealt with according to Montana regulations. Explore Montana DEQ's Asbestos web site at: www.deq.mt.gov/Asbestos

Libby and Troy Residents

Reducing Asbestos Exposure To Vermiculite or Asbestos In or Around Your Home or Business

Vermiculite in Libby & Troy

Vermiculite was used in a variety of forms for decades in and around Libby homes as a soil additive, a lightweight aggregate for concrete, and attic insulation, among other things.

If vermiculite is present, it may contain Libby asbestos. Vermiculite will continue to be discovered from time to time even after a cleanup has been completed at a property. It was not possible for EPA to remove (or to even know about) all the vermiculite in the area. Vermiculite may be left in sealed walls, home foundations, and other relatively inaccessible areas.

Some encounters with vermiculite will be small and may include:

- **minor renovations** – removing old carpets, installing ceiling fans, or removing wall outlets
- **minor landscaping** – replacing bedding for plants and mowing

There will be times when a large pocket of vermiculite is discovered. Such situations may include:

- **intrusive digging** – septic systems, sprinklers, and water lines.
- **major renovations** – taking walls down, putting in windows, etc.
- **fires** – fire-fighting and subsequent cleanup.

Protect Yourself

Hiring a licensed asbestos contractor to clean up vermiculite spilled while doing home improvements is recommended to minimize your exposure.



(Left) Raw vermiculite in soils. (Right) When heated, vermiculite exfoliates (or pops), forming a lightweight material ideal for packing, insulation, and as a soil additive.

Take Steps to Avoid Exposure

- For a small quantity, such as a handful of vermiculite, wet wipe it and throw it away. For a small quantity of vermiculite in surface soil, such as a very isolated area or a few random flakes, we recommend you wet it and have it removed by contacting the **Asbestos Resource Program (ARP)**. **If possible, leave it alone.** If the material is buried, keep it that way – it's better buried than at the surface.
- HEPA filter vacuums are effective on small quantities of vermiculite indoors. **Never vacuum vermiculite with a regular vacuum.** HEPA vacuums and wet wiping can be used periodically to remove any small amounts of asbestos containing dust that is introduced into your home or to vacuum dust from previously inaccessible locations such as under recently removed carpets, appliances, and furniture.
- For larger quantities of vermiculite, such as what you may find in a breached wall, do not disturb the material. **Do not vacuum large amounts of vermiculite – even with a HEPA vacuum.**
- Mowing or rototilling in yards and gardens, where vermiculite is found may cause asbestos to become airborne. If possible, sprinkle your yard or garden with water before mowing or tilling.
- If you encounter a large amount of vermiculite in soil that cannot be avoided, such as when it was used around pipes, around other structures, or as bulk fill – you may have sparkling soil – **do not disturb the material. Contact ARP for appropriate evaluation and assistance.**
- If you are planning on remodeling your home, find out if there is vermiculite in the attic or walls, or any of the materials that will be taken out, disturbed, or are likely to create dust. You can call the ARP (406-291-5335), if you are unsure.

You should also be aware of specific regulations regarding remodeling, demolition, and disposal that may impact your work, especially big projects.



Lincoln County Asbestos Resource Program (ARP)
(406) 291-5335

For more information visit: lcarp.org

Libby Asbestos is Toxic

It should be avoided or handled with extreme care. Exposure to Libby Amphibole asbestos has resulted in disease in workers and non-workers who have had contact with contaminated materials. Take care not to bring any contaminated clothing or material back to your home or business. Treat any asbestos containing material as regulated material and comply with all state and local regulations. The health risk from exposure to all asbestos depends greatly on the amount of asbestos in the material you are disturbing and how long the exposure lasts. **There is no known threshold risk level for asbestos-related materials, and any exposure will increase the risk of asbestos-related disease.**

If you take the basic precautions outlined in this fact sheet, your risk from exposure will be less.

RENTERS – You have a right to know about any adverse conditions at your rental.

Ask your landlord about the presence of vermiculite. If you do not receive the information you request, contact the Lincoln County Asbestos Resource Program.

Common dust or surgical masks are not effective against asbestos fibers!



Wearing a respirator mask with a P-100 fine particulate HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly or exposure may still occur.

For more information on respirator requirements, visit OSHA's website:
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- **Contractors & Tradesmen Working Outdoors** – *What to do if you find vermiculite or asbestos*
- **Demolition Activities** – *Precautionary steps to take before tearing down structures*
- **Contractors & Tradesmen Working Indoors** – *What to do if you find vermiculite or asbestos*
- **13 Simple Steps to Protect from Libby Asbestos** – *How to reduce exposure to asbestos*

Who Can I Contact With Questions About Asbestos?



**ARP
HOTLINE
(406) 291-5335**



**Montana
Asbestos Control
Program
(406) 444-5300**

The DEQ or ARP might send personnel out to inspect a situation involving vermiculite or LA. That guidance might include advising the owner to allow a licensed asbestos contractor or inspector to take samples, conduct cleanup, or take other special measures to reduce the risk of asbestos exposure. A list of licensed contractors and inspectors can be provided by contacting DEQ or ARP.

Montana law requires that employers hire a licensed inspector to determine if asbestos is present before doing any work. Asbestos that is not associated with the Libby vermiculite mine is still regulated by the Montana DEQ. If non-Libby asbestos is found, it should be dealt with according to Montana regulations. Explore Montana DEQ's Asbestos web site at: www.deq.mt.gov/Asbestos

Lincoln County Do-It-Yourselfers

Reducing Asbestos Exposure To Vermiculite or Asbestos In or Around Your Home or Business

Vermiculite in Libby & Troy

Vermiculite was used in a variety of forms for decades in and around Libby homes as a soil additive, a lightweight aggregate for concrete, and attic insulation, among other things.

If vermiculite is present, it may contain Libby asbestos. Vermiculite will continue to be discovered from time to time even after a cleanup has been completed at a property. It was not possible for EPA to remove (or to even know about) all the vermiculite in the area. Vermiculite may be left in sealed walls, home foundations, and other relatively inaccessible areas.

Some encounters with vermiculite will be small and may include:

- **minor renovations** – removing old carpets, installing ceiling fans, or removing wall outlets
- **minor landscaping** – replacing bedding for plants and mowing

There will be times when a large pocket of vermiculite is discovered. Such situations may include:

- **intrusive digging** – septic systems, sprinklers, and water lines.
- **major renovations** – taking walls down, putting in windows, etc.
- **fires** – fire-fighting and subsequent cleanup.

Protect Yourself

Hiring a licensed asbestos contractor to clean up vermiculite spilled while doing home improvements is recommended to minimize your exposure.



(Left) Raw vermiculite in soils. (Right) When heated, vermiculite exfoliates (or pops), forming a lightweight material ideal for packing, insulation, and as a soil additive.

Take Steps to Avoid Exposure

- For a small quantity, such as a handful of vermiculite, wet wipe it and throw it away. For a small quantity of vermiculite in surface soil, such as a very isolated area or a few random flakes, we recommend you wet it and have it removed by contacting the **Asbestos Resource Program (ARP)**. **If possible, leave it alone.** If the material is buried, keep it that way – it's better buried than at the surface.
- HEPA filter vacuums are effective on small quantities of vermiculite indoors. **Never vacuum vermiculite with a regular vacuum.** HEPA vacuums and wet wiping can be used periodically to remove any small amounts of asbestos containing dust that is introduced into your home or to vacuum dust from previously inaccessible locations such as under recently removed carpets, appliances, and furniture.
- For larger quantities of vermiculite, such as what you may find in a breached wall, do not disturb the material. **Do not vacuum large amounts of vermiculite – even with a HEPA vacuum.**
- Mowing or rototilling in yards and gardens, where vermiculite is found may cause asbestos to become airborne. If possible, sprinkle your yard or garden with water before mowing or tilling.
- If you encounter a large amount of vermiculite in soil that cannot be avoided, such as when it was used around pipes, around other structures, or as bulk fill – you may have sparkling soil – **do not disturb the material. Contact ARP for appropriate evaluation and assistance.**
- If you are planning on remodeling your home, find out if there is vermiculite in the attic or walls, or any of the materials that will be taken out, disturbed, or are likely to create dust. You can call the ARP (406-291-5335), if you are unsure.

You should also be aware of specific regulations regarding remodeling, demolition, and disposal that may impact your work, especially big projects.



Lincoln County Asbestos Resource Program (ARP)
(406) 291-5335

For more information visit: lcarp.org

Libby Asbestos is Toxic

It should be avoided or handled with extreme care. Exposure to Libby Amphibole asbestos has resulted in disease in workers and non-workers who have had contact with contaminated materials. Take care not to bring any contaminated clothing or material back to your home or business. Treat any asbestos containing material as regulated material and comply with all state and local regulations. The health risk from exposure to all asbestos depends greatly on the amount of asbestos in the material you are disturbing and how long the exposure lasts. **There is no known threshold risk level for asbestos-related materials, and any exposure will increase the risk of asbestos-related disease.**

If you take the basic precautions outlined in this fact sheet, your risk from exposure will be less.

RENTERS – You have a right to know about any adverse conditions at your rental.

Ask your landlord about the presence of vermiculite. If you do not receive the information you request, contact the Lincoln County Asbestos Resource Program.

Common dust or surgical masks are not effective against asbestos fibers!



Wearing a respirator mask with a P-100 fine particulate HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly or exposure may still occur.

For more information on respirator requirements, visit OSHA's website: www.osha.gov/respiratory-protection

Learn about the risks of asbestos exposure and basic precautions by reviewing the Best Management Practices (BMP) resource fact sheets available at the **Lincoln County Asbestos Resource Program** or on the website: lcarp.org

- **Reducing Asbestos Exposure** – *How to reduce exposure to asbestos when renovating or excavating*
- **Lincoln County Do-It-Yourselfers** – *What to do if you find vermiculite or asbestos*
- **Contractors & Tradesmen Working Outdoors** – *What to do if you find vermiculite or asbestos*
- **Demolition Activities** – *Precautionary steps to take before tearing down structures*
- **Contractors & Tradesmen Working Indoors** – *What to do if you find vermiculite or asbestos*
- **13 Simple Steps to Protect from Libby Asbestos** – *How to reduce exposure to asbestos*

Who Can I Contact With Questions About Asbestos?



**ARP
HOTLINE
(406) 291-5335**



**Montana
Asbestos Control
Program
(406) 444-5300**

The DEQ or ARP might send personnel out to inspect a situation involving vermiculite or LA. That guidance might include advising the owner to allow a licensed asbestos contractor or inspector to take samples, conduct cleanup, or take other special measures to reduce the risk of asbestos exposure. A list of licensed contractors and inspectors can be provided by contacting DEQ or ARP.

Montana law requires that employers hire a licensed inspector to determine if asbestos is present before doing any work. Asbestos that is not associated with the Libby vermiculite mine is still regulated by the Montana DEQ. If non-Libby asbestos is found, it should be dealt with according to Montana regulations. Explore Montana DEQ's Asbestos web site at: www.deq.mt.gov/Asbestos

Reducing Asbestos Exposure

Libby Amphibole Asbestos

Libby amphibole asbestos (LA) is a naturally occurring mineral but should be handled with extreme care. Exposure to LA can lead to serious asbestos-related diseases, such as asbestosis, lung cancer or mesothelioma.

The health risk from exposure to all asbestos depends greatly on the amount of asbestos in the material you are disturbing and length of time that exposure lasts; therefore, precautions should be exercised to limit asbestos exposures.

Vermiculite

Vermiculite was mined in Libby, MT and was commonly used in and around homes in Lincoln County for a variety of reasons, including as a soil additive, construction aggregate and attic insulation. If vermiculite is present, it may contain LA.

If you encounter vermiculite on your property, it is possible that it is contaminated with asbestos. The disturbance of vermiculite that is contaminated with asbestos may cause the LA to become airborne.

Cover or wet the vermiculite and call the ARP Hotline. The ARP will help determine if the vermiculite is contaminated with LA.

You may come into contact with asbestos on your property even if the EPA has investigated the property or completed a removal.

High efficiency particulate air, HEPA, filter vacuums are effective for asbestos containing vermiculite insulation. Never vacuum vermiculite with a regular vacuum. Also, use a HEPA vacuum for household cleaning and to remove dust from inaccessible areas, such as under carpets, appliances or furniture.



ARP Hotline • 406-291-5335

Call if you plan to remodel, demolish, excavate OR if you find vermiculite on your property. The Asbestos Resource Program (ARP) will send personnel out to inspect the situation, provide information, and make recommendations. The ARP may also serve as a liaison during those activities.

You may come into contact with Libby amphibole asbestos during:

Renovating – removing old carpets or drywall, installing ceiling fans or removing wall outlets, taking down walls, putting in windows.

Routine landscaping – gardening, rototilling or mowing.

Extensive digging – septic systems, sprinklers or water lines.

Should I be worried about asbestos if the EPA has already been to my property?

Even though the EPA has visited your property, you could still come into contact with asbestos.

Call the ARP for more information on the investigation and removal activities completed by the EPA and for details about the asbestos that may remain on your property.

REMEMBER, regular dust masks are not effective in reducing exposure to LA.

For more information visit our website:
www.lcarp.org

Reducing Asbestos Exposure



Vermiculite in soil



Processed vermiculite often seen as insulation

Additional Resources



Lincoln County

Asbestos Resource Program

503 California Ave • Libby, MT 59923

HOTLINE: 406-291-5335

www.lcarp.org



Montana

Department of Environmental Quality

Asbestos Control Program

406-444-5300 www.deq.mt.gov



United States

Environmental Protection Agency

Region 8: 1-800-227-8917

www.epa.gov / r8eisc@epa.gov

Steps to take while renovating or demolishing:

- **Do** contact the ARP Hotline before renovating or demolishing.
- **Do** check local, state and federal regulations regarding renovation and demolition of buildings.
- **Do** use point-of-cut ventilation techniques when pulling, cutting or accessing behind boards or wall coverings.
- **Do** use a HEPA vacuum at the point of access or disturbance to minimize dust migration and lessen potential exposure.

Demolition:

- **Do** use water to moisten the area being demolished to minimize dust.
- **Do** rinse off any equipment within the work area.
- **Do** keep all debris wet and covered with a tarp during transportation.
- **Do** dispose of debris according to local, state and federal laws including landfill specific requirements.

Steps to take while working outside of your home:

- **Do** water your lawn often, a healthy lawn reduces dust.
- **Do** rinse gardening tools outside within your work area after every use.
- **Do** wipe your feet and/or take your shoes off at the door and leave them outside, if possible. Try not to bring any contaminated clothing or material back inside.
- **Do** wash your hands outdoors after any yard work, if possible.
- **Do not** disturb areas where you can see vermiculite. If it is a place you intend to work in, cover the vermiculite and call the ARP Hotline.
- **Do not** dig, cultivate, mow, rake or rototill your yard or garden when it is dry and dusty.
- **Do not** bring dusty or dirty things inside.

**CALL THE ARP HOTLINE
IF YOU SEE ANY VERMICULITE ON YOUR
PROPERTY, EVEN IF YOU ARE UNSURE.**

406-291-5335

Contractors & Tradesmen Working Indoors

What To Do If You Find Vermiculite and Asbestos In A Home or Business

Vermiculite in Libby & Troy



For several decades, vermiculite was commonly used in and around homes in Lincoln County for a variety of applications, including as a soil additive, construction aggregate, and attic insulation.

If vermiculite is present, it might contain Libby Amphibole (LA) asbestos which is toxic. Exposure to LA could lead to such serious diseases as asbestosis, lung cancer, or mesothelioma. It was not possible for EPA to remove (or to even know about) *all* the vermiculite in the area. In some cases, vermiculite might be intentionally left in sealed walls, home foundations, and other relatively inaccessible areas. Remodeling, repair, electrical, or plumbing work might uncover vermiculite that was otherwise sealed in place.

Always ask the homeowner if they know where you might find vermiculite.

It is possible that you might unexpectedly find vermiculite after starting your work, perhaps by cutting into a wall (drill a pilot test hole first) or uncovering something that previous investigations did not find or the homeowner did not know about.

You are strongly encouraged to not work with vermiculite or disturb it in any way.

Improper work practices can contaminate the interior of the home or building where you are working! It is your responsibility to know the state and local laws and regulations.

(left) Popped Vermiculite Ore

(right) Raw Vermiculite Ore



Precautionary Steps to Take So You Can Get On With Your Job

If you encounter vermiculite, it is likely that you will be exposed to Libby Amphibole asbestos. If you choose to continue working, take the following minimal steps:

1. **Always notify the resident.** If they haven't already told you about it, they might not know.
2. **For very small quantities, such as a handful, or if you are unsure as to whether it's vermiculite or not,** you can call the **Asbestos Resource Program (ARP)**. If you do not want to call the ARP, as a precaution, use a damp paper towel to scoop up the material into a sealable plastic bag or jar. Then use another damp towel to wipe down the area. Place the used paper towels in the container and throw everything away in a proper receptacle (a covered trash can is OK).
3. **Never vacuum vermiculite with a regular vacuum.** HEPA filter vacuums are effective on small quantities of vermiculite. Residents who had a cleanup completed were provided a HEPA vacuum.
4. **For larger quantities, such as what you might find in a breached wall, or if you are unsure as to whether it's vermiculite or not,** do not disturb the material. Do not vacuum large amounts of vermiculite - even with a HEPA vacuum. Isolate and cover the area and call the ARP immediately.
5. **No matter the volume or location of known or suspected vermiculite, contact the ARP** Please notify the ARP early to protect yourself and your workers and to ensure the most



Lincoln County Asbestos Resource Program (ARP)
(406) 291-5335

For more information visit: larp.org

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If you take the basic precautions outlined in this fact sheet, your risk from exposure will be less.

Common dust or surgical masks are not effective against asbestos fibers!



Wearing a respirator mask with a P-100 fine particulate HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly or exposure may still occur.

For more information on respirator requirements, visit OSHA's website: www.osha.gov/respiratory-protection

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(406) 444-5300**

The DEQ or ARP might send personnel out to inspect a situation involving vermiculite or LA. That guidance might include advising the owner to allow a licensed asbestos contractor or inspector to take samples, conduct cleanup, or take other special measures to reduce the risk of asbestos exposure. A list of licensed contractors and inspectors can be provided by contacting DEQ or ARP.

Montana law requires that employers hire a licensed inspector to determine if asbestos is present before doing any work. Asbestos that is not associated with the Libby vermiculite mine is still regulated by the Montana DEQ. If non-Libby asbestos is found, it should be dealt with according to Montana regulations. Explore Montana DEQ's Asbestos web site at: www.deq.mt.gov/Asbestos

Contractors & Tradesmen Working Outdoors

What To Do If You Find Vermiculite and Asbestos Around A Home or Business

Vermiculite in Libby

For several decades, vermiculite was commonly used in and around homes in Lincoln County for a variety of applications, including as a soil additive, construction aggregate, and attic insulation.



If vermiculite is present, it might contain Libby Amphibole asbestos (LA). Exposure to LA could lead to such serious diseases as asbestosis, lung cancer, and mesothelioma. It was not possible for EPA

to remove (or to even know about) *all* the vermiculite in the area. In some cases, vermiculite might be intentionally left in sealed walls, home foundations, and other relatively inaccessible areas. Construction, remodelling, or landscaping involving digging might uncover vermiculite following cleanup at a property.

Always ask the homeowner if they know where buried vermiculite might be. ARP might have information on the property based on the investigation, design, and cleanup that has been completed. When calling ARP, you will need to provide the address, location of the work, and the likely depth of excavation.



It is possible that you might unexpectedly find vermiculite after starting your work, perhaps by uncovering it while doing any major outdoor project. You are strongly encouraged to not disturb it in any way that might cause LA to become airborne.

Precautionary Steps to Take So You Can Get On With Your Job

If you encounter vermiculite, it is likely that you will be exposed to Libby Amphibole asbestos. If you choose to continue working, take the following simple steps:

1. **Always notify the resident.** If they haven't already told you about it, they might not know.
2. **Stop work to assess the volume** of vermiculite. Cover or wet down the material, if possible.
3. **For very small quantities** of vermiculite, such as a handful, it is recommended you wet the area and contact the **Asbestos Resource Program (ARP)** for appropriate evaluation and assistance. **If possible, leave it alone.** If the material is buried, leave it there. It's better to have it buried than at the surface.
4. **For larger quantities** of vermiculite such as when it was used as fill around pipes, around other structures, or as bulk fill (you may have sparkling soil) **do not disturb the material – call the Asbestos Resource Program (ARP) immediately.**



Vermiculite shown leaking from siding on the exterior of a structure



Lincoln County Asbestos Resource Program (ARP)
(406) 291-5335

For more information visit: lcarp.org

Libby Asbestos is Toxic

It should be avoided or handled with extreme care. Exposure to Libby Amphibole asbestos has resulted in disease in workers and non-workers who have had contact with contaminated materials. Take care not to bring any contaminated clothing or material back to your home or business. Treat any asbestos containing material as regulated material and comply with all state and local regulations. The health risk from exposure to all asbestos depends greatly on the amount of asbestos in the material you are disturbing and how long the exposure lasts. **There is no known threshold risk level for asbestos-related materials, and any exposure will increase the risk of asbestos-related disease.**

If you take the basic precautions outlined in this fact sheet, your risk from exposure will be less.

Common dust or surgical masks are not effective against asbestos fibers!



Wearing a respirator mask with a P-100 fine particulate HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly or exposure may still occur.

For more information on respirator requirements, visit OSHA's website: www.osha.gov/respiratory-protection

Learn about the risks of asbestos exposure and basic precautions by reviewing the Best Management Practices (BMP) resource fact sheets available at the **Lincoln County Asbestos Resource Program** or on the website: lcarp.org

- **Reducing Asbestos Exposure** – *How to reduce exposure to asbestos when renovating or excavating*
- **Lincoln County Do-It-Yourselfers** – *What to do if you find vermiculite or asbestos*
- **Demolition Activities** – *Precautionary steps to take before tearing down structures*
- **Contractors & Tradesmen Working Indoors** – *What to do if you find vermiculite or asbestos*
- **Libby and Troy Residents** – *Vermiculite or Asbestos in or around your home or business*
- **Yard Work and Gardening Activities** – *What to do if you find vermiculite or asbestos*
- **13 Simple Steps to Protect from Libby Asbestos** – *How to reduce exposure to asbestos*

Who Can I Contact With Questions About Asbestos?



ARP
HOTLINE
(406) 291-5335



Montana
Asbestos Control
Program
(406) 444-5300

The DEQ or ARP might send personnel out to inspect a situation involving vermiculite or LA. That guidance might include advising the owner to allow a licensed asbestos contractor or inspector to take samples, conduct cleanup, or take other special measures to reduce the risk of asbestos exposure. A list of licensed contractors and inspectors can be provided by contacting DEQ or ARP.

Montana law requires that employers hire a licensed inspector to determine if asbestos is present before doing any work. Asbestos that is not associated with the Libby vermiculite mine is still regulated by the Montana DEQ. If non-Libby asbestos is found, it should be dealt with according to Montana regulations. Explore Montana DEQ's Asbestos web site at: www.deq.mt.gov/Asbestos

Yard Work and Gardening Activities

What To Do If You Are Working In Your Yard and Encounter Soil That Contains Vermiculite or Asbestos

Vermiculite In Libby & Troy

For several decades, vermiculite was commonly used in and around homes in Lincoln County for a variety of applications, including as a soil additive, construction aggregate, and attic insulation. If vermiculite is present, it might contain Libby Amphibole asbestos (LA).

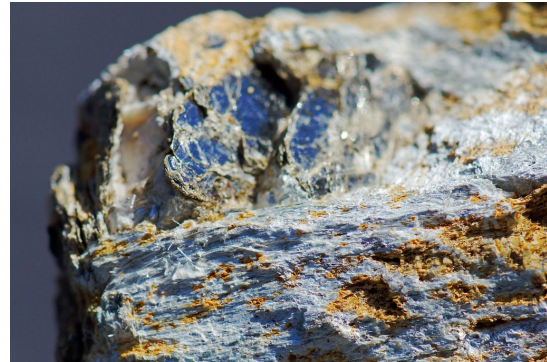
Exposure to LA could lead to serious diseases such as asbestosis, lung cancer, and mesothelioma. It is not possible to remove (or to even know about) *all* the vermiculite in the area.

It is possible that you might unexpectedly find vermiculite after starting your yard work or gardening activities. If you do, you are strongly encouraged to not disturb it further and cause the LA to become airborne.

Precautionary Steps To Take While Working In Your Yard

The Do's:

1. **Do** water often. A healthy lawn reduces dust and contact with bare soil.
2. **Do** mow your lawn or roto-till your garden when it's damp—not when it's dry or dusty.
3. **Do** rinse off any rental equipment within your work area before returning the equipment.
4. **Do** rinse off gardening tools outside within your work area after every use.
5. **Do** wipe your feet and/or take your shoes off at the door and leave them outside, if possible.
6. **Do** wash your hands outdoors after any yard work, if possible.
7. **Do** call the **Lincoln County Asbestos Resource Program (ARP) at no cost to you** if you see ANY vermiculite on your property, even if you are unsure. While waiting for ARP to arrive, take precautions to not disturb the area.



Libby Amphibole asbestos with vermiculite ore in raw form

The Don'ts:

1. **Don't** disturb areas where you can see vermiculite. If it's a place you intend to work in, cover the vermiculite and call **ARP**.
2. **Don't** dig, cultivate, mow, rake or roto-till your yard or garden when it's dry and dusty.
3. **Don't** bring dusty or dirty things inside.

Un-exfoliated



Exfoliated



The photo on the left is an example of raw vermiculite in soils. When heated, vermiculite exfoliates (or pops), forming a lightweight material ideal for packing, insulation, and as a soil additive as shown in the photo on the right.



Lincoln County Asbestos Resource Program (ARP)
(406) 291-5335

For more information visit: larp.org

Libby Asbestos is Toxic

It should be avoided or handled with extreme care. Exposure to Libby Amphibole asbestos has resulted in disease in workers and non-workers who have had contact with contaminated materials. Take care not to bring any contaminated clothing or material back to your home or business. Treat any asbestos containing material as regulated material and comply with all state and local regulations. The health risk from exposure to all asbestos depends greatly on the amount of asbestos in the material you are disturbing and how long the exposure lasts. **There is no known threshold risk level for asbestos-related materials, and any exposure will increase the risk of asbestos-related disease.**

If you take the basic precautions outlined in this fact sheet, your risk from exposure will be less.

Common dust or surgical masks are not effective against asbestos fibers!



Wearing a respirator mask with a P-100 fine particulate HEPA filter is the best way to avoid breathing asbestos fibers. However, they must be used properly or exposure may still occur.

For more information on respirator requirements, visit OSHA's website: www.osha.gov/respiratory-protection

Learn about the risks of asbestos exposure and basic precautions by reviewing the Best Management Practices (BMP) resource fact sheets available at the **Lincoln County Asbestos Resource Program** or on the website: **lcarp.org**

- **Reducing Asbestos Exposure** – *How to reduce exposure to asbestos when renovating or excavating*
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- **Demolition Activities** – *Precautionary steps to take before tearing down structures*
- **Libby and Troy Residents** – *Vermiculite or Asbestos in or around your home or business*
- **Contractors & Tradesmen Working Indoors** – *What to do if you find vermiculite or asbestos*
- **13 Simple Steps to Protect from Libby Asbestos** – *How to reduce exposure to asbestos*

Who Can I Contact With Questions About Asbestos?



**ARP
HOTLINE
(406) 291-5335**



**Montana
Asbestos Control
Program
(406) 444-5300**

The DEQ or ARP might send personnel out to inspect a situation involving vermiculite or LA. That guidance might include advising the owner to allow a licensed asbestos contractor or inspector to take samples, conduct cleanup, or take other special measures to reduce the risk of asbestos exposure. A list of licensed contractors and inspectors can be provided by contacting DEQ or ARP.

Montana law requires that employers hire a licensed inspector to determine if asbestos is present before doing any work. Asbestos that is not associated with the Libby vermiculite mine is still regulated by the Montana DEQ. If non-Libby asbestos is found, it should be dealt with according to Montana regulations. Explore Montana DEQ's Asbestos web site at: www.deq.mt.gov/Asbestos



Before you hit the road you should ask yourself:

- Is there any chance of debris falling or blowing out of my vehicle?
- Would I feel safe driving behind my vehicle?
- Would my load hold if I had to brake suddenly or if I hit a bump?
- Can I drive a normal speed?
- Would I want a vehicle loaded in this way driving through my neighborhood?
- Is my load secured on top, on the sides, and in the back?
- Did I double check my load to make sure it is secured?

If you answered 'no' to any of those questions you need to secure your load better.

Each year in North America, road litter, either dumped on purpose by motorists, or fallen accidentally from unsecured loads, causes 25,000 accidents, nearly 100 of them fatal.

Many litter related citations are the result of failure to secure a load.

Covering or securing your load will keep money in your pocket. You'll be keeping our roads safer, and you'll be doing your part to keep Lincoln County beautiful.

TIPS FOR SECURED LOADS

- Place lighter material at the bottom
- Keep the load below the top edge of the truck box if possible
- Place tall items flat or against the back of the cab
- Seal all boxes, bags, and garbage cans
- Fully cover loose material with a tarp
- Stop frequently to check that nothing has loosened during transport
- Wrap straps through and around items
- Block items against each other to prevent shifting
- Secure cushions, pillows, and other light items against the wind
- Use high quality straps designed for the job



Properly secured loads utilize "bed nets" like this, tarps, and adjustable or ratchetting ties.

— DON'T FORGET —
**Secure
your load...**

**PREVENT LITTER AND KEEP OUR
ROADS CLEAN AND SAFE**

State law and Lincoln County Litter Control Ordinance require you to secure your load:

MCA 61-8-370 SECURING OF LOAD

- (1) A person operating a loaded vehicle on a public highway shall load the vehicle or secure the load sufficiently to prevent littering or creating an obstruction dangerous to the public traveling on the highway.

2018-02-03 LITTERING PROHIBITIONS

- (1) It is unlawful for any person to transport garbage or refuse on a public road as an uncovered or secured road.

A violation may result in a misdemeanor and a fine minimum of \$25 and maximum \$200.

HELP PREVENT LITTER!

COVER AND SECURE IT!

**KEEP LINCOLN COUNTY SAFE AND
BEAUTIFUL!**

Lincoln County Health Department
Lincoln County Annex Building
418 Mineral Avenue
Libby, Montana
59923

Phone: 406-283-2442
Fax: 406-293-5640

Like us on Facebook!
www.facebook.com/lincolnMThealth/



Revised 2/09/23

Secure Your Load for Safe and Clean Roads



**APPENDIX B CONCEPTUAL SITE MODEL, EXPOSURE PATHWAYS,
AND POPULATION**

TABLE 5-2
Conceptual Site Model, Exposure Pathways and Populations
Libby Asbestos Superfund Site

Primary Source	Primary Transport Mechanism	Secondary Source	Exposure Media	Exposure Locations	Operable Unit	Disturbance Description	Exposure Population ^[a]									
							Resident	Recreational Visitor	Teachers/ students	Worker						
										Indoor Worker	Tradesperson	Outdoor Worker				
Mine site & past mining, milling, processing operations	Aerial emissions (current and historical, deposition/resuspension during disturbance activities)	soil/duff	Outdoor air, ambient conditions	Outdoor	All	---	1	1	1	1	1	1				
	Transport of solid waste, raw materials	soil/duff	Outdoor air, during soil/duff disturbance activities	Parks	OU1, OU4, OU7	lawn/park maintenance							1			
				Road ROW	OU2, OU8	mowing/brush-hogging								1		
				Forested Areas	OU4	hiking				1						
						building campfires				1						
						ATV riding				1						
				Residential/Commercial Properties	OU2, OU4, OU7	yard work				1						1
						gardening				1						1
						playing on driveways				1						
				Schools	OU4, OU7	ATV riding in LUAs				1						
						outdoor maintenance										1
						playing on playgrounds							1			
				Bike Trails/Paths	OU4, OU5, OU7	riding bicycles					1					
				Roads	OU8	driving cars				1	1	1	1	1	1	
	Motocross Track	OU5	motocross participant/spectator					1								
	Industrial Properties	OU5	site maintenance									1				
	Railyard/Railroad Corridors	OU6	RR maintenance									1				
	Aerial emissions	Tree bark	Outdoor air, during tree bark disturbance activities	Forested Areas	OU4	local wood harvesting		1								
						campfire burning			1							
						wildfire		1	1	1	1	1	1			
	Landfills	OU4, OU7	woodchipping									1				
	Aerial emissions to tree bark; use of bark as a landscaping material	Wood chips/mulch	Outdoor air, during woodchip/mulch disturbance activities	Residential/Commercial Properties	OU2, OU4, OU7	gardening/landscaping		1					1			
						Woodchip Piles	OU5	pile maintenance							1	
	Aerial emissions (current and historical)/indoor air potentially impacted by previous disturbance of LA-containing material ^[b]	indoor air mixed with outdoor air	Indoor air, passive conditions	Residential/Commercial Properties	OU4, OU7	---		1			1					
				Industrial Properties	OU5	---					1					
				Schools	OU4, OU7	---					1					
	Use of vermiculite in building materials	vermiculite insulation (VI)	Indoor air, during VI disturbance activities	Residential/Commercial Properties	OU4, OU7	attic use, routine property maintenance		1					1			
						construction/demolition								1		
Aerial emissions (current and historical) to outdoor air mixing with indoor air potentially impacted by previous disturbance of LA-containing material ^[b]	indoor dust	Indoor air, during indoor dust disturbance activities	Residential/Commercial Properties	OU4, OU7	cleaning (sweeping, dusting, vacuuming)		1									
			Commercial/Industrial Buildings	OU1, OU5	general					1						
			Schools	OU4, OU7	general					1						
Aerial emissions (current and historical) to tree bark used for firewood	woodstove ash	Indoor air, during woodstove ash disturbance activities	Residential/Commercial Properties	OU4, OU7	woodstove ash removal		1									

^[a] Note that a given individual may be a member of several exposure populations. For example, an individual may live in OU7, work in OU4, and recreate in OU5. In this example, aspects of the exposure scenarios for a resident, indoor worker, and recreational visitor would apply to the individual. The cumulative assessment addresses cumulative exposures that span multiple exposure scenarios.

^[b] LA-containing material could include VI or woodstove ash.

Notes:

ATV - all-terrain vehicle LUAs - limited-use areas ROW - right-of-way USFS - United States Forest Service
LA - Libby amphibole asbestos OU - operable unit RR - railroad VI - vermiculite insulation

**APPENDIX C OU1/OU2 SUBAREA 2/OU5 ENVIRONMENTAL
COVENANT**

After Recording Return To:

City of Libby
P.O. Box 1428
Libby, Montana 59923

DECLARATION OF INSTITUTIONAL CONTROLS ON REAL PROPERTY

THIS DECLARATION OF INSTITUTIONAL CONTROLS ON REAL PROPERTY (the "Institutional Controls") is made effective on June 17, 2019, by the City of Libby, Montana ("City"), having an address of P.O. Box 1428, Libby, Montana, pursuant to Section 75-10-727, Montana Code Annotated ("MCA"), with the approval of the United States Environmental Protection Agency ("EPA") and the Montana Department of Environmental Quality ("DEQ"), third-party beneficiaries of these Institutional Controls.

RECITALS

WHEREAS, the City, classified pursuant to Section 7-1-4111, MCA, is the owner of certain real property (the "Property") located in Lincoln County, Montana, depicted on Exhibit A, Certificate of Survey (COS) hereto, and more particularly described as follows:

Northwest ¼ of Section 31, Township 30 North, Range 31 West, Certificate of Survey 1828 and 2332 and 3879 and 3920, acres 15.9692, TRS 2C-2CB1-2AA-2CD1.

Parcel ID 56-4175-03-2-03-12-0000

WHEREAS, the Property is located within the Libby Asbestos Contamination and adjacent to the groundwater contaminant plume of the Libby Groundwater Contamination National Priorities List sites ("Sites") upon which hazardous or deleterious substances have come to be located;

WHEREAS, Libby amphibole asbestos is present in the surface and subsurface soil of the Property.

WHEREAS, the contamination plume from the Libby Groundwater Contamination National Priorities List Site also is located directly upstream from the Property;

WHEREAS, in the 2010 Record of Decision for Operable Unit 1 (OU1), the EPA, with concurrence from DEQ, selected a remedial action that included excavation and disposal of asbestos-contaminated soils, but allowed for hazardous substances, pollutants, or contaminants to remain above levels that allow for unlimited use and unrestricted exposure, and therefore required the implementation of institutional controls to prevent uses posing unacceptable risks to

human health or the environment or compromising the remedy. Remedial action for the OUI was completed in July 2013. Some ICs have been implemented for OUI, but the 2015 Libby Asbestos Five-Year Review Report recommended that DEQ work with the City to record an environmental covenant on the Property to enhance protectiveness.

WHEREAS, on certain portions of the Property, contaminated soil was removed, and an 18-inch layer of clean cover soil was installed; riverbank areas were capped with riprap.

WHEREAS, the City desires to restrict certain uses and activities on the Property to mitigate a risk to the public health, safety, and welfare and the environment by imposing appropriate institutional controls on the Property, pursuant to Montana Code Annotated ("MCA") § 75-10-727.

These Institutional Controls are not intended to interfere with, contradict, supersede, or otherwise affect any other restrictions on the Property.

NOW, THEREFORE, the City hereby agrees and declares:

1. These Institutional Controls will run with the Property and bind all holders, owners, lessees, occupiers, and purchasers of the Property ("the Owner").
2. The following exhibits are attached to and made part of these Institutional Controls:

Exhibit A-Description of the Property

3. RESTRICTIONS ON USE: The following covenants, conditions and restrictions apply to the use of the Property, run with the land, and are binding on the Owner:
 - a. Residential or commercial development or use must not occur unless the requirements in subsection 3(c) are met. "Residential" includes, but is not limited to, permanent residential use; temporary residential use; limited residential use; short-term residential use; children's day care; mobile homes with or without footings; mobile home with or without a pad; and camping. It is the City's intent that this limitation be construed as broadly as possible to prohibit any type of residential use whatsoever unless the requirements in subsection 3(c) are met.
 - b. Except as provided in subsections 3(c) or 3(d), below, no soil or other materials can be disturbed in any manner by the Owner, including without limitation drilling or excavation, without the express prior written approval of the United States Environmental Protection Agency ("EPA") and the Montana Department of Environmental Quality ("DEQ"). It is the City's intent that this limitation be construed as broadly as possible to prohibit any type of excavation, drilling, or disturbance on the entire Property whatsoever without written approval from EPA and DEQ.

- c. Prior to excavating; constructing; disturbing any portion of the Property; or using the Property for residential or commercial use as defined in the ROD and any post-ROD changes, the Owner must first obtain written approval from EPA and DEQ for a written plan that includes the following requirements:
- i. sampling using EPA-approved protocols for the reasonably anticipated future use of the Property;
 - ii. members of the public must be protected from exposure to asbestos (including wetting and other best management practices);
 - iii. all asbestos in soil above the relevant cleanup level (as outlined in the ROD and any post-ROD changes) based upon the reasonably anticipated future use of that portion of the Property must be managed, transported, and disposed to ensure protection of public health, safety, and welfare and the environment;
 - iv. transportation and disposal of soil that contains asbestos must be consistent with then-current state and federal laws governing asbestos-containing waste/material (e.g., the requirements contained in ARM 17.74.369 or successor administrative rule or law), even if such requirements are not directly applicable;
 - v. all workers with access to the areas of the Property where disturbance work is being conducted must have the appropriate OSHA Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training;
 - vi. the integrity of the cover must be maintained following the excavation or disturbance;
 - vii. the health and safety of the excavation/construction workers must be managed by mitigating exposure to asbestos; and
 - viii. any other requirements EPA and DEQ determine are necessary to be protective of public health, safety, and welfare.

EPA and DEQ in their sole and joint discretion have the right to waive any or all of these requirements where the proposed action described in the written plan does not directly or indirectly interfere with, is not inconsistent with, and does not hinder, delay, diminish or frustrate the implementation, effectiveness, purposes, integrity, or operation and maintenance of the remedy, or any remedial action under federal, state or local law or regulation.

- d. In the event of an emergency (e.g., a broken water main), the Owner may disturb the soil on the Property without a prior work plan pursuant to subsection 3(c) but only to the extent necessary to respond to the emergency (e.g., repairing water main break). The Owner must orally notify EPA and DEQ within 24 hours of becoming aware of the emergency by calling (406) 444-0379. The Owner must conduct the emergency disturbance work in accordance with the substantive

requirements in subsection 3(c) and submit a report for EPA and DEQ approval that addresses all of the items in subsection 3(c) within 30 days of conducting the emergency disturbance work.

4. **PROTECTION OF THE REMEDY:** No action will be permitted, taken, authorized, or allowed which directly or indirectly interferes with, is inconsistent with, or hinders, delays, diminishes or frustrates the implementation, effectiveness, purposes, integrity, or operation and maintenance of the remedy, or any remedial action required under federal, state or local law or regulation.
5. DEQ and EPA and their agents and all representatives and contractors of any person conducting DEQ or EPA-approved remedial actions on the Property will have the right to access the Property at all reasonable times. Nothing in this document limits or otherwise affects EPA or DEQ's rights of entry and access under state or federal law.
6. The City and its successors and assigns retain the right to enter or cause its agents to enter the Property at all reasonable times in order to inspect for violations of these Institutional Controls.
7. Any conveyance of the Property by the City must clearly state that the City will remain an intended beneficiary of these Institutional Controls. The conveyance must specify that the remedy of "specific performance" will be available to the City for violations of these Institutional Controls. The conveyance must also specify that at all times after the City conveys its interest in the Property and no matter what person or entity is in title to or in possession of the Property, the City and its agents will retain the right to enter the Property at reasonable intervals and at reasonable times of the day in order to inspect for violations of the Institutional Controls contained herein.
8. The City has agreed to enforce the requirements of these Institutional Controls and take prompt action to correct any violations of these Institutional Controls. The City is entitled to enforce these Institutional Controls as an intended beneficiary thereof. The City specifically agrees that the remedy of "specific performance" of these Institutional Controls will be available to the City in such proceedings. The City must enforce the requirements of these Institutional Controls and take prompt action to correct any violations of these Institutional Controls. The City must notify DEQ within five calendar days of the City, its agents, representatives, successors in interest, or assignees, receiving actual or constructive notice of any violation or potential violation of these Institutional Controls.
9. DEQ and EPA are entitled to enforce these Institutional Controls as an intended beneficiary thereof. The City specifically agrees that the remedy of "specific performance" will be available to DEQ and EPA in such proceedings. Venue for

enforcement of these Institutional Controls will be in the District Court of the First Judicial District.

10. The City must cause these Institutional Controls and any DEQ-approved modifications to be recorded in the office of the Clerk and Recorder of Lincoln County, Montana. These Institutional Controls apply in perpetuity and every subsequent instrument conveying an interest in all or any portion of the Property, including, but not limited to, deeds, leases and mortgages, must include a notice of the existence of these Institutional Controls and their recording reference. The notice must be in substantially this form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN INSTITUTIONAL CONTROL. Because of potential or known asbestos, no soil may be disturbed on this property without the prior written approval of DEQ and EPA. Groundwater wells are prohibited on this property because of pentachlorophenol, polycyclic aromatic hydrocarbons (PAHs), and heavy metals. The full restrictions must be reviewed within the original Institutional Control, which is dated [insert date of approval] and recorded [date of recording] in [**insert recording reference in bold**], records of Lincoln County, Montana.

Within sixty (60) days of the date any such instrument or conveyance is executed, the Owner must provide EPA and DEQ with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference. Any conveyance of all or a portion of the Property must include a requirement to include the language in this paragraph in all future conveyances.

11. The Owner will notify DEQ and EPA of any proposed conveyance of all or a portion of the Property at least 30 days prior to any such conveyance. The Owner will provide notice to all potential purchasers by providing a copy of these Institutional Controls prior to the conveyance of all or a portion of the Property and must provide a copy of this notice to DEQ and EPA. Any conveyance by the Owner must require future owners to provide notice to all potential purchasers by providing a copy of these Institutional Controls prior to the conveyance of all or a portion of the Property and to provide a copy of the notice to DEQ and EPA.
12. DEQ and EPA need not be notified of conveyances of easements that are solely overhead (e.g., easements for utility lines) and do not involve any prohibited activities specified in

Sections 3-5 of these Institutional Controls, and such conveyances do not need to include these Institutional Controls.

13. The rights provided to DEQ and EPA in these Institutional Controls include any successor agencies of DEQ and EPA.
14. NOTICES: Notices to EPA and DEQ must either be served personally or sent by first class mail, postage prepaid, addressed as follows:

a. OWNER: City of Libby
P.O. Box 1428
Libby, Montana 59923

b. EPA: Program Director, Remedial Response Program
U.S. Environmental Protection Agency Region 8
1595 Wynkoop Street
Denver, CO 80202

Director
U.S. Environmental Protection Agency Region 8 Montana Office
10 W. 15th Street, Suite 3200
Baucus Federal Building
Helena, Montana 59626

c. DEQ: Bureau Chief, Federal Superfund Bureau
Montana Department of Environmental Quality
Attn: Libby Asbestos Superfund Site
P.O. Box 200901
Helena, MT 59620-0901

Legal – Waste Management & Remediation Division
Montana Department of Environmental Quality
Attn: Libby Asbestos Superfund Site
P.O. Box 200901
Helena, MT 59620-0901

or any subsequent address for EPA or DEQ submitted in writing by EPA or DEQ to the current owner.

15. The interpretation and performance of this instrument will be governed by the laws of the United States and the laws of the State of Montana.

16. These Institutional Controls were approved by DEQ under the provisions of Section 75-10-727, MCA, on June 3, 2019. These Institutional Controls will run with the land and be binding on all successors in interest to the Property until the Institutional Controls are removed or modified in accordance with Section 75-10-727 MCA and recorded in the land records referenced in Section 10, above.

IN WITNESS WHEREOF, the City has executed this Declaration of Institutional Controls on Real Property effective as of the date written above.

THE CITY of LIBBY

By: 
Mayor Brent Teske

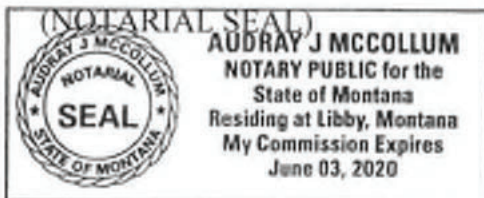
State of Montana
County of Lincoln

This instrument was acknowledged before me on June 17, 2019, by
Audrey J. McCollum as Clerk of the City of Libby.

Notary Signature: 

Printed Name: Audrey J. McCollum

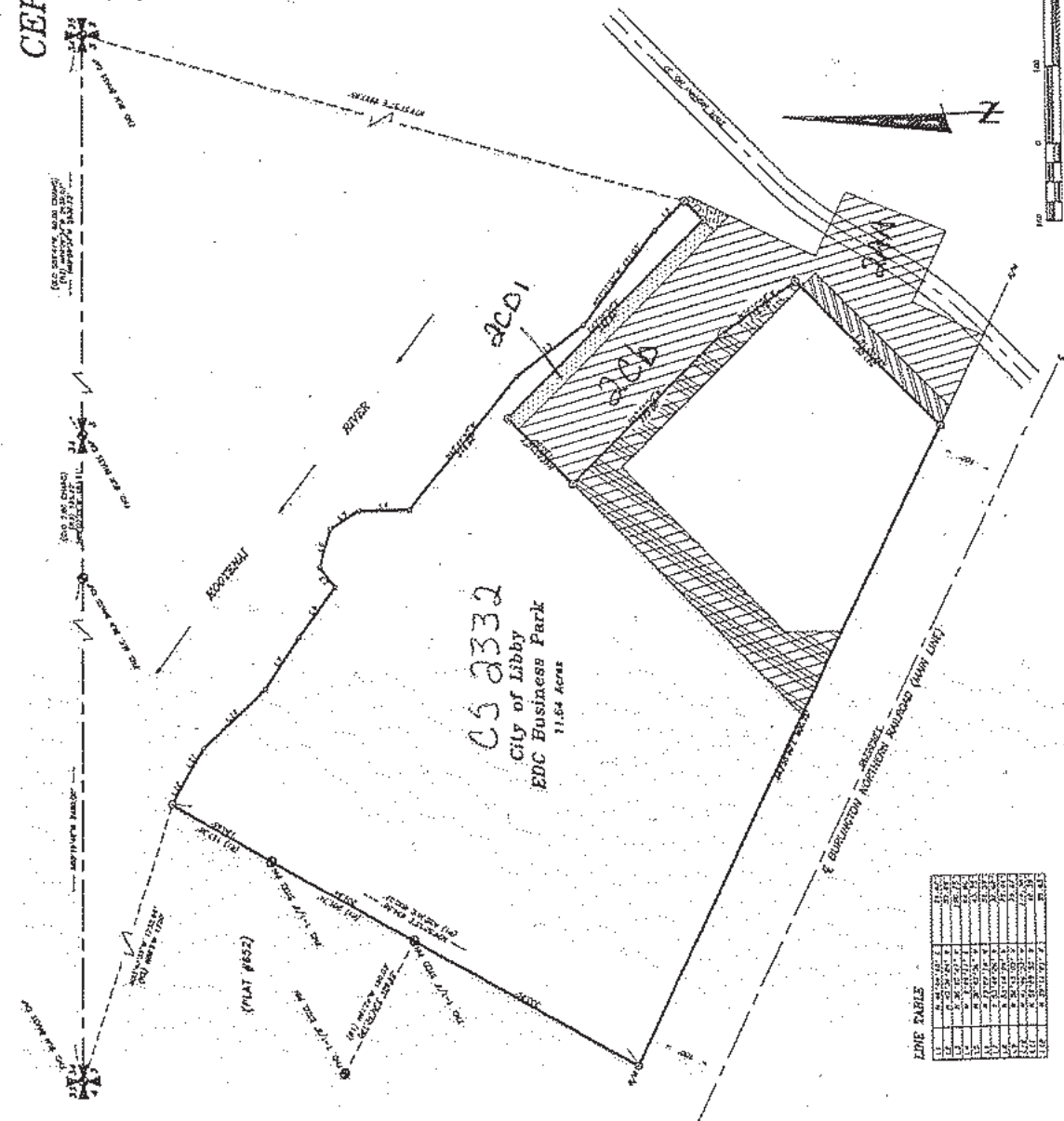
Notary Public for the State of Montana
Residing at Libby Montana
My Commission expires June 03, 2020



CERTIFICATE OF SURVEY

Section 3,
Township 30 North, Range 31 West,
of the Principal Montana Meridian,
Lincoln County, Montana

City of Libby
EDC Business Park



SEQUENCE OF NEEDS

- 1. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1941
- 2. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927
- 3. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927
- 4. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927
- 5. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927

LEGEND

- 1. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1941
- 2. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927
- 3. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927
- 4. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927
- 5. RECORD BOOKING AND STORAGE FOR SET AND PLAT - 1927

PURPOSE OF SURVEY

TO DEFINE THE BOUNDARIES OF THE PROPERTY DESCRIBED IN THE PLAT OF THE CITY OF LIBBY, MONTANA, AND TO DEFINE THE BOUNDARIES OF THE PROPERTY DESCRIBED IN THE PLAT OF THE CITY OF LIBBY, MONTANA, AND TO DEFINE THE BOUNDARIES OF THE PROPERTY DESCRIBED IN THE PLAT OF THE CITY OF LIBBY, MONTANA.

BASIS OF BEARINGS

BEARINGS ARE BASED ON THE MERIDIAN OF SURVEY NO. 272.

PURPOSE OF SURVEY

TO DEFINE THE BOUNDARIES OF THE PROPERTY DESCRIBED IN THE PLAT OF THE CITY OF LIBBY, MONTANA, AND TO DEFINE THE BOUNDARIES OF THE PROPERTY DESCRIBED IN THE PLAT OF THE CITY OF LIBBY, MONTANA, AND TO DEFINE THE BOUNDARIES OF THE PROPERTY DESCRIBED IN THE PLAT OF THE CITY OF LIBBY, MONTANA.



CERTIFICATE OF SURVEY NO. 23332

J.R.S. SURVEYING, INC.
P.O. BOX 1050
317 MINERAL AVENUE
LIBBY, MONTANA 59923
(406) 233-6050



SURVEYOR'S CERTIFICATE
I, James R. Stovall, do hereby certify that the boundaries of the property described in the plat of the City of Libby, Montana, and the boundaries of the property described in the plat of the City of Libby, Montana, and the boundaries of the property described in the plat of the City of Libby, Montana, are as shown on the plat of the City of Libby, Montana, and as shown on the plat of the City of Libby, Montana, and as shown on the plat of the City of Libby, Montana.

SECTION 3
TOWNSHIP 30N
RANGE 31W
PRINCIPAL MERIDIAN MT
LINCOLN COUNTY

DATE: 5-1-85
JOB NO. 485-21
DWN. BY: JLV
REVISION: SNC
SHEET: 1 OF 1

CERTIFICATE OF RECORDER
I, [Name], County Commissioner, do hereby certify that the plat of the City of Libby, Montana, and the plat of the City of Libby, Montana, and the plat of the City of Libby, Montana, are as shown on the plat of the City of Libby, Montana, and as shown on the plat of the City of Libby, Montana, and as shown on the plat of the City of Libby, Montana.

COUNTY COMMISSIONER
[Signature]
DATE: 5-15-85
[Signature]
DATE: 5-15-85

LINE TABLE

LINE NO.	BEARING	DISTANCE	AREA
1	N 89° 15' 00" E	100.00	100.00
2	S 89° 15' 00" E	100.00	100.00
3	S 00° 00' 00" W	100.00	100.00
4	N 89° 15' 00" W	100.00	100.00
5	N 89° 15' 00" E	100.00	100.00
6	S 89° 15' 00" E	100.00	100.00
7	S 00° 00' 00" W	100.00	100.00
8	N 89° 15' 00" W	100.00	100.00
9	N 89° 15' 00" E	100.00	100.00
10	S 89° 15' 00" E	100.00	100.00
11	S 00° 00' 00" W	100.00	100.00
12	N 89° 15' 00" W	100.00	100.00
13	N 89° 15' 00" E	100.00	100.00
14	S 89° 15' 00" E	100.00	100.00
15	S 00° 00' 00" W	100.00	100.00
16	N 89° 15' 00" W	100.00	100.00
17	N 89° 15' 00" E	100.00	100.00
18	S 89° 15' 00" E	100.00	100.00
19	S 00° 00' 00" W	100.00	100.00
20	N 89° 15' 00" W	100.00	100.00
21	N 89° 15' 00" E	100.00	100.00
22	S 89° 15' 00" E	100.00	100.00
23	S 00° 00' 00" W	100.00	100.00
24	N 89° 15' 00" W	100.00	100.00
25	N 89° 15' 00" E	100.00	100.00
26	S 89° 15' 00" E	100.00	100.00
27	S 00° 00' 00" W	100.00	100.00
28	N 89° 15' 00" W	100.00	100.00
29	N 89° 15' 00" E	100.00	100.00
30	S 89° 15' 00" E	100.00	100.00
31	S 00° 00' 00" W	100.00	100.00
32	N 89° 15' 00" W	100.00	100.00
33	N 89° 15' 00" E	100.00	100.00
34	S 89° 15' 00" E	100.00	100.00
35	S 00° 00' 00" W	100.00	100.00
36	N 89° 15' 00" W	100.00	100.00
37	N 89° 15' 00" E	100.00	100.00
38	S 89° 15' 00" E	100.00	100.00
39	S 00° 00' 00" W	100.00	100.00
40	N 89° 15' 00" W	100.00	100.00
41	N 89° 15' 00" E	100.00	100.00
42	S 89° 15' 00" E	100.00	100.00
43	S 00° 00' 00" W	100.00	100.00
44	N 89° 15' 00" W	100.00	100.00
45	N 89° 15' 00" E	100.00	100.00
46	S 89° 15' 00" E	100.00	100.00
47	S 00° 00' 00" W	100.00	100.00
48	N 89° 15' 00" W	100.00	100.00
49	N 89° 15' 00" E	100.00	100.00
50	S 89° 15' 00" E	100.00	100.00
51	S 00° 00' 00" W	100.00	100.00
52	N 89° 15' 00" W	100.00	100.00
53	N 89° 15' 00" E	100.00	100.00
54	S 89° 15' 00" E	100.00	100.00
55	S 00° 00' 00" W	100.00	100.00
56	N 89° 15' 00" W	100.00	100.00
57	N 89° 15' 00" E	100.00	100.00
58	S 89° 15' 00" E	100.00	100.00
59	S 00° 00' 00" W	100.00	100.00
60	N 89° 15' 00" W	100.00	100.00
61	N 89° 15' 00" E	100.00	100.00
62	S 89° 15' 00" E	100.00	100.00
63	S 00° 00' 00" W	100.00	100.00
64	N 89° 15' 00" W	100.00	100.00
65	N 89° 15' 00" E	100.00	100.00
66	S 89° 15' 00" E	100.00	100.00
67	S 00° 00' 00" W	100.00	100.00
68	N 89° 15' 00" W	100.00	100.00
69	N 89° 15' 00" E	100.00	100.00
70	S 89° 15' 00" E	100.00	100.00
71	S 00° 00' 00" W	100.00	100.00
72	N 89° 15' 00" W	100.00	100.00
73	N 89° 15' 00" E	100.00	100.00
74	S 89° 15' 00" E	100.00	100.00
75	S 00° 00' 00" W	100.00	100.00
76	N 89° 15' 00" W	100.00	100.00
77	N 89° 15' 00" E	100.00	100.00
78	S 89° 15' 00" E	100.00	100.00
79	S 00° 00' 00" W	100.00	100.00
80	N 89° 15' 00" W	100.00	100.00
81	N 89° 15' 00" E	100.00	100.00
82	S 89° 15' 00" E	100.00	100.00
83	S 00° 00' 00" W	100.00	100.00
84	N 89° 15' 00" W	100.00	100.00
85	N 89° 15' 00" E	100.00	100.00
86	S 89° 15' 00" E	100.00	100.00
87	S 00° 00' 00" W	100.00	100.00
88	N 89° 15' 00" W	100.00	100.00
89	N 89° 15' 00" E	100.00	100.00
90	S 89° 15' 00" E	100.00	100.00
91	S 00° 00' 00" W	100.00	100.00
92	N 89° 15' 00" W	100.00	100.00
93	N 89° 15' 00" E	100.00	100.00
94	S 89° 15' 00" E	100.00	100.00
95	S 00° 00' 00" W	100.00	100.00
96	N 89° 15' 00" W	100.00	100.00
97	N 89° 15' 00" E	100.00	100.00
98	S 89° 15' 00" E	100.00	100.00
99	S 00° 00' 00" W	100.00	100.00
100	N 89° 15' 00" W	100.00	100.00

DECLARATION OF RESTRICTIVE COVENANTS ON REAL PROPERTY

1. This Declaration of Restrictive Covenants on real property ("Institutional Controls") is made this 11TH day of JULY, 2014, by Kootenai Development Company ("Owner", which term includes its successors and assigns), pursuant to Section 75-10-727, Montana Code Annotated ("MCA"), with the approval of the United States Environmental Protection Agency ("EPA") and the Montana Department of Environmental Quality ("DEQ"), third-party beneficiaries of these Institutional Controls.
2. WHEREAS, Owner is the owner of real property located in the County of Lincoln, State of Montana that comprises approximately 18 acres, hereinafter referred to as the "Property" (also known as the Flyway), which lies within Operable Unit No. 2 (OU2) of the Libby Asbestos Superfund site ("Site") [EPA ID No. #MT0009083840] located approximately four (4) miles east of Libby, Montana, in Section 32, Township 31N, Range 30W of Lincoln County as further particularly described by the Site Legal Description (Attachment A); and
3. WHEREAS, Kootenai Development Company entered into settlement agreements with the U.S. Government and with the DEQ regarding the Site that were entered by the United States Bankruptcy Court for the District of Delaware, *In re W. R. Grace & Co., et al.*, No. 01-01139 (JKF), on June 2, 2008 and July 21, 2008, respectively (collectively, the "Settlement Agreements").
4. WHEREAS, in the Record of Decision dated May 10, 2010 as amended (the "ROD"), the Assistant Regional Administrator, Office of Ecosystems Protection and Remediation, for EPA Region VIII, selected a Remedial Action for OU2 which allows for waste to be left on Site above levels that allow for unlimited use and unrestricted exposure providing these Institutional Controls are employed to mitigate a risk to the public health, safety, and welfare and the environment, limit land/resource use, and/or protect the integrity of the remedy. "Remedial Action" shall mean the Remedial Action described in the Libby Superfund Site OU2 ROD, and amendments thereto; and
5. WHEREAS, asbestos in the soil has been left in place on the Property, and the entire Property may contain asbestos at varying depths; and
6. WHEREAS, on certain portions of the Property, excavation has occurred up to four feet below ground surface; and
7. WHEREAS, Owner agrees to restrict the use of the Property to mitigate a risk to the public health, safety, and welfare and the environment by imposing appropriate institutional controls on the Property, the purpose of which is to ensure the permanent preservation and maintenance of remedial structures that are required to minimize human exposure and/or protect the integrity of the remedy; and

NOW, THEREFORE, Owner hereby agrees and declares:

8. Restrictions on Use: The following covenants, conditions and restrictions apply to the use of the Property, run with the land, and are binding on the Owner:
- a) Except as provided in subsection 8(b), below, no soil or other materials shall be disturbed in any manner by Owner, including without limitation drilling or excavation, without the express prior written approval of EPA and DEQ. It is Owner's intent that this limitation be construed as broadly as possible to prohibit any type of excavation on the entire Property whatsoever without written approval from EPA and DEQ.
 - b) Prior to excavating, constructing, or otherwise disturbing any portion of the Property, Owner shall first obtain written approval from EPA and DEQ for a written plan that:
 - 1. Indicates (a) how a Montana-accredited inspector will sample and inspect for asbestos prior to disturbing the Property; (b) how members of the public will be protected from exposure to asbestos (including wetting and other best management practices); (c) how asbestos in soil will be managed, transported, and disposed to ensure protection of public health, safety, and welfare and the environment; (d) that samples of any cover must be collected and analyzed in accordance with EPA's most current practices; and (e) provides that transportation and disposal of soil that contains asbestos must be consistent with then-current state and federal laws governing asbestos-containing waste/material (e.g., the requirements contained in ARM 17.74.369), even if such requirements are not directly applicable;
 - 2. Specifies that all workers with access to the areas of the Property where the work is being conducted must be Montana-accredited asbestos workers and have the appropriate OSHA Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training;
 - 3. Explains how the integrity of the cover will be maintained following the excavation or disturbance; and
 - 4. Details how the health and safety of the excavation/construction workers will be managed by mitigating exposure to asbestos; however, EPA and DEQ will not provide written approval of such health and safety plan.
 - c) Protection of the Integrity of Remedial Action. Owner shall not take, allow, or permit action on the Property if such action is reasonably likely to create an excessive risk of migration of hazardous or deleterious substances or a potential hazard to public health, safety, or welfare or the environment or will result in a disturbance of the structural integrity of any engineering controls designed or utilized at the Site to contain hazardous or deleterious substances or to limit

human or environmental exposure to the hazardous or deleterious substances.

9. Owner agrees to provide DEQ and EPA (including their representatives and contractors, and all representatives and contractors of any person conducting DEQ or EPA-approved remedial actions on the Property) access at reasonable times to the Property. Nothing in this document shall limit or otherwise affect EPA's rights of entry and access or EPA's authority to take response actions under CERCLA, the National Contingency Plan, or other federal law, to the extent such actions are consistent with the Settlement Agreements.
10. Any conveyance of all or a portion of the Property by Owner must clearly state that Kootenai Development Company shall remain an intended beneficiary of these Institutional Controls. The conveyance shall specify that the remedy of "specific performance" will be available to Kootenai Development Company for violations of these Institutional Controls, but that Kootenai Development Company is not required by this document to exercise the right of "specific performance." The conveyance shall also specify that at all times after Owner conveys its interest in the Property and no matter what person or entity is in title to or in possession of the Property, Kootenai Development Company and its agents shall retain the right, but not the obligation, to enter the Property at reasonable intervals and at reasonable times of the day, with reasonable advance notice, in order to inspect for violations of the Institutional Controls contained herein.
11. Except as provided in any state or federal law, including, but not limited to, CECRA, Sections 75-10-701 *et seq.*, MCA, and/or CERCLA as amended 42 U.S.C. § 9601, *et seq.*, no Owner shall be liable for violations of the terms of these Institutional Controls occurring after its ownership in the Property has ceased. Liability for any acts occurring wholly before any transfer and liability for any transfer if in violation of these Institutional Controls shall survive the transfer. Any new Owner shall cooperate in the restoration of the Property or removal of violations caused by prior Owner(s) and may be held responsible for any continuing violations.
12. Owner shall notify DEQ and EPA within thirty (30) calendar days of receiving actual or constructive notice of any violation or potential violation of these Institutional Controls.
13. The provisions of these Institutional Controls of the Property shall run with the land and bind all holders, owners, lessees, occupiers, and purchasers of the Property. These Institutional Controls apply in perpetuity and every subsequent instrument conveying an interest in all or any portion of the Property shall include these Institutional Controls. Owner will notify DEQ and EPA of any proposed conveyance of all or a portion of the Property at least thirty (30) days prior to any such conveyance. DEQ and EPA need not be notified of conveyances of easements that are solely overhead (e.g., easements for utility lines) and do not involve any prohibited activities specified in Section 8 of these Institutional Controls, and such

conveyances do not need to include these Institutional Controls. Any conveyance by Owner shall require any future owner(s) to provide notice to all potential purchasers, as provided in Sections 15 and 16, below.

14. The rights provided to DEQ and EPA in these Institutional Controls include any successor agencies of DEQ and EPA.
15. Filing Notice of Institutional Controls. Owner shall cause the requirements of these Institutional Controls to be placed in all instruments that convey an interest in the Property, except as provided in Section 13, above. This requirement will be satisfied by Owner satisfying the requirement of Section 16, below. Owner shall file these Institutional Controls and any DEQ-approved modifications thereto in the land records of the Clerk and Recorder's Office, Lincoln County, Montana, within thirty (30) days of the date it is executed by the Owner. Owner must provide EPA and DEQ with a certified true copy of said instrument and its recording reference.
16. Notice Requirement. Owner agrees to include in any instrument conveying any portion of the Property, including, but not limited to, deeds, leases and mortgages, a notice that is in substantially the following form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN
INSTITUTIONAL CONTROL, DATED _____ 2014, RECORDED IN
THE PUBLIC LAND RECORDS ON _____ 2014, IN BOOK____,
PAGE___ , IN LINCOLN COUNTY. DOCUMENT _____

Within sixty (60) days of the date any such instrument or conveyance is executed, Owner must provide EPA and DEQ with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference. Any conveyance of all or a portion of the Property must include a requirement to include the language in this Paragraph 16 in all future conveyances.

17. Enforcement of Institutional Controls. EPA and DEQ, as well as Kootenai Development Company upon its transfer of ownership of this Property, shall be entitled to enforce the terms of these Institutional Controls by resort to specific performance or other legal process as third-party beneficiaries including, but not limited to, the authority provided by CECRA and CERCLA. Owner specifically agrees that the remedy of "specific performance" of these Institutional Controls shall be available to DEQ and EPA in such proceedings. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA and CECRA. Any forbearance, delay or omission to exercise rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver of such term or of any subsequent breach of the same or any other term, or of any of the rights under this instrument. Venue for enforcement of these Institutional Controls by EPA and/or DEQ shall be in the First Judicial District Court,

Montana.

18. Notices. Any notice, demand, request, consent, approval or communication that any party desires or is required to give to the others shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, addressed as follows:

Owner: Kootenai Development Company
c/o W. R. Grace & Co.-Conn.
6401 Poplar Avenue, Suite 301
Memphis, TN 38119

Courtesy W. R. Grace & Co.-Conn.
Copy to: Environmental Legal Counsel
7500 Grace Drive
Columbia, MD 21044

EPA: Program Director, Remedial Response Program
U.S. Environmental Protection Agency
1595 Wynkoop Street
Denver, CO 80202

DEQ: Bureau Chief, Federal Superfund Bureau
Montana Department of Environmental Quality
Attn: Libby Asbestos Superfund Site
P.O. Box 200901
Helena, MT 59620-0901

Legal - Remediation Division
Montana Department of Environmental Quality
Attn: Libby Asbestos Superfund Site
P.O. Box 200901
Helena, MT 59620-0901

19. Controlling Law. The interpretation and performance of this instrument shall be governed by the laws of the United States and the laws of the State of Montana.
20. These Institutional Controls were approved by DEQ under the provisions of Section 75-10-727, MCA, on July 1, 2014. These Institutional Controls shall run with the land and be binding on all successors in interest to the Property until the Institutional Controls are removed or modified in accordance with Section 75-10-727 MCA and recorded in the land records referenced in Sections 15 and 16 above.
21. Owner agrees that these Institutional Controls may need to be modified following the

completion of the site-wide risk assessment for the entire Libby Superfund Site (based upon the final toxicity data), or based upon a five-year review conducted pursuant to CERCLA, as provided in the ROD.

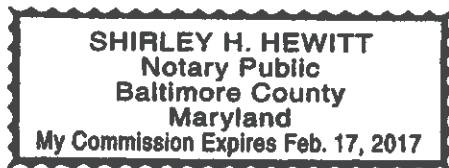
IN WITNESS WHEREOF, Kootenai Development Company, has caused this instrument to be executed this 11 day of July, 2014.

By: Karen Ethier
Karen E. Ethier, solely in her capacity as Vice President of Kootenai Development Company, and not her individual capacity.

STATE OF MARYLAND
COUNTY OF HOWARD

The foregoing instrument was acknowledged before me this 11TH day of JULY, 2014, by Karen E. Ethier on behalf of Kootenai Development Company, a MONTANA Corporation, and not in her individual capacity, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute said instrument.

Witness my hand and official seal hereto affixed the day and year written above



Shirley H. Hewitt
Notary Public

6818 HOLABIRD AVE.
BALTIMORE MD 21222

Address

My commission expires: FEB. 17, 2017

Attachments

A Property Description and Map

After Recording, Mail to:
WR Grace
7500 Grace Drive
Columbia, MD 21044

After Recording Return To:
Attn: Ken Rayome
Lincoln County Port Authority
PO Box 1071
Libby, MT 59923-1071

301570 BOOK: 397 RECORDS PAGE: 633 Pages: 12
STATE OF MONTANA LINCOLN COUNTY
RECORDED: 07/05/2022 10:57 KOI: COVENANTS
ROBIN A. BENSON CLERK AND RECORDER
FEE: \$0.00 BY: *Michelle Bend Deputy*
FOR: LINCOLN COUNTY BOARD OF COMMISSIONERS 512 CALIFORNIA AVE,

DECLARATION OF ENVIRONMENTAL COVENANT/INSTITUTIONAL CONTROL ON
REAL PROPERTY

THIS DECLARATION OF ENVIRONMENTAL COVENANT/INSTITUTIONAL CONTROL
ON REAL PROPERTY (the "Institutional Control") is made effective 5th July, 2022
by the Lincoln County Port Authority ("Port Authority"), having an address of 60 Port
Boulevard, T-3, Libby, Montana 59923.

RECITALS

WHEREAS, the Port Authority is the owner of certain real property (the "Property") located in
Lincoln County, Montana, depicted on Exhibit A hereto, and more particularly described as
follows:

S10, T30 N, R31 W, C.O.S. 4090, PARCEL B&C, ACRES 145.709, & CS 4616
PARCEL B & TRS 5B, 5BA, 5BD

S11, T30 N, R31 W, ACRES 143.37, TRACTS 1 & 1C IN W2W2

S03, T30 N, R31 W, ACRES 30.547, TRS 2 2AD & 2AG IN SESE PLYWOOD PLANT
(016-05E)

S03, T30 N, R31 W, ACRES 2.298, TR 2A4A IN NWSE PLAT 886 *9843*

EAST LIBBY, S03, T30 N, R31 W, BLOCK 4, PART LOTS 16-17-18 ALL LOTS 19-
20-21-22 *9847*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 004, Lot 001, ACRES 0.29,
9848

EAST LIBBY ACREAGE, S03, T30 N, R31 W, ACRES 32.62, ALL BLOCK 1 *9849*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 2 & 2A, ACRES 4.65, & TR
2Z3 in W2SWNESE PLAT 156 *9851*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 003, Lot 001, ACRES 1.06, PLAT 122 *9853*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 5, ACRES 9.8498, & YOUNG&ROGERS PART of LOT 1 & R/W & TRS -22AC-22A1-2AEC1-2AEC2 in SE *9856*

EAST LIBBY AMENDED, S03, T30 N, R31 W, BLOCK 5, ACRES 0.61, 50' RR R/W THRU LOTS 1 8 9 10 & 12 *9859*

S03, T30 N, R31 W, C.O.S. 3954, PARCEL 2, ACRES 1.382, *13267*

EAST LIBBY AMENDED, S03, T30 N, R31 W, BLOCK 6, Lot 1 - 3, ACRES 7.589, & PART OF LOTS 5-7 & TR 2L *18447*

S02, T30 N, R31 W, C.O.S. 3267, PARCEL B, 25.921 ACRES *54330*

WHEREAS, the Property is located within the Libby Asbestos National Priorities List site upon which hazardous or deleterious substances have come to be located;

WHEREAS, Libby Amphibole Asbestos was encapsulated or left in place on certain portions of the Property beneath a remedy cover in building materials and soil, and remedial actions were determined complete in accordance with remedial action levels for Operable Unit 5 by the U.S. Environmental Protection Agency (EPA);

WHEREAS, the Port Authority agrees, pursuant to the EPA Institutional Control Implementation and Assurance Control Plan for Operable Unit 5, to restrict certain uses and activities on the Property to mitigate a risk to the public health, safety, and welfare and the environment posed by the Libby Amphibole left in place by imposing appropriate institutional controls on the Property, pursuant to Montana Code Annotated ("MCA") § 75-10-727;

This Institutional Control is not intended to interfere with, contradict, supersede, or otherwise affect any other restrictions on the Property, including, but not limited to, the November 2, 1993 deed restriction at Book #193, Page 233-276.

NOW, THEREFORE, the Port Authority hereby agrees and declares:

1. This Institutional Control will run with the Property and bind all holders, owners, lessees, occupiers, and purchasers of the Property ("the Owner").
2. The following exhibits are attached to and made part of these Institutional Controls:

Exhibit A - Description of the Property

Exhibit B - Removal Action Locations

Exhibit C - Approval of Institutional Controls

3. RESTRICTIONS ON USE: The following covenants, conditions and restrictions apply to the use of the Property, run with the land, and are binding on the Owner:
- a. Residential Use Prohibited. No Residential development or use (as defined in the final Record of Decision for Operable Units 4 through 8 of the Libby Asbestos NPL site [ROD]) is allowed unless the requirements in subsection 3(c) are met. "Residential" includes, without limitation: permanent residential use; temporary residential use; limited residential use; short-term residential use; children's day care; mobile homes with or without footings; and mobile homes with or without a pad. It is the Port Authority's intent that this limitation be construed as broadly as possible to prohibit any type of residential use whatsoever unless the requirements in subsection 3(c) are met.
 - b. The Owner must provide the Montana Department of Environmental Quality ("DEQ") and DEQ's designated Operations and Maintenance Representative, the Lincoln County Asbestos Resource Program, with a written notice and plan before performing the restricted activities or permitting a restricted use in subsections 3(a) consistent with current and future Operations and Maintenance Plans and Operations and Maintenance Manuals pertaining to OU5. This written notice will include completing the Lincoln County Property Evaluation Notification, which is a regulation under the Lincoln County Board of Health. DEQ may request changes to any plan necessary to protect public health, safety, and welfare within 30 days of receiving the proposed plan. If DEQ does not respond within 30 calendar days from delivery of the written plan, DEQ waives its right to request changes and the plan is deemed accepted. Any plan must clearly describe the proposed activity and include the following provisions and requirements if necessitated by plans for residential development, excavation, and/or sample results that indicate presence of Libby Amphibole Asbestos above remedial action levels for indicated use:
 - i. Sampling results or a sampling plan, using EPA-approved protocols, sufficient to characterize the Libby Amphibole asbestos contamination for the portion of the Property upon which the proposed activity will occur, including in surface soil, buildings, or mitigation activities/best management practices that negate the need to sample;
 - ii. measures to be taken to ensure that the public is protected from exposure to asbestos (including wetting and other best management practices);
 - iii. if necessary, a plan for achieving the appropriate ROD cleanup level for asbestos for the portion of the Property upon which the proposed activity will occur;

- iv. identification of state and federal laws and regulations in place at the time of the proposed activity applicable to the transportation and disposal of any asbestos containing material if transportation and disposal are included as a component of the plan;
- v. personnel performing the proposed work must be required to have the appropriate OSHA Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training, and the appropriate asbestos mitigation techniques must be outlined to protect worker health and safety;
- vi. if a cover is utilized, provisions for its maintenance after the proposed work is complete; and
- vii. for a proposed change to residential use, the final approval determination from the Asbestos Resource Program provided for in Section 1.6.2 of the Final Operation and Maintenance Plan for Operable Unit 5 (O&M Plan) or the equivalent in any updated plan.

DEQ in its sole discretion has the right to waive any or all of these requirements where the proposed action described in the written plan does not directly or indirectly interfere with, is not inconsistent with, and does not hinder, delay, diminish or frustrate the implementation, effectiveness, purposes, integrity, or operation and maintenance of the remedy, or any remedial action under federal, state or local law or regulation.

Owner may take actions immediately necessary to address an emergency situation (e.g., a broken water main) without complying with the requirements of subsection 3(c). The Owner must provide written notification to DEQ within 72 hours after Owner's discovery of the emergency, unless the repairs are completed in areas cleared for commercial/recreational activities. The Owner must conduct emergency actions in a manner which protects workers and public health, safety, and welfare. Owner must submit a written notification in report form to DEQ within 30 calendar days after conducting the emergency response. The notification must describe the situation constituting the emergency, the response actions taken, and any issues that remain unaddressed.

- c. General Restrictions: Except as provided in subsections 3(b) or 3(c), prior to excavating; constructing; or disturbing any portion of the Property:
 - i. unless the Institutional Controls Implementation and Assurance Plan (ICIAP) does not require sampling, sampling using EPA-approved protocols for the reasonably anticipated future use of the Property;
 - ii. members of the public must be protected from exposure to asbestos (including wetting and other best management practices);
 - iii. all asbestos in soil above the relevant cleanup level (as outlined in the ROD, any post-ROD changes, and the Remedial Action Report for Operation Unit 5 of the Libby Asbestos Superfund Site) based upon the

reasonably anticipated future use of that portion of the Property must be managed, transported, and disposed to ensure protection of public health, safety, and welfare and the environment;

- iv. transportation and disposal of soil that contains asbestos must be consistent with then-current state and federal laws governing asbestos-containing waste/material (e.g., the requirements contained in ARM 17.74.369 or successor administrative rule or law), even if such requirements are not directly applicable;
- v. all workers with access to the areas of the Property where disturbance work is being conducted must have the appropriate OSHA Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training;
- vi. the health and safety of the excavation/construction workers must be managed by mitigating exposure to asbestos; and
- vii. any other requirements outlined in the most current version of the Libby Asbestos Superfund Site Operable Unit (OU) 5 or Sitewide ICIAP on file with the EPA.

EPA and DEQ in their sole and joint discretion have the right to waive any or all of these requirements where the proposed action described in the written plan does not directly or indirectly interfere with, is not inconsistent with, and does not hinder, delay, diminish or frustrate the implementation, effectiveness, purposes, integrity, or operation and maintenance of the remedy, or any remedial action under federal, state or local law or regulation.

4. PROTECTION OF THE REMEDY ABOVE OR ENCAPSULATING LEFT IN PLACE LIBBY AMPHIBOLE ASBESTOS CONTAMINATION: No action shall be permitted, taken, authorized, or allowed which directly or indirectly interferes with, is inconsistent with, or hinders, delays, diminishes or frustrates the implementation, effectiveness, purposes, integrity, or operation and maintenance of the remedy, or any remedial action required under federal, state or local law or regulation.
5. DEQ and EPA and their agents and all representatives and contractors of any person conducting DEQ or EPA-approved remedial actions on the Property will have the right to access the Property at all reasonable times. Nothing in this document limits or otherwise affects EPA or DEQ's rights of entry and access under state or federal law.
6. Any conveyance of all or a portion of the Property must clearly state that the conveyee is the intended beneficiary of these Institutional Controls. The conveyance shall specify that the remedy of "specific performance" will be available to DEQ for violations of these Institutional Controls. The conveyance shall also specify that at all times after Owner conveys its interest in the Property and no matter what person or entity is in title to or in possession of the Property, DEQ, EPA, and its agents shall retain the right to enter the Property at reasonable intervals and at reasonable times of the day in order to inspect for

violations of the Institutional Controls contained herein. Venue for enforcement of these Institutional Controls will be in the District Court of the First Judicial District.

7. The Port Authority must cause these Institutional Controls and any DEQ-approved modifications to be recorded in the office of the Clerk and Recorder of Lincoln County, Montana. These Institutional Controls apply in perpetuity and every subsequent instrument conveying an interest in all or any portion of the Property, including, but not limited to, deeds, leases and mortgages, must include a notice of the existence of these Institutional Controls and their recording reference. The notice must be in substantially this form:

NOTICE: THE INTEREST CONVEYED HEREBY IS SUBJECT TO AN INSTITUTIONAL CONTROL. Because of potential or known LA asbestos, development of residential activities on this property without the prior written approval of DEQ is not permitted. The full restrictions must be reviewed within the original Institutional Control, which is dated 3rd July 99 [date of approval] and recorded 3rd July 20 [date] in 301570 [recording reference], records of Lincoln County, Montana.

Within sixty (60) days of the date any such instrument or conveyance is executed, the Owner must provide EPA and DEQ with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference. Any conveyance of all or a portion of the Property must include a requirement to include the language in this paragraph in all future conveyances.

8. The Owner will notify DEQ and EPA of any proposed conveyance of all or a portion of the Property at least 30 days prior to any such conveyance. The Owner will provide notice to all potential purchasers by providing a copy of these Institutional Controls prior to the conveyance of all or a portion of the Property and must provide a copy of this notice to DEQ and EPA. Any conveyance by the Owner must require future owners to provide notice to all potential purchasers by providing a copy of these Institutional Controls prior to the conveyance of all or a portion of the Property and to provide a copy of the notice to DEQ and EPA.
9. DEQ and EPA need not be notified of conveyances of easements that are solely overhead (e.g., easements for utility lines) and do not involve any prohibited activities specified in Sections 3-5 of these Institutional Controls, and such conveyances do not need to include these Institutional Controls.
10. The rights provided to DEQ and EPA in these Institutional Controls include any successor agencies of DEQ and EPA.

11. Reserved Rights of Owner: Owner hereby reserves unto itself, its successors and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions and rights granted herein.

12. NOTICES: Notices to EPA and DEQ must either be served personally or sent by first class mail, postage prepaid, addressed as follows:

- a. EPA: Program Director, Remedial Response Program
U.S. Environmental Protection Agency Region 8
1595 Wynkoop Street
Denver, CO 80202

Director
U.S. Environmental Protection Agency Region 8 Montana Office
10 W. 15th Street, Suite 3200
Baucus Federal Building
Helena, MT 59626

- b. DEQ: Bureau Chief, Federal Superfund Bureau
Montana Department of Environmental Quality
Attn: Libby Asbestos Superfund Site
P.O. Box 200901
Helena, MT 59620-0901

Legal – Waste Management & Remediation Division
Montana Department of Environmental Quality
Attn: Libby Asbestos Superfund Site
P.O. Box 200901
Helena, MT 59620-0901

or the current address publicly listed for the EPA regional office or DEQ.

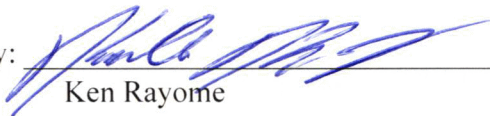
13. The interpretation and performance of this instrument will be governed by the laws of the United States and the laws of the State of Montana.

14. These Institutional Controls were approved by DEQ under the provisions of Section 75-10-727, MCA, on [date], as evidenced by the approval attached as Exhibit C. These Institutional Controls will run with the land and be binding on all successors in interest to the Property until the Institutional Controls are removed or modified in accordance with Section 75-10-727 MCA and recorded in the land records referenced in Section 10, above.

IN WITNESS WHEREOF, the Port Authority has executed this Declaration of Institutional Controls on Real Property effective as of the date written above.

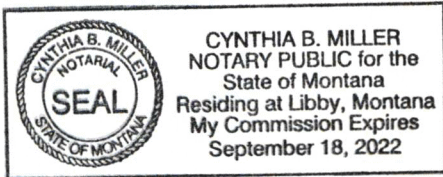
THE LINCOLN COUNTY PORT AUTHORITY

By: 
Jerry Bennett
Lincoln County Commissioner

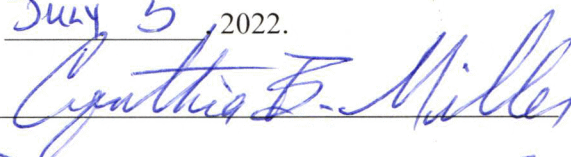
By: 
Ken Rayome
Director of Operations, Lincoln County Port Authority

State of Montana
County of Lincoln

This instrument was acknowledged before me on July 5, 2022.



(NOTARIAL SEAL)

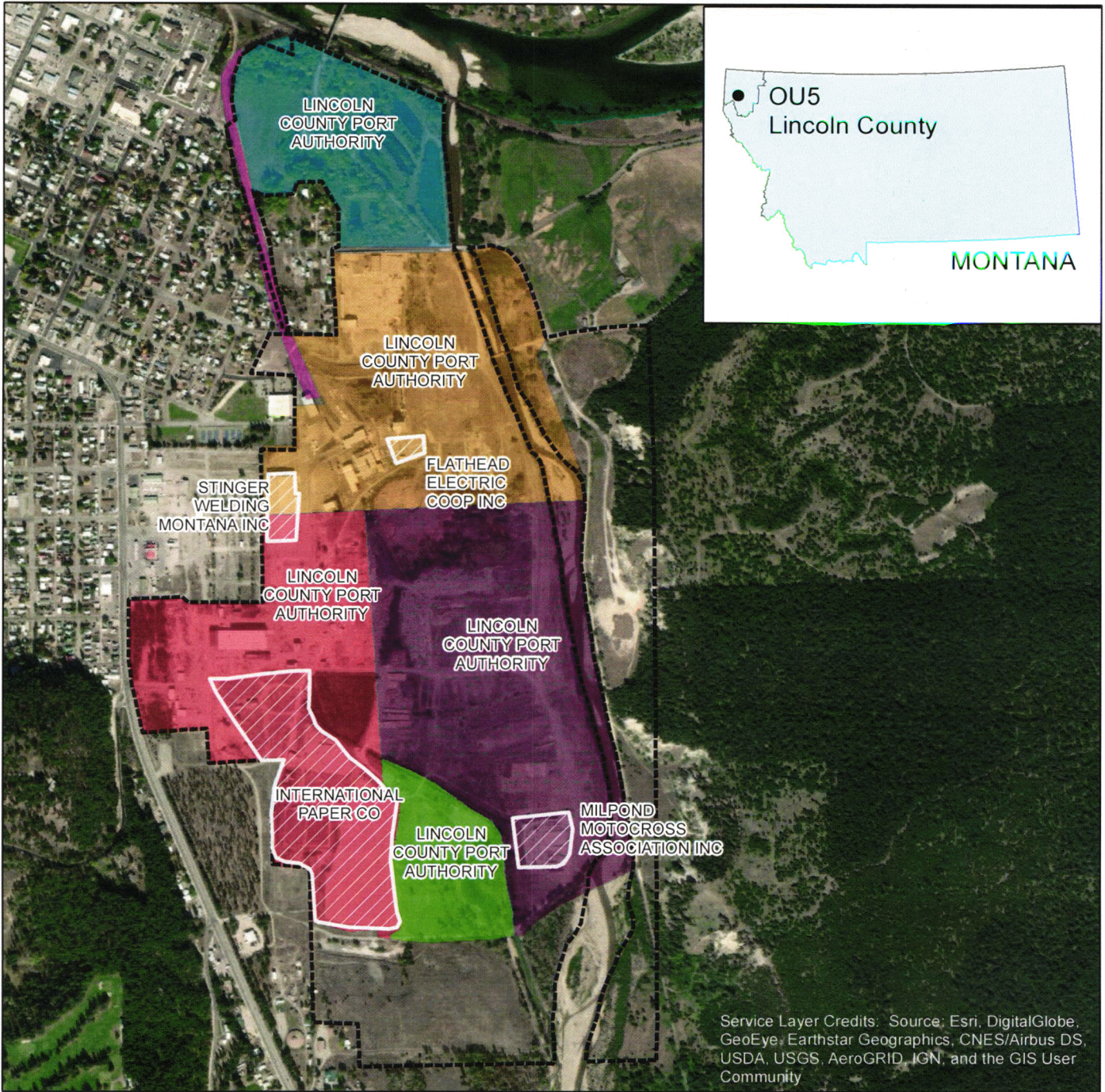
Notary Signature: 

Printed Name: _____

Notary Public for the State of Montana

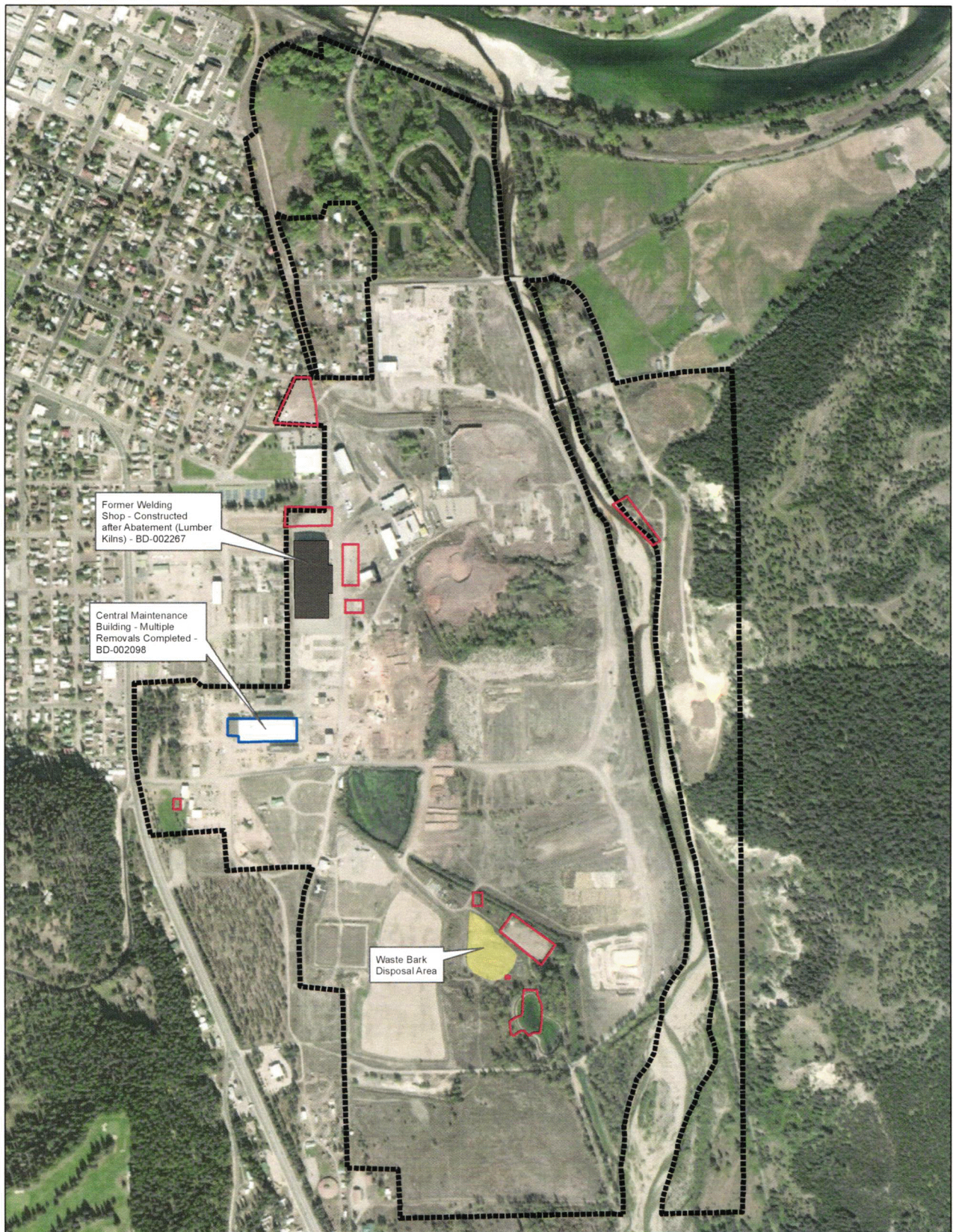
Residing at _____

My Commission expires: _____



Service Layer Credits: Source; Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

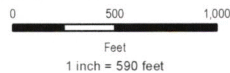
<p>LEGEND</p> <p> OU5 Boundary</p> <p> Private Property</p> <p>Property Use</p> <p> Storm Water Containment and Wastewater Lagoon Area</p> <p> Southwest Area</p> <p> Log Storage Area</p> <p> Lumber Yard</p> <p> Former Tree Nursery</p> <p> Railroad Spur</p>	<p align="center">EXHIBIT A PROPERTY DESCRIPTION LIBBY ASBESTOS SUPERFUND SITE LINCOLN COUNTY, MONTANA</p> <p align="center"> 0 1,000 2,000 Feet 1 inch = 1,100 feet </p> <p align="center"> </p> <p align="right"> Weston Solutions, Inc. 805 North Last Chance Gulch Helena, MT 59601 406-646-2401 www.westonsolutions.com </p>
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LEGEND

- New Building - No Remedial Action Required
- Encapsulated Building Material
- Soil Removal Action Area (Approximate Location)
- Soil Cap (Approximate Location)
- OU5 Boundary

EXHIBIT B
REMOVAL ACTION LOCATIONS
LIBBY ASBESTOS SUPERFUND SITE
LINCOLN COUNTY, MONTANA



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Weston Solutions, Inc.
 805 North Last Chance Gulch
 Helena, MT 59601
 406-646-2401
www.westonsolutions.com

EXHIBIT C:
MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY APPROVAL OF
INSTITUTIONAL CONTROLS

Upon execution by the authorized signatory below, in accordance with Montana Code Annotated Section 75-10-727, the Montana Department of Environmental Quality approves the institutional controls for the Lincoln County Port Authority Properties as set forth in the Declaration of Restrictive Covenants on Real Property located in Lincoln County, Montana, depicted on Exhibit A, and more particularly described as follows:

S10, T30 N, R31 W, C.O.S. 4090, PARCEL B&C, ACRES 145.709, & CS 4616
PARCEL B & TRS 5B, 5BA, 5BD

S11, T30 N, R31 W, ACRES 143.37, TRACTS 1 & 1C IN W2W2

S03, T30 N, R31 W, ACRES 30.547, TRS 2 2AD & 2AG IN SESE PLYWOOD PLANT
(016-05E)

S03, T30 N, R31 W, ACRES 2.298, TR 2A4A IN NWSE PLAT 886 *9843*

EAST LIBBY, S03, T30 N, R31 W, BLOCK 4, PART LOTS 16-17-18 ALL LOTS 19-
20-21-22 *9847*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 004, Lot 001, ACRES 0.29,
9848

EAST LIBBY ACREAGE, S03, T30 N, R31 W, ACRES 32.62, ALL BLOCK 1 *9849*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 2 & 2A, ACRES 4.65, & TR
2Z3 in W2SWNESE PLAT 156 *9851*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 003, Lot 001, ACRES 1.06,
PLAT 122 *9853*

EAST LIBBY ACREAGE, S03, T30 N, R31 W, BLOCK 5, ACRES 9.8498, &
YOUNG&ROGERS PART of LOT 1 & R/W & TRS -22AC-22A1-2AEC1-2AEC2 in
SE *9856*

EAST LIBBY AMENDED, S03, T30 N, R31 W, BLOCK 5, ACRES 0.61, 50' RR R/W
THRU LOTS 1 8 9 10 & 12 *9859*

S03, T30 N, R31 W, C.O.S. 3954, PARCEL 2, ACRES 1.382, *13267*

EAST LIBBY AMENDED, S03, T30 N, R31 W, BLOCK 6, Lot 1 - 3, ACRES 7.589, &
PART OF LOTS 5-7 & TR 2L *18447*

S02, T30 N, R31 W, C.O.S. 3267, PARCEL B, 25.921 ACRES *54330*

Amy M Steinmetz

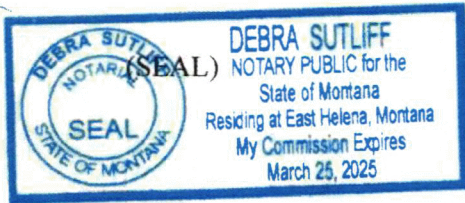
By: Amy Steinmetz
DEQ Waste Management & Remediation Division Administrator

STATE OF MONTANA
COUNTY OF LEWIS AND CLARK

On this the 17 day of June, 2022, before me, a Notary Public in and for the State of Montana, personally appeared Amy Steinmetz, the Waste Management & Remediation Division Administrator of DEQ. Known to me or satisfactorily proven to be the person(s) who executed this Montana Department of Environmental Quality Approval of Institutional Controls, and acknowledged that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my notarial seal on the day and year first above written.

Notary: *Debra Sutliff*
Printed Name: Debra Sutliff
Notary Public for the State of Montana



My Commission Expires: March 25, 2025

APPENDIX D PEN REGULATION

HEALTH AND ENVIRONMENT REGULATIONS
CHAPTER 1: Control of Air Pollution
Subchapter 2: Libby Amphibole (LA) Property Evaluation Notification (PEN)

Date Adopted: March 11, 2020

Date Effective: *to be determined*

I. REGULATION, AUTHORITY AND PURPOSE

- A. The City/County Board of Health for Lincoln County (Board of Health) was created as the Local Board of Health for Lincoln County by an Inter-local Agreement between the City of Libby and Lincoln County with authority under Mont Code Ann. § 50-2116(2)(c)(v)(A) to enact public health regulations to protect public health, safety, and welfare and to facilitate Institutional Controls selected by the United States Environmental Protection Agency (USEPA) and Montana Department of Environmental Quality (DEQ) for the Libby Asbestos Superfund Site.
- B. The Board of Health finds there is a threat to public health, safety, and welfare posed by the environmental conditions that led the USEPA to designate the Libby Asbestos Superfund Site. That threat was largely mitigated by completion of remedial actions performed by the USEPA. The remedial action included leaving some contamination in place. As such, the final remedial action condition as well as ongoing and future changes on properties must be maintained to ensure protectiveness of the remedy.
- C. The Board of Health collaborates with the DEQ and the USEPA to continue to protect public health, safety, and welfare by ensuring that the Libby Asbestos Superfund Site remedies remain protective and LA asbestos is properly managed to ensure protectiveness of the remedy.
- D. The Lincoln County Asbestos Resource Program (ARP) is a Board of Health directed public health program that was established in 2012 with the mission of reducing potential exposure to LA asbestos that is found within the Libby Asbestos Superfund Site and the surrounding areas of Lincoln County. A key goal of the Board of Health directed ARP to minimize burden on the community members themselves. The program was developed by the USEPA as a pilot study as the Environmental Resource Specialist (ERS) program and through a cooperative agreement passed on to Lincoln County ARP program in January 2014 and modified under the guidance of the Board of Health to its current program under the guidance of the Board of Health and is currently funded through a cooperative agreement/grant from the USEPA.
- E. DEQ is responsible for future Operation and Maintenance (O&M) of the Site, and funding from DEQ is anticipated for ARP to support O&M activities.
- F. The Board of Health has chosen to implement this Property Evaluation Notification Regulation pursuant to its authority under Mont Code Ann. § 50-2-116(2)(c)(v)(A) to protect public health, safety, and welfare.

II. GENERAL PROVISIONS

- A. Title: These regulations shall be known as the “LIBBY AMPHIBOLE (LA) ASBESTOS PROPERTY EVALUATION NOTIFICATION (PEN)”.

- B. Authority: Authorization for these regulations is through Montana Code Annotated (MCA) § 50-2-116(2)(c)(v)(A).
- C. Purpose: The purpose of this regulation is to reduce the possibility of the public's exposure to LA asbestos as a result of Applicable Activities, as defined in Definitions in Section F.2 of this regulation. These activities shall be referred to as Applicable Activities. This PEN regulation is focused on providing LA asbestos property information, data, education, and evaluations to protect the public during Applicable Activities. This PEN regulation is an institutional control listed within the Operating Unit 4 and Operating Unit 7 Institutional Control Implementation and Assurance Plan (ICIAP). Note that this PEN regulation is separate from the Montana Asbestos Control Act, DEQ Asbestos Control Program requirements, or other due diligence processes, and does not replace or supersede the associated regulations on asbestos in Montana.
- D. Contingent Applicability: Implementation and execution of this regulation is dependent upon the existence and continued functionality and funding of the ARP. Similarly, success of the ARP is highly dependent upon the existence of this regulation. If the ARP ceases to exist or is unable to effectively function from lack of funding or other reasons, then this regulation will be suspended until the ARP, or other BOH designated organization, is functional and able to again support implementation and execution. Such suspension shall not be effective until the Board of Health affirmatively votes to suspend this regulation.
- E. Jurisdiction: This LA PEN regulation governs activities within the Libby Asbestos Superfund Site National Priorities List boundary which is composed of eight Operable Units, all of which are located in Lincoln County, Montana. Jurisdiction includes Operable Units 1, 2, 4, 5, and 7. Operable Unit 3 (the Former Libby Vermiculite Mine), Operable Unit 6 (Burlington Northern Santa Fe Railroad and Rail corridors) and Operable Unit 8 (Roadways) are excluded from the requirements of this LA PEN regulation. Descriptions of the jurisdictional areas included within each Operable Unit governed by this PEN regulation are detailed in each respective Record of Decision and summarized below:
1. Operable Unit 1 is the former Export Plant, and is situated on the south side of the Kootenai River, just north of the downtown area of the City of Libby, Montana. OU1 includes the embankments of Montana Highway 37, the former Export Plant, and the Riverside Park. The property is bounded by the Kootenai River on the north, Highway 37 on the east, the Burlington Northern Santa Fe railroad thoroughfare on the south, and the State of Montana property on the West (EPA, May 2010a). These areas and boundaries are shown the Operable Unit 1 Record of Decision Exhibit 2-2 (EPA, May 2010a). Currently in the final stages of Deletion from the NPL.
 2. Operable Unit 2 includes area impacted by contamination released from the former Screening Plant. These areas include the former Screening Plant, the Flyway property, a privately-owned property, and the Rainy Creek Road Frontage and Highway 37 right-of-way adjacent to Rainy Creek Road (EPA, May 2010b). These areas and boundaries are shown in the Operable Unit 2 Record of Decision Exhibit 22 (EPA, May 2010b). Formally Deleted from the NPL on April 10, 2019.

3. Operable Unit 4 is called Libby Residential/Commercial areas. Operable Unit 4 is defined as the residential, commercial, industrial (not associated with Grace Mining Operations), and public properties, including schools and parks, in and around the City of Libby (EPA, February 2016). The boundaries for Operable Unit 4 are shown in Exhibit 1-2, Figure 1-2, and Figures 5-2 through 5-16 in the Operable Unit 4 through 8 Record of Decision (EPA, February 2016).
4. Operable Unit 5 is called the Former Stimson Lumber Company. Operable Unit 5 is defined geographically by the parcel of land that included the former Stimson Lumber Company. OU5 is bounded by the high bank of Libby Creek to the east, the Burlington Northern Santa Fe railroad to the north, and properties within Operable Unit 4 to the south and west (EPA, February 2016). The boundaries for Operable Unit 5 are shown in Exhibit 1-2, Figure 1-2, and Figures 5-17a through 5-17b in the Operable Unit 4 through 8 Record of Decision (EPA, February 2016).
5. Operable Unit 7 is called Town of Troy, and is defined as the residential, commercial, and public properties in and around the Town of Troy, Montana located 20 miles west of downtown Libby (EPA, February 2016). The boundaries for Operable Unit 7 are shown in Exhibit 1-2, Figure 1-2, and Figures 5-21 through 5-25 in the Operable Unit 4 through 8 Record of Decision (EPA, February 2016).

F. Definitions: The following definitions shall apply in the interpretation and enforcement of this regulation. The word "shall" as used in this regulation indicates a mandatory requirement.

1. LA asbestos is specific to the form of naturally occurring amphibole asbestos comprised of a range of mineral types and morphologies, and associated with the Libby vermiculite deposits in the region near the Libby Asbestos Superfund Site (EPA, February 2016). LA asbestos forms durable, long, thin structures that are generally respirable, can reasonably be expected to cause disease, and is considered to be the contaminant of concern at the Libby Asbestos Superfund Site (EPA, February 2016).
2. "Applicable Activities" means activities related to real property to include:
 - a. Excavation, grading, and landscaping;
 - b. Interior or exterior demolition, repair, modification, disturbance of material, or remodeling of permanent or temporary structures;
 - c. Transfer of real property regardless of whether any comfort letter has been issued by USEPA or any other agency;
 - d. Change in Land Use Category or Property Use Area as used in Sections 2.3 and 4.2 of the *Remedial Design Report, Revision 1, Libby Asbestos Site Operable Units 4 & 7* (April 5, 2017); and
 - e. Any dividing of land, including through subdivision, family transfer, Court-ordered division, or other division of land.
3. "LA Asbestos Property Evaluation" means a required evaluation, performed by the ARP, to include evaluation of data and information related to LA asbestos based on the notification by a property owner or interested party who has submitted a PEN due to planned Applicable Activities within the jurisdiction

(Section E above). The LA Asbestos Property Evaluation will be performed by the ARP to provide information relative to the potential for LA Asbestos exposure related to the Applicable Activity as detailed. This regulation details the PEN notification requirements and the associated LA Asbestos Property Evaluation elements to be provided in an effort to protect the remedy and public health.

4. “Days” means business days (i.e., Monday, Tuesday, Wednesday, Thursday, and Friday), excluding holidays observed by Lincoln County and ARP.
 5. “Person” is any individual, institution, partnership, business, corporation, association, or other private or government entity.
 6. “Property” is real property that is fixed property, principally land and structures. This regulation applies to the Applicable Activities related to real property within the jurisdiction.
- G. Severability: If any provision of this Regulation is declared invalid by any court or tribunal, the remaining provisions of this Regulation shall not be affected thereby.

III. LIBBY AMPHIBOLE ASBESTOS PROPERTY NOTIFICATION PROCESS

- A. LA Asbestos Property Evaluation Notification (PEN) Process Requirements: Prior to performing Applicable Activities within the above defined jurisdiction, a person is required to notify the ARP of the proposed Applicable Activities through the PEN process.
- B. Applicability Specifics:
1. The following Applicable Activities within the jurisdiction require a PEN:
 - a. Excavation, grading, and landscaping;
 - b. Interior or exterior demolition, repair, modification, disturbance of material, or remodeling of permanent or temporary structures;
 - c. Transfer of real property regardless of whether any comfort letter has been issued by USEPA or any other agency;
 - d. Change in Land Use Category or Property Use Area as used in Sections 2.3 and 4.2 of the *Remedial Design Report, Revision 1, Libby Asbestos Site Operable Units 4 & 7* (April 5, 2017); and
 - e. Any dividing of land, including through subdivision, family transfer, Court-ordered division, or other division of land.
 2. In addition to the defined Applicable Activities, the following activities within the jurisdiction also require a PEN:
 - a. These requirements are applicable to modification or construction of wastewater systems requiring disturbance of surface or subsurface soils.
 - b. These requirements are applicable to any division of property, including through subdivision, family transfer, Court-ordered division, or other division of land. Subdivision definitions, requirements, and permits are authorized by separate entities and regulations. The Lincoln County Subdivision regulations contain specific requirements related to

examination of potential LA related issues as a condition of approval of the subdivision. Division of property exempt from the Subdivision regulations is however an Applicable Activity requiring a PEN.

- c. These requirements are applicable to government entities performing Applicable Activities within the jurisdiction.
 - d. Emergency response activities (such as floods, fires, natural disasters, building collapse, sinkholes, earthquakes, etc.) where the excavation, modification, or demolition activities are conducted in response to a property emergency. In this case, the ability to submit a PEN form beforehand is not feasible. Thus, the property owner shall notify ARP of the emergency response activity within three (3) business days to determine if a post-facto PEN notification or inspection is required.
3. Exclusions to PEN Process include the following:
- a. Remodeling activities that are cosmetic in nature (e.g. wallpaper installation or removal, carpet installation or removal, painting, installing built-in furniture, etc.) that will not disturb the existing interior flooring (excluding carpet), interior walls, ceilings, structural elements, exterior siding, roofing, foundations, utility penetrations or insulation;
 - b. Exterior landscaping or remodeling that will not disturb surface or subsurface soil (e.g., concrete repair/staining, replace slats on decking, staining or painting fencing, etc.); or
 - c. Emergency response activities (such as floods, fires, natural disasters, building collapse, sinkholes, earthquakes, etc.) where the excavation, modification, or demolition activities are conducted in response to a property emergency. In this case, the ARP shall be notified the next business day to determine if a post-facto PEN notification or inspection is required.
- C. PEN Requirements: The notification of intent to perform Applicable Activities for a property shall be made to the ARP by the owner of the property, or the owner's authorized agent, on a form provided by the ARP (electronic or hard-copy) and/or through the Montana811 utility locate request process.
1. Notification for those Applicable Activities regulated by Montana811 through MCA Title 69, Chapter 4, Part 5 are automatically notified to the ARP when submitted through the Montana811 notification process and will serve as notification to ARP relative to the PEN process. If activities are limited to those regulated by Montana811 then no additional PEN-specific ARP form is required.
 2. Applicable Activities not captured under Montana811 Notifications within the jurisdiction will require preparation and submittal of the ARP PEN form signed and dated by the applicant, and will include the following information, at a minimum:
 - a. The name, address, email address, and telephone number of the person who owns the real property;
 - b. The name, address, email address and telephone number of the person submitting the PEN.
 - c. The physical address of the property or a legal description if a physical address is not assigned where the Applicable Activity will take place;

- d. The name, address, email address, and phone number of the person who will be responsible for performing the Applicable Activity, if it is not the owner of the real property. If a contractor is to be used, provide their name, address, telephone number, and any asbestos related credentials or certifications;
- e. Confirmation that Montana811 has been notified, if applicable; and
- f. A description of the proposed activity, including:
 - i. The general nature and extent of the project including the project objective, including a specific statement regarding whether division of property is an objective;
 - ii. Estimated location, mass, area, and volume (as applicable) of the media or building materials that will be disturbed or removed;
 - iii. If already proposed, any mitigating or best management practices that are planned to reduce or eliminate the exposure to LA asbestos and/or vermiculite, if anticipated, and measures to reduce the generation of dust;
 - iv. Planned activities for transporting and disposing of building materials, soil, waste, disturbed materials, and potential LA asbestos and/or vermiculite; and
 - v. If the Applicable Activity is the sale of real property or change in Land Use Category, the description should state “sale of property” or “Change in Land Use Category”.

D. Fee: No fee will be associated with a PEN for the owner or person submitting the notification.

E. PEN and LA Asbestos Property Evaluation Process: PEN forms shall be submitted to ARP and a subsequent LA Asbestos Property Evaluation conducted. In addition to the “ARP Required Response” outlined in Section III.E. below, ARP is authorized to do none, any, or all of the following activities in response to a PEN submission:

1. Collection of prior information related to LA investigations, inspections, site records, evaluations, designs, remedies, communications, etc. as may be available from EPA documents and database, DEQ Libby Instance Response Manager database, or other accessible sources;
2. Site observations, including reference to available maps/figures and other available records, and an ARP site visit of the subject property (on or near the property depending on access permission granted by the owner);
3. Discussion with owner, PEN applicant, or contractor representatives related to property conditions and proposed activities;
4. An evaluation of prior information and site observations in relation to former and current land use, existing conditions, future land use, and proposed activities at the property;
5. Summarization of collected information, site observations, evaluations;
6. Recommendations as may be specific to the Subdivision approval process for follow up activities, such as sampling, evaluations, and cleanups;

7. Recommendations for Best Management Practices, available resources to support the activity, and informational/educational materials;
8. Follow up site visit, if applicable;
9. Dialog and communication summary;
10. Assistance in identifying a remediation contractor, if applicable;
11. Guidance related to possible mitigation of expenses for the incremental cost to the project attributable to the presence of LA;
12. Evaluations and/or recommendations specific to the Subdivision review and approval process;
13. Updates to property evaluation and pertinent applicable activities or inspections will be uploaded and tracked by ARP in the DEQ Libby Instance Response Manager database.

F. ARP Required Response:

1. Notifications shall be submitted at least three (3) full business days prior to the initiation of Applicable Activities. Once notified, the ARP has two full business days to discuss activities to be performed and to respond by giving the current property status. Day one begins the next operating business day after the PEN form submittal to the ARP. The timeline for ARP's discussion with the applicant is based on expected circumstances. If there are unforeseen circumstances, ARP will provide notice to the applicant of a modified timeline.
2. Once a complete PEN form is submitted, the ARP shall review the notification and perform the ARP LA Asbestos Property Evaluation to assess the potential for LA asbestos exposure based on previous LA asbestos evaluations, remedies, and inspections. If the PEN notification is incomplete, the ARP may request additional information prior to performing or completing their Evaluation.
3. Notifications to ARP are separate from, and not limited to, other required notifications under local, county, state, or federal law.

G. Evaluation Reporting: Upon completion of the LA Asbestos Property Evaluation, the ARP will communicate the findings to the applicant and/or owner, and document the communication. Different PEN deliverables will be offered according to the applicable activity:

1. Response for excavation, grading, landscaping activities: After receiving a completed PEN form, a phone call and/or email to the PEN requestor explaining the current status of the property will suffice as a completed PEN response. Confirmation that Montana811 utility locate has been notified of planned digging activity will be requested. Please see Section III B (1) for details on Montana811 utility locates and the PEN notification. If follow-up is needed, an additional evaluation performed by ARP may be conducted. An additional phone call, email

and/or letter would summarize the findings of this additional evaluation and any additional steps that need to be taken. Best management practices and guidance for disposal, relevant to the applicable activity, will be shared with the PEN requestor. A summary of PEN activities, and associated records or documents, will be retained in DEQ and/or ARP databases or files.

2. Response for interior/exterior demolition, repair, modification, disturbance of material, or remodeling to permanent or temporary structures: After receiving a completed PEN form, a phone call and/or email to the PEN requestor explaining the current status of the property will suffice as a completed PEN response. If follow-up is needed, an additional evaluation performed by ARP may be conducted. An email and/or letter would summarize the findings of this additional evaluation and any additional steps that need to be taken. Best management practices and guidance for disposal, relevant to the applicable activity, will be shared with the PEN requestor. A summary of PEN activities, and associated records or documents, will be retained in DEQ and/or ARP databases or files.
3. Response for sale of real property: After receiving a completed PEN form, a phone call and/or email to the PEN requestor explaining the current status of the property will suffice as a completed PEN response. After communicating with the buyer and/or seller of real property, ARP will develop a letter detailing the current status of the property and activities performed on the property during cleanup. The letter can be delivered electronically or by mail. See Section E 3(G) on Disclosure of LA Asbestos Property Evaluation in Sale of Property. Maintenance requirements for installed engineering controls, relevant to the specific remedy on the property, will be shared with the PEN requestor. A summary of PEN activities, and associated records or documents, will be retained in DEQ and/or ARP databases or files.
4. Response for Change in Land Use Category or Property Use Area: After receiving a completed PEN form, ARP will make a phone call and/or send an email to the PEN requestor explain the current status of the property. An additional evaluation performed by ARP may be required which entails the analysis of previous sampling, if any, within the proposed work area, researching property files of surrounding properties near the proposed work area, and a visual soil inspection of the work areas. A detailed report summarizing the findings of this additional evaluation, along with an ARP recommendation for any additional steps that need to be taken will be given to the PEN requestor. Best management practices and guidance for disposal, relevant to the applicable activity, will be shared with the PEN requestor. A summary of PEN activities, and associated records or documents, will be retained in DEQ and/or ARP databases or files.
5. Response for any division of property, including through subdivision, family transfer, Court-ordered division, or other division of land: The Lincoln County Subdivision Regulations require an APR evaluation initiated through a PEN submission as part of the subdivision application review. After receiving a completed PEN form, ARP will make a phone call and/or email to the PEN requestor explaining the current status of the property. An additional evaluation performed by ARP is required which entails the analysis of previous sampling, if any, within the proposed work area, researching property files of surrounding

properties near the work area and a visual soil inspection of the proposed work areas. A detailed report summarizing the findings of this additional evaluation, along with an ARP recommendation and any additional steps that need to be taken will be given to the PEN requestor. This letter may be included in the new subdivision package for the County Planner to receive. Best management practices and guidance for disposal, relevant to the applicable activity, will be shared with the PEN requestor. A summary of PEN activities, and associated records or documents, will be retained in DEQ and/or ARP databases or files.

- H. Disclosure of LA Asbestos Property Evaluation in Sale of Property: Sellers of real property shall submit a PEN application as outlined in Section III.B.2. above. Sellers shall provide a copy of the resulting LA Asbestos Property Evaluation to any buyer, or buyer's agent, prior to sale of seller's property. At buyer's request, seller shall also provide a copy of the resulting LA Asbestos Property Evaluation to any third parties (for example, lending institutions, insurers, etc.).
- I. Individuals not performing Applicable Activities, but who wish to obtain a LA Asbestos Property Evaluation for a property, may contact ARP to submit a request for a LA Asbestos Property Evaluation. ARP, at its discretion, may initiate the PEN process on any property within the jurisdiction of this regulation. Those LA Asbestos Property Evaluation will be processed based on ARP availability.
- J. Penalties: Violations of any provision of this regulation is counter to the USEPA Libby Asbestos Superfund Site remedy, operation and maintenance, and institutional control measures. Violations of this notification could result in exposure to or spreading of LA contamination and may be subject to enforcement provisions by the BOH under MCA § 50-2-124. Failure to comply may exclude consideration of any financial assistance that may be available.
- K. Effective Date: Once the regulation is adopted by the City/County Board of Health for Lincoln County, the requirements of this regulation shall not become effective until the City/County Board of Health for Lincoln County passes a resolution stating the effective date of this regulation.

IV. REFERENCES

EPA, 2010a. *Record of Decision for Libby Asbestos Superfund Site, The Former Export Plant Operable Unit 1*. Libby Asbestos Site, Libby, Montana. Prepared for the EPA by CDM Federal Programs Corporation. EPA Document: 1154081.

EPA, 2010b. *Record of Decision for Libby Asbestos Superfund Site, The Former Screening Plant and Surrounding Properties Operable Unit 2*. Libby Asbestos Site, Libby, Montana. Prepared for the EPA by CDM Federal Programs Corporation. EPA Document: 1154082.

EPA, 2016. *Record of Decision for Libby Asbestos Superfund Site – Libby and Troy Residential and Commercial Properties, Parks and Schools, Transportation Corridors, and Industrial Park – Operable Units 4 through 8*. Libby Asbestos Site, Libby, Montana. Prepared for the EPA by CDM Federal Programs Corporation. EPA Document: 1563024.

EPA, 2020. *Operable Units 4 and 7, Institutional Control Implementation and Assurance Plan*. Libby Asbestos Superfund Site, Libby, Montana. Prepared for the EPA by CDM Smith. EPA Document: (to be determined). *In preparation*.

EPA, 2020. *Operable Units 4 and 7, Operations and Maintenance Plan*. Libby Asbestos Superfund Site, Libby and Troy Residential and Commercial Properties, Parks, and Schools. Prepared for the EPA by CDM Federal Programs Corporation. EPA Document: (to be determined). *In preparation*.

DEQ, 2020. *Operable Units 4 and 7, Operations and Maintenance Manual*. Libby Asbestos Superfund Site. Prepared for DEQ by Weston Inc. *In preparation*.

Lincoln County, 2019. *Lincoln County Subdivision Regulations*. Prepared to comply with the Montana Subdivision and Platting Act.

APPENDIX E MDT ENCROACHMENT PERMIT ADDENDUM

**ADDENDUM TO MDT APPROACH AND ENCROACHMENT/OCCUPANCY PERMIT
NOTIFICATION OF LIBBY AMPHIBOLE ASBESTOS**

MDT right-of-way surface soil located within the boundaries of the Libby Asbestos National Priorities List Superfund site and in yet unidentified areas of MDT right-of-way in Lincoln County, Montana may contain ubiquitous amounts of amphibole asbestos contamination. This contamination is primarily sourced from the historic mining, processing, and transport of vermiculite from the former W.R. Grace Mine located north of Libby, MT. The releases of Libby amphibole asbestos (LA) to the environment have caused a range of adverse health effects in exposed people, including not only workers at the mine and processing facilities, but also residents of Lincoln County.

Testing by MDT and the U.S. Environmental Protection Agency (EPA) has confirmed the presence of LA in both asphalt aggregate and in MDT right-of way surface soil on MT 37 north of the Kootenai River Bridge to past the junction with Rainy Creek Road. Though not yet tested, LA may also be present in trees and vegetation. Testing also indicates that other transportation corridors in Lincoln Co. also contain varying amounts of LA in both surface soil and vegetation. Testing also indicates that other transportation corridors in Lincoln County also contain varying amounts of LA asbestos in both soil and vegetation.

(Name of Permittee) is hereby put on notice that undiscovered areas of LA contamination may be present in MDT right-of-way surface soil in the permit area. Permittee should take all appropriate precautions to guard against potential exposure to LA contamination by its agents, employees, or other third parties while conducting any soil or vegetation disturbance in MDT right-of-way in the permit area. Permittee shall notify the **Lincoln County Asbestos Resource Program (ARP)** to report any planned disturbance of soil or vegetation within the permit area, at **(406) 291-5335**. For additional information or questions, Permittee may contact the ARP or MDT Environmental Services in Helena, MT at (406) 444-3423.

Permittee, its agents and employees, agree to protect, defend and indemnify the State of Montana, MDT, its agents, and employees, and save and hold each of them harmless from and against all claims, demands and causes of action of any kind or character, including defense costs, arising from activities conducted under this permit, from any claims or causes of action from the Permittee's agents, employees, or other third parties arising from or allegedly due to activities under this permit, and from any claims, demands and causes of action of any kind or character, including defense costs, or damages due to or allegedly caused to any third parties for personal injuries, property damage, loss of life or property, civil penalties, or criminal fines resulting from or in any way connected with activities pertaining to this permit.

This Addendum constitutes an addition to said permit. All other provisions of said permit remain unchanged.

APPENDIX F OU1 RIVERFRONT PARK EXCAVATION APPLICATION

Riverfront Park Excavation Application

Date of submittal: _____ Date work will start: _____

Name of Performing Party: _____

Purpose of the work: _____

Does purpose of work include excavation? Yes No

Will excavation be greater than 18 inches? Yes No

Will all spoils be removed from the site? Yes No

 If Yes: Disposal of spoils will be coordinated with Lincoln County Asbestos Resource Program (ARP)

 If No: Follow best management practices (BMPs) to replace soil back into the excavation. (Follow light pole SOW for an example of BMPs)

Will additional soil be placed on the surface? Yes No

Are the soils from an approved source? Yes No

Please indicate on the map (page 2) where the excavation will take place.

Following questions to be completed by city representative:

Will proposed excavation breach cap? Yes No If Yes: contact ARP

Reviewed by:

Signature: _____
City of Libby representative

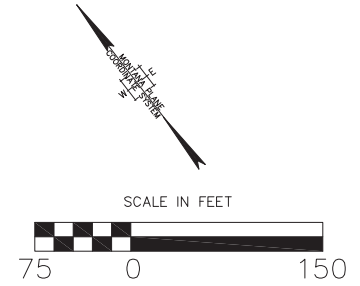
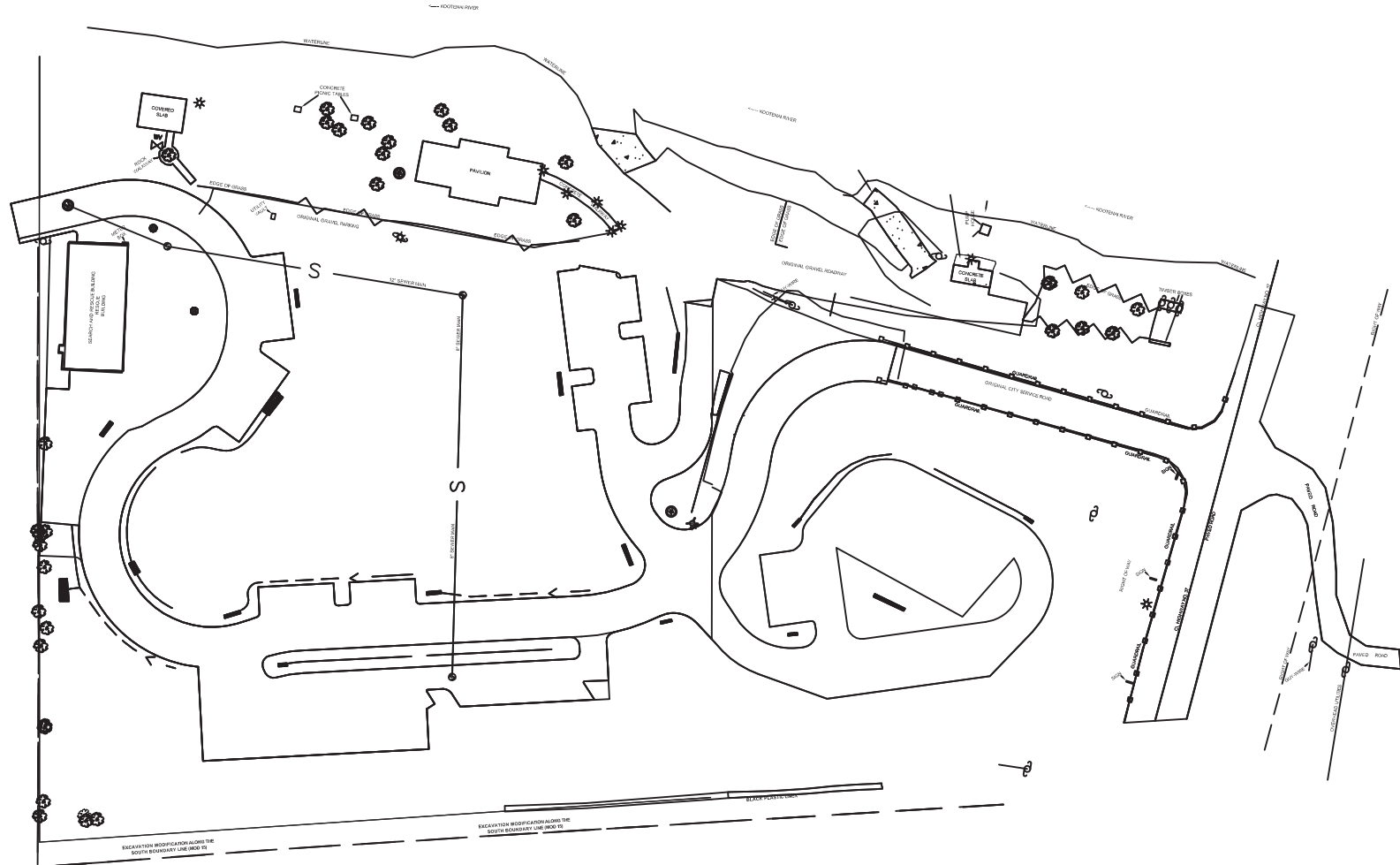
Date: _____

Signature: _____
Lincoln County Asbestos Resource Program

Date: _____

Riverfront Park Excavation Application

OU1 Overview Map



APPENDIX G SITEWIDE ICIAP RESPONSIVENESS SUMMARY

OU4/OU7 ICIAP RESPONSIVENESS SUMMARY

1.0 PUBLIC AND STAKEHOLDER COMMENTS ON THE DRAFT FINAL OU4/OU7 INSTITUTIONAL CONTROL IMPLEMENTATION AND ASSURANCE PLAN

A total of 134 comments were received from 15 stakeholders specific to the Final Draft Operable Unit 4/7 (OU4/OU7) Institutional Control Implementation and Assurance Plan (ICIAP) for the Libby Asbestos Superfund Site (Site). The number that each party submitted is summarized below.

- 10 citizens – 21 comments
- Senator Mike Cuffe – 3 comments
- City-County Board of Health for Lincoln County, Institutional Control Steering Committee, Lincoln County Asbestos Resource Program (Submitted collaboratively) – 109 comments
- Montana Department of Environmental Quality (DEQ) – 1 comment

Out of 134 comments received on the Draft Final OU4/OU7 ICIAP, a majority of the comments were from the City-County Board of Health for Lincoln County, Institutional Control Steering Committee, Lincoln County Asbestos Resource Program (ARP) who jointly provided comments and were editorial in nature regarding specific text within the document. Those editorial suggestions were considered and revised as appropriate to text within the final ICIAP. The remainder of the comments received primarily fall within the following categories: Length of comment period, responsiveness, remaining risk/fire impacts, funding, restrictiveness. A list of the most common comments are presented within this section. A summary of the response to these comments is provided in Section 2.

Frequent Comments

1. Length of public comment period/Responsiveness from agencies/public awareness
2. Remaining Risk from Libby amphibole asbestos (LA) Exposure/Wildfire/Structure Fire Impacts
3. Funding/financial burden of institutional controls (ICs)
4. Restrictiveness of ICs

2.0 RESPONSE TO COMMENTS NARRATIVE

2.1 Length of Public Comment Period/Responsiveness from Agencies/Public Awareness

The agencies received a number of comments concerning a lack of responsiveness by the agencies (U.S. Environmental Protection Agency [EPA], DEQ and various Lincoln County managers). The formal public comment period is designed to collect all comments, and then provide a comprehensive response after the end of that period. The *Record of Decision for Libby Asbestos Superfund Site, Libby and Troy Residential and Commercial Properties, Parks and Schools, Transportation Corridors, Industrial Park, Operable Units 4-8, Lincoln County, Montana* (ROD) clarified that a public comment period would be made available once ICs for the Site had been identified and incorporated into an ICIAP document. Since the ICIAP and the operations and maintenance (O&M) plan are closely related, any comments received during both comment periods were considered in finalizing these plans. The public comment period of 60 days was announced in

three local newspapers. The EPA published a fact sheet summarizing information in the ICIAP and provided contact information on how to formally submit comments in the local newspapers, the fact sheet, and on the EPA website. Additionally, EPA agreed to assist in hosting a public meeting following completion of the ICIAP and O&M plan, to discuss additional questions and concerns from the community.

2.2 Remaining Risk from LA Exposure

The human health risk assessment (HHRA) was comprehensive and is the basis for determining what level of contamination posed an unacceptable risk at the Site. EPA developed a remedy, remedial action levels, and clearance criteria in the ROD that are intended to be protective of human health and the environment. ICs are a large component of the remedy listed within the ROD, and were established in part to address residual risks to human health presented in the HHRA. EPA reviewed the work completed within OU4 and OU7 and found the remedy to be complete. Over 8,000 properties were evaluated and more than 2,600 had a response action completed. The IC program was developed with the goal of requiring minimal restrictions and to provide assistance and information to educate the public and protect the remedy to guard against areas becoming re-contaminated.

Periodic monitoring includes annual inspections, which involves interviews, record reviews, and site inspections. Asbestos health surveillance is outside the scope of EPA and DEQ, and thus is outside the scope of the ICIAP. Ambient air monitoring at the Site was conducted from 2006 to 2013 by EPA and DEQ (from 2009 to 2013). As presented in the HHRA, exposures to LA in ambient air do not result in an unacceptable risk and are not likely to contribute significantly to cumulative risk. Additionally, all ambient air data was collected during a time when removal of LA contamination was taking place on the Site; thus, the available data represent a worst case scenario under current conditions. Future ambient air monitoring is not anticipated, but could be re-evaluated if annual inspections or five-year reviews conclude that it is warranted.

Because there are no identified ICs specific to recreational users or visitors, the ICIAP has been revised to remove specific language on the responsibility of “recreational users and visitors”. LA awareness level training and information of best management practices is available upon request by ARP to contractors, property owners, tenants, and members of the public and identified as such in the ICIAP. The HHRA did not identify unacceptable exposures for recreational users or visitors within OU4 and OU7.

Structure fires within OU4 and OU7 are considered an unscheduled event and will be managed under O&M on a case by case basis if LA contamination could present a potential for exposure from the property or within a structure. Training regarding the awareness of LA has been provided by the EPA and future opportunities will be available upon request by ARP to local volunteer fire departments during O&M. As presented in the HHRA, as evidenced through both simulated and authentic wildfire events in a worst-case scenario (i.e., a wildfire within OU3), outdoor air exposures would not present an unacceptable risk to residents within OU4 and OU7. Risks not

associated with OU4/OU7 (e.g., wildland firefighters, logging) will be addressed as part of the Record of Decision for OU3.

2.3 Funding/Financial Burden of ICs

Funding for ARP during O&M will be directed through DEQ and not EPA. Grant funding in the past is beyond the scope of the ICIAP. The ICIAP discussed educational components that will be in place during O&M and ARP will be the primary facilitator in providing education and information to the public during O&M. ARP is a program set up for O&M at the Site, was funded through a cooperative agreement grant with EPA during remedial action and will be funded similarly during O&M by DEQ through a cooperative agreement utilizing available O&M funds.

EPA set up a settlement fund for the Site. From the settlement fund, \$11 million was placed into a separate interest-bearing account dedicated to helping to pay for future sitewide (all OUs except OU3 and OU6) O&M. Currently, the funds in that account are nearly \$12 million. The cost of the sitewide O&M program will be evaluated through a cost-risk analysis to help minimize uncertainty associated with those costs. O&M settlement funds are administered by EPA to DEQ through a cooperative agreement grant and are subject to EPA eligibility requirements. EPA will administer O&M settlement funds for costs associated with LA and LA-source materials where property owners have provided and will continue to provide access for associated investigations and/or response actions; the property owner has not actively participated in a for-profit enterprise of distributing, treating, storing, or disposing of vermiculite; and property owners will take appropriate precautions in handling any LA source materials in and around their home, avoiding where possible activities which may spread LA source materials to other locations without first consulting with DEQ and/or ARP.

In addition to this settlement fund, under Montana Code Annotated 75-10-743(10)(c) and 75-10-704(4)(j)(I), starting July 1, 2018, DEQ receives an appropriation of \$600,000 annually from an orphan share transfer. The subsequent Montana Code Annotated 75-10-1601 provided a framework on how this money could be used and established a permanent trust fund to pay exclusively for costs to the state of cleanup and long-term O&M for Libby. From this account, \$480,000 is allocated annually for oversight and support of the advisory team (i.e., Libby Asbestos Superfund Oversight Committee). As of September 2019, the trust fund balance was \$852,536. DEQ also received approximately \$5 million as part of the bankruptcy settlement with Grace. Under recommendation by the Libby Asbestos Superfund Oversight Committee and approval by DEQ, these funds could also be used to support O&M activities in Libby and Troy, particularly those situations where EPA administered funds are precluded from being used. If other currently available and planned funding resources are depleted, remaining EPA-held “remedial action settlement funds” may be made available to the State of Montana and Lincoln county to be used for O&M activities related to encounters with LA within OU4 and OU7.

The primary criterion for ARP assistance is that a property owner is conducting an activity that would impact the LA remedy on a property, and the property owner is coordinating this activity

with ARP. Random sampling and updates are not anticipated unless conditions warrant a re-evaluation or a property condition changes and is coordinated through ARP.

The intent of ICs is to minimize the potential for human exposure to contamination and protect the integrity of the remedy. The ICs have been developed to minimize the financial burden of addressing LA as long as the proper steps are taken with ARP and DEQ. Any LA identified during the Property Evaluation Notification (PEN) process, with an ARP developed and DEQ approved statement of work, would be included as appropriate for financial reimbursement, upon evaluation by ARP and authorization by DEQ. Public information sheets will be available during O&M to describe the financial reimbursement program and to guide homeowners through this process.

2.4 Restrictiveness of ICs

There are no environmental covenants being placed on properties in OU4 or OU7 nor is there expected to be any placed into the future. Deed notices have been placed on properties that refused access to ensure that future purchasers are aware of the existing or potential environmental conditions relating to LA. On November 18, 2019, EPA sent a letter to the Lincoln County Board of Commissioners, known Lincoln County realtors, title companies, appraisers, and others within Lincoln County involved in property transactions which discussed the transition to O&M for OU4 and OU7 and how future communication regarding property status will be handled by DEQ.

Because the PEN is a regulation instituted by the City-County Board of Health for Lincoln County, any comments received regarding the regulation were forwarded to ARP and the IC Steering Committee representative to address. A link was provided within text of the final OU4/OU7 ICIAP to direct readers to the current version of the PEN regulation.