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The Former Export Plant Operable Unit 1 Institutional Control Implementation and Assurance Plan

U.S. Environmental Protection Agency

Libby Asbestos Superfund Site
Libby, Montana

February 2014

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Operable Unit 1
Institutional Control Implementation and Assurance Plan

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February 2014

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Libby Asbestos Superfund Site
The Former export Plant
Operable Unit 1
Lincoln County, Montana

Institutional Control Implementation and Assurance Plan

USACE Contract No. W912DQ-08-D-0018
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Acronyms and Abbreviations

ABS	activity-based sampling
ARP	Asbestos Resource Program
BNSF	BNSF Railway Company
COC	contaminant of concern
DEQ	Montana Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
Grace	W.R. Grace
IC	institutional control
ICIAP	Institutional Control Implementation and Assurance Plan
LA	Libby amphibole asbestos
MDT	Montana Department of Transportation
MCA	Montana Code Annotated
O&M	Operations and Maintenance
OU	operable unit
ROW	right-of-way
Site	Libby Asbestos Superfund Site
U-Dig	Montana utility locate service

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Section 1

Introduction

This Institutional Control Implementation and Assurance Plan (ICIAP) was prepared by the U.S. Environmental Protection Agency (EPA) for the EPA Region 8 Libby Asbestos Superfund Site (Site) (Figure 1-1) in Libby, Montana. The Site has been divided into eight separate operable units (OUs) (Table 1-1). This ICIAP addresses OU1, the former Export Plant. Investigation and response actions of OU1 were performed by the EPA, in consultation with the Montana Department of Environmental Quality (DEQ), under the Superfund law.

This ICIAP identifies and documents activities that are designed to implement, maintain, and enforce institutional controls (ICs) at OU1, and the organizations responsible for conducting these activities. This ICIAP will help ensure that OU1 ICs are properly implemented to protect the remedies in place, and continue to operate as intended.

Oversight of ICs will be included during operation and maintenance (O&M) phases on the site and are included in the *Operations and Maintenance Plan, Former Export Plant*, Operable Unit 1(CDM Smith 2013c).

Table 1-1 Libby Asbestos Site OUs

OU#	Name
1	Former Export Plant
2	Former Screening Plant and nearby areas
3	Former Vermiculite Mine
4	Libby, Montana (residential, commercial, industrial, and public properties)
5	Former Stimson Lumber Mill
6	BNSF Railway
7	Troy, Montana (residential, commercial, and public properties)
8	U.S. and Montana State highways and secondary highways that lie within the boundaries of the Site.

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Section 2

Site Details

2.1 Site Description

The Site (CERCLIS #MT0009083840) is located in and around the Cities of Libby and Troy, Montana. Libby is the county seat of Lincoln County and is in the northwest corner of Montana, about 35 miles east of Idaho and 65 miles south of Canada.

Numerous hard rock mines have operated in the Libby area since the 1880s, but the dominant impact to human health and the environment in the City of Libby 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 contaminant of concern (COC) at the Libby Asbestos Superfund Site. EPA initiated an emergency response action in November 1999 to address questions and concerns raised by citizens of the City of Libby regarding possible ongoing exposures to asbestos fibers as a result of historical mining, processing, and exportation of asbestos-containing vermiculite. To facilitate a multi-phase approach to remediation of the Libby Asbestos Superfund Site, eight separate OUs were established. These OUs are shown on Figure 2-1 and are described below:

OU1. The Former Export Plant OU1 is the subject of this plan and is situated just north of the downtown area of the City of Libby, Montana. The property is bounded by the Kootenai River on the north, Highway 37 on the east, the BNSF Railway Company (BNSF) railroad thoroughfare on the south, and State of Montana property on the west. OU1 includes the former Export Plant, Riverfront Park, and the embankments of City Service Road and Highway 37. The Highway 37 right-of-way adjacent to the OU1 site was included due to the proximity to the OU1 site and the known contamination in the right-of-way (ROW).

OU2. OU2 includes areas impacted by contamination released from the Former Screening Plant. The Highway 37 right-of-way adjacent to the OU2 site was included due to the proximity to the OU2 site and the known contamination in the ROW. For the purposes of the ICIAP, the contaminated portion of the Highway 37 right-of-way is considered part of Subareas 1, 2 and 3 within OU2.

OU3. The mine OU includes the former vermiculite mine and the geographic area (including ponds) surrounding the former vermiculite mine that has been impacted by releases from the mine, including Rainy Creek and the Kootenai River.

OU4. OU4 is defined as residential, commercial, industrial (not associated with former Grace operations), and public properties, including schools and parks in and around the City of Libby, or those that have received material from the mine not associated with Grace operations. OU4 includes only those properties not included in other OUs.

OU5. OU5 includes all properties that were part of the former Stimson Lumber Mill and that are now owned and managed by the Lincoln County Port Authority.

OU6. The rail yard owned and operated by BNSF is defined geographically by the BNSF property boundaries and extent of contamination associated with BNSF rail operations. Generally, the boundary

is as wide as the railroad right-of-way. Railroad transportation corridors are also included in this OU and no boundaries have been set at this time on the east-west length of the OU.

OU7. The Troy OU includes all residential, commercial, and public properties in and around the Town of Troy, approximately 20 miles west of downtown Libby.

OU8. OU8 is comprised of the U.S. and Montana State highways and secondary highways that lie within the boundaries of the Site.

Section 3

Operable Unit 1 – Former Export Plant

3.1 OU1 Characteristics and History

OU1 covers approximately 17 acres on the south side of the Kootenai River, just north of the City of Libby downtown area (Figure 2-1). It is bounded by the Kootenai River on the north, Highway 37 on the east, the BNSF railroad thoroughfare on the south, and State of Montana property on the west.

The three areas within the OU are carried through all discussions of the remedial alternatives and are shown on Figure 3-1:

- **Former Export Plant (Area 1) –** From the early 1960s to approximately 1990, the Export Plant was used 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.

  Throughout its history, portions of the site were leased to various parties for both commercial and non-commercial enterprises. From approximately 1977 to 1997, organized youth baseball events (games and practices) were held at ball fields, which were centrally located in Area 1. Between approximately 1987 and 2000, the Millwork West Company, a retail lumberyard and building material supplier, leased the northwestern portion of Area 1. Buildings and equipment owned by Millwork West were removed and/or demolished as part of the removal activities conducted by Grace in 2001 and 2002.

  Other commercial and industrial uses of the site also occurred in the past that utilized infrastructure at the site. These other commercial/industrial uses reportedly included a metal scrap dealer and a larch tree gum manufacturer. The infrastructure that supported these businesses included industrial power supply, a railroad spur, and truck scales. This infrastructure was removed during the removal activities conducted at this site.

  Area 1 is approximately 12 acres in size. It is currently owned by the City of Libby and is mostly a landscaped park with paved access and parking, with the exception of a small area used by David Thompson Search and Rescue. In 2004, the search and rescue organization constructed a building containing an office and a five-bay garage on the northwest portion of the site on the south side of City Service Road. The garage 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 Area 1 is unrestricted. Details of investigation and removal activities in the OU1 areas are provided in the Final RA Report (CDM Smith 2013b).

- **Riverfront Park (Area 2) –** Area 2, Riverfront Park, is approximately 4.7 acres in size. 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, and picnic tables. The newer of the two boat ramps is used by recreational boaters and commercial fishing outfitters; the older ramp is not commonly used due to swift current at its approach. Access to Area 2 is

unrestricted. Details of investigation and removal activities in the OU1 areas are provided in the Draft Final RA Report (CDM Smith 2013b).

- **Embankments (Area 3) –** Area 3 is approximately 1 acre in size. 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. Specific details of investigation and removal activities in the OU1 areas are provided in the Final RA Report (CDM Smith 2013b).

3.2 Response Action Summary

Multiple investigation, pre-removal, and removal events have occurred at OU1 to date. All of these activities were conducted by the EPA or by Grace under the EPA's oversight. These activities are detailed in the *Final Remedial Investigation Report, Operable Unit 1 – Former Export Plant* (EPA 2009); *Final Remedial Action Report, Operable Unit 1 – The Former Export Plant Site* (CDM Smith 2013b); and summarized in Tables 3-1 and 3-2 below.

3.2.1 Other OU1 Investigation Activities

In addition to the activities described in Table 3-1, post-construction activity-based sampling (ABS) activities were performed in Areas 1 and 2 of OU1 in July, August, and September of 2013. In general, data was collected to support a post-construction risk assessment to confirm the effectiveness of the remedy. Specifics regarding the post-construction ABS activities are detailed in the *Sampling and Analysis Plan/Quality Assurance Project Plan: 2013 Post-Construction Activity-Based Sampling, Libby Asbestos Superfund Site, Operable Unit 1* (CDM Smith 2013a).

Table 3-1. Summary of Investigation Activities at OU1

Year	Event	Summary
Area 1 – Former Export Plant		
1999, December	Soil sampling	Baseline evaluation of LA soil contamination on site.
2000, March/April	Soil and stationary air sampling	Soil sample event to supplement the 1999 investigation and better characterize site soil. Air sampling was conducted to establish baseline concentrations of LA in ambient air.
2000, June	Activity-based sampling (ABS)	Done to assess exposure risk associated with disturbance of LA in areas containing vermiculite. Activities investigated included floor sweeping and moving bags of vermiculite insulation inside a building.
2001, March/April/August	Soil, bulk material, and dust sampling	Investigation of soil, bulk materials (wood shavings, insulation, debris, etc. in the five buildings), and dust (surfaces inside warehouse and pole barn) sampling to determine if residual levels of LA remained at the site after the 2000/2001 removal.
2002, April/May	Bulk materials and soil sampling	Addressed concerns of tenants about residual contamination. Bulk materials samples (from Millwork West) and soil samples from areas of suspect mine-related materials).
2006, June	Soil sampling	City of Libby waterline sampling during excavation of a trench through Area 1 parallel to City Service Rd. in preparation for

		new water supply pipeline. Gross quantities of vermiculite were encountered. Samples were collected from soil stockpiled during initial pipeline excavation.
2007, September/October	Soil sampling and indoor ABS	RI data gap sampling, site-wide soil sampling and indoor ABS. Surface soil samples were collected to evaluate LA content and presence/absence of surficial vermiculite. ABS was conducted to assess indoor air in onsite building and outdoor air near disturbed soil.
Area 2 – Riverfront Park		
2003, May/July	Soil sampling	In response to a discovery of contaminated material, a visual inspection and soil sampling was conducted near the new boat ramp and picnic table area.
2003, September/October	Soil sampling	Pre-removal characterization included interviews, visual inspection, and collection of surface and subsurface soil samples.
2007, Sept ember	Soil sampling	Surface samples collected using a grid to evaluate LA asbestos content and presence/absence of surficial vermiculite.
Area 3 – Embankments		
2007, Sept ember	Soil sampling	RI data gap and soil sampling

Table 3-2 Summary of Response Actions at OU1

Year	Material Removed	Summary of Response Action
Area 1 – Former Export Plant		
July 2000 through January 2001 (Grace)	Vermiculite and contaminated dust, soil, and debris	Removal and cleaning per the unilateral administrative order between EPA and Grace.
2001, September/ October (Grace)	Contaminated soil and building debris	Demolition of historic buildings and removal of contaminated soil
2002, October through December Grace)	Contaminated soil and building debris	Demolition of remaining historic building and removal of additional contaminated soil
2006, September	Contaminated soil	Removal of soil as part of city waterline installation
2011, September – 2012, June	Contaminated soil	Removal of contaminated soil

Area 2 – Riverfront Park		
2003 October/November	Contaminated soil	Removal of contaminated soil
2007, July	Contaminated soil	Removal of contaminated soil and placement of rock cover in areas of observed vermiculite
2008, May	Contaminated soil	Site work for placement of pavilion footers
2008, July	Contaminated soil	Removal of contaminated soil
2012, February/March	Contaminated soil	Removal of contaminated soil and placement of riprap
Area 3 – Embankments		
2011, August	Contaminated soil	Removal of contaminated soil
2012, April	Contaminated soil	Removal of contaminated soil

3.2.2 Summary of Institutional Control Elements

The following is a summary of response action IC elements in place to satisfy the remedial alternatives discussed in the OU1 Record of Decision (EPA 2010):

For OU1, ICs will be used to ensure that any future encounters with residual contamination are managed appropriately. ICs for OU1 include governmental and proprietary land use restrictions and informational devices.

A Montana utility locate service (U-Dig), has been implemented as a way to notify anyone disturbing the ground that asbestos contamination may be found below the ground surface. U-Dig is a local service that excavators contact at no cost prior to performing work at a property to locate underground hazards (e.g., electrical lines). Excavator is defined as a person conducting the excavation activities [Montana Code Annotated (MCA) 2011, 69-4-501]. Excavation is defined as any operation in which earth, rock, or other material in the ground is removed, or otherwise displaced by means or use of any tools, equipment, or explosives (MCA 2011, 69-4-501). Advice on how to address the contamination, if disturbance is required, can be obtained from the Asbestos Resource Program (ARP). Property owners, tenants, and those performing work on a property are provided with a means to evaluate potential exposure to LA or LA source materials, such as Libby vermiculite, during routine and non-routine activities at properties located within the Site through an EPA funded program. This program will be in place at the Site to ensure the burden of remediation costs for removing LA materials do not fall onto property owners. As part of this program, an ARP position is staffed in Libby by the City/County Board of Health under the Lincoln County Department of Environmental Health. In addition to providing advice and instruction, the ARP will assist in managing contamination encountered, as necessary. Assistance in managing contamination may include, but is not limited to, providing resource materials and best management practices, contractor referrals, and/or removal of contamination.

Additional informational devices include the EPA Information Center, handouts, and contractor training classes. For information handouts and contractor training classes individuals may contact the EPA Information Center or the ARP at the following:

Libby - EPA Information Center
108 E 9th St
Libby, MT 59923
(406) 293-6194

Asbestos Resource Program
418 Mineral Ave
Libby, MT 59923
(406) 291-5335

3.3 Contaminant of Concern

The main COC and agent for potential exposure to the public at OU1 have been termed interchangeably by the EPA as Libby amphibole asbestos or LA. Currently, the EPA has established a draft inhalation unit risk value and draft reference concentration for exposure to LA at the Site.

OU1 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. The vermiculite deposit that was mined by Grace contains a distinct form of naturally-occurring amphibole asbestos that is comprised of a range of mineral types and morphologies. 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.) that have been identified in the Rainy Creek complex near Libby, MT (Meeker et al. 2003). LA is a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act. LA has the ability to form durable, long, and thin structures that are generally respirable, can reasonably be expected to cause disease, and hence is considered the contaminant of concern at the Site.

Because vermiculite mined from Libby has been found to be contaminated with LA, which is known to cause human health effects, the EPA initiated an emergency response action in November 1999 to address questions and concerns raised by citizens of Libby regarding possible ongoing exposures to asbestos fibers as a result of historical mining, processing, and exportation of vermiculite.

3.3.1 Physical Boundaries of Impacted Resources

OU1 is divided into three areas (Area 1, Area 2, and Area 3), each of which is described in Sections 3.1 and 3.2 and shown in Figure 3-1. Numerous investigations were conducted within OU1 and are summarized in Section 3.2.1. Based on those investigations, contamination is known to be present in the following media:

- Soil

Exposure to the contamination has been mitigated by various removal actions (see Section 3.2.2) conducted in Areas 1, 2, and 3 primarily to remove accessible source materials.

Location and depth of contamination left in place at OU1, based on investigation activities and removal-related confirmation soil sampling, are shown in Figures 3-2 and 3-3.

Specific sources of contamination, as described in the *Former Export Plant Site, Operable Unit 1, Final Remedial Action Report* (CDM Smith 2013b) and the Former Export Plant Site, Operable Unit 1, *Operations and Maintenance Plan* (CDM Smith 2013c) include the following:

- Subsurface soil is known to contain vermiculite and also LA at non-detect, less than 1 percent, and greater than 1 percent levels; the location and depths of vermiculite-containing soil are shown on figures 3-2 and 3-3.

3.4 Current Site Information

3.4.1 Parcel Ownership/Occupancy Information

The Listed parcel ownership information was collected from Montana Cadastral at the following web link: http://svc.mt.gov/msl/mtcadastral/.

3.4.1.1 Area 1 Parcel Contact Information

Owner: City of Libby
PO Box 1428
Libby, MT 59923

Area 1: The property is currently listed as an industrial site and is being used for primarily for recreational purposes.

3.4.1.2 Area 2 Parcel Contact Information

Owner: City of Libby
PO Box 1428
Libby, MT 59923

Area 2: The property is currently listed as an industrial site and is being used for primarily for recreational purposes.

3.4.1.3 Area 3 Parcel Contact Information

Owner: State of Montana
2701 Prospect Ave
Helena, MT 59601

Area 3: The property is currently listed as rural undeveloped land and is being used primarily for recreational purposes. There are currently no plans to develop the property and is currently utilized to perform periodic maintenance activities.

3.4.2 Property Interest and Resource Ownership

There are currently no additional property interests at OU1 that may impact the ICs.

3.4.3 Current and Reasonably Anticipated Future Site Land Use

3.4.3.1 Land Use

For all areas of OU1, the ICs have been developed based upon the current land use, which is the reasonably anticipated future land use, as noted below.

Area 1, Former Export Plant, is currently owned by the City of Libby and it is anticipated that the property will continue to be used for recreational and commercial purposes.

Area 2, Riverfront Park, is currently owned by the City of Libby and it is anticipated that the property will continue to be used for recreational and commercial purposes.

Area 3, Embankments, is owned and maintained by MDT. The property is currently vacant, undeveloped land. At this time, MDT has no plans to develop this property.

3.4.3.2 Groundwater Use

Since the EPA does not consider groundwater to be a viable pathway for exposure, OU1 does not include groundwater.

3.4.3.3 Surface Water Use

Potential impacts to surface water (Kootenai River) will be considered when ecological risk is evaluated, and will be addressed as part of the OU3 remedial activities.

3.4.4 Responsible Parties and Stakeholders

There are currently no additional responsible parties or stakeholders other than those described above in Section 3.4.1.

3.4.5 Local Government Information

The City/County Board of Health has entered into a cooperative agreement with the EPA in which the Asbestos Resource Program (ARP) was developed. The ARP under the direct supervision of the Lincoln County Environmental Health Department was developed to assist with education, managing risks associated with asbestos exposure, and implementing initiatives to reduce the risk of asbestos exposure.

3.5 Site Mapping

Mapping of residual contamination, site boundaries, protective covers, remedy components, and site features for OU1 is shown on Figure 3-2 and 3-3.

Section 4

Institutional Control Instruments

The following section outlines IC components and the four types of IC instruments (categories) in place at OU1: proprietary controls, governmental controls, enforcement documents, and informational devices.

4.1 Key Components

4.1.1 Institutional Controls Objectives

The following are the main objectives of the ICs in place at OU1:

1. Notify future land owners 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 the site that could pose unacceptable risks to human health or the environment or compromise the remedy.
5. Implement controls to prevent uses of the site that could spread contamination to un-impacted or previously remediated locations and media.

4.1.2 Current and Reasonably Anticipated Future Land Use

The ICs in place at OU1 are expected to allow for the current and reasonably anticipated future uses of recreational and maintenance activities at the site. ICs are expected to serve to control any potential disturbance of the protective cap through such means as a Section 75-10-727, MCA, institutional control (deed restriction), U-Dig, MDT encroachment permit, park permits, contacting the ARP, and the EPA Information Center.

4.1.3 Instrument Duration

All IC Instruments set forth for OU1 are expected to be in-place in perpetuity. The only condition for termination of individual IC Instruments will be the complete removal and proper disposal of all contaminated soil.

4.2 Instrument Categories

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

4.2.1 Proprietary Controls

Under Section 75-10-727, MCA, a DEQ-approved IC may be used to restrict the property as necessary to mitigate the risk to public health. The IC may also notify future land owners of previous response

actions completed at the site and of known or potential contamination within the soils at the site. In the event any such instrument is approved by DEQ, it will be appended to this plan. The landowner must agree to place the IC on the property.

If DEQ approves of an institutional control under Section 75-10-727, MCA, EPA and/or DEQ would be third-party beneficiaries of the institutional control, with enforcement rights.

Use Restrictions

Any use restrictions for this IC will be identified in DEQ's environmental covenant pursuant to MCA 75-10-727.

4.2.2 Government Controls

Government controls at OU1 include U-Dig. Montana state law (MCA 2013, 69-4-503) requires that all parties planning to excavate, drill, or perform other subsurface activities, notify the designated U-Dig notification center prior to the start of these activities. The ARP is notified by the U-Dig call center for all activities planned within the site boundaries. Advice on how to address the contamination, if disturbance is required, would be obtained from the ARP. In addition to providing advice and instruction, the ARP will assist with management of contamination encountered, as necessary. Assistance in managing contamination may include, but is not limited to, providing resource materials and best management practices, contractor referrals, and/or removal of contamination.

Use Restrictions

Use restrictions related to this government control are identified by Montana state law (MCA 2013, 69-4-503). Persons intending to disturb the protective cover in place at OU1 will be required to notify a designated "One-call" center (i.e., U-Dig) prior to conducting the activities. The ARP will then provide advice on performing the activities according to site best management practices, and provide assistance with management of contamination encountered.

4.2.3 Enforcement Documents with Institutional Control Components

Enforcement documents related to OU1 include an MDT encroachment application and a City of Libby permit. All individuals and organizations intending to perform work within the ROW of Montana Highway 37 must apply for an encroachment permit with the MDT. Any application for the OU1 ROW along Highway 37 is accompanied by an addendum, which notifies the permittee to take precautions to guard against potential exposure to LA contamination. A copy of the MDT encroachment permit and addendum is included in this document as Appendix A.

The Fred Brown Pavilion Rental Agreement is an acting permit issued by the City of Libby for users of the pavilion area who reserve the area for commercial, non-profit, or private use. Some activities at the site may be prohibited, as listed in the rental agreement, to ensure remedies at the site remain intact. The Fred Brown Pavilion Rental Agreement is made available by the City of Libby through the following links:

http://cityoflibby.com/wp-content/uploads/pavillion-agreementfamily-10.pdf

http://cityoflibby.com/wp-content/uploads/pavillionagreementprofit10.pdf

Use Restrictions

Use restrictions related to these enforcement documents are identified within the MDT encroachment permit and addendum, and the City of Libby permit. Applicants will be provided with restrictions on

activities that may penetrate the protective cover, and may result in disturbance and transportation of potential contaminated sub-surface soil.

4.2.4 Informational Devices

Informational devices related to OU1 include the ARP as described in Section 3.2.2. Any persons interested in information regarding LA and/or resources available to minimize risks associated with LA and/or resources available are encouraged to contact the ARP at 406-291-5335, or visit the Lincoln County ARP website: www.LCARP.com.

In addition to the ARP, all information for the site (historical and current site documents) and any associated best management practices, are available to the public at the EPA Information Center. This informational device will be maintained by the EPA or another government organization throughout the lifespan of IC instrument implementation at the site.

Use Restrictions

No use restrictions are associated with this informational device. The EPA Information Center (or other government organization) will simply act as an informational resource.

Section 5

Institutional Control Implementation

The following table (Table 5-1) provides a brief summary of the implementation for all IC instruments for OU1 set forth by this plan.

Exhibit 5-1 Summary of IC Implementation

Instrument Name	Deed Restriction	Pavilion Permit	U-Dig	Encroachment Permit	ARP	Information Center	O&M Plan
Instrument Category	Proprietary Control	Enforcement Document	Government Controls	Enforcement Document	Informational Device	Informational Device	Informational Device
IC Objectives (a)	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	1, 2, 3, 4, 5	2, 3, 4, 5
Use Restrictions	To be developed	Penetration and disturbance of the protective cover	Not Applicable	Penetration of the protective cover, disturbance and transportation of potential contaminated sub-surface soil	Not Applicable	Not Applicable	Best Management Practices and Engineering Controls
Implementation Prerequisites	Must be approved by DEQ and filed with the Clerk and Recorder's Office of Lincoln County	Already in place	Already in place	Already in place	Already in place	Already in place	Already in place
Implementation Complete	Legal recording of institutional control	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 and Contact Information	DEQ	City of Libby	EPA / DEQ	MDT	EPA/Lincoln County	EPA / DEQ	EPA / DEQ
Instrument Lifespan	In perpetuity						
Conditions for Termination of IC	Complete removal and disposal of all contamination at site						

(a) IC Objectives

1. *Notify future land owners of 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 the site that could pose unacceptable risks to human health or the environment or compromise the remedy.*
5. *Implement controls to prevent uses of the site that could spread contamination to un-impacted or previously remediated locations and media.*

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Section 6

Institutional Control Maintenance

Institutional control maintenance consists of periodic monitoring and reporting to confirm that ICs are in place and providing protection as intended. Maintenance activities consist of notifications to new land owners or lessees, continuing education for landowners and property users through annual updates and information available through the EPA Information Center, and periodic review of the property and ICs by the implementing agency, entity, or organization.

In the event of a transfer of ownership, it is the transferor's responsibility to ensure that the new owner or tenant is informed of the ICs in place at the property. In the event of a property transfer, the intended use of the property may need to be evaluated to determine if the existing ICs in place are sufficient to protect the public from exposure.

To facilitate monitoring of the ICs, roles and responsibilities, schedule, and corrective actions, and reporting requirements will be performed in accordance with the O&M plan and its associated checklists.

Periodic monitoring will consist of at least yearly in-person investigations and annual contacts to the relevant property owners to remind them of the presence and requirements of the ICs. The monitoring will assess for changes in land use, property transfers, and failure of any implemented ICs. ICs will be evaluated and updated (if necessary) on an annual basis. The routine and critical evaluation of ICs will assess:

1. Whether the selected IC instruments remain in place.
2. Whether the ICs are enforced such that they meet the stated objectives and performance goals and provide protection required by the response (EPA 2012).

In the event of a property transfer or change of use, more frequent monitoring may be necessary.

Similar to employee education, public education can serve as an important tool for IC maintenance. A well-informed public can provide extra monitoring during use of the site. In the event a member of the public identifies a potential issue at the site, a method of reporting should be made available. For the site, the ARP and EPA Information Office are available to the community to respond to concerns and provide information and guidance.

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Section 7

Institutional Control Enforcement

Institutional control enforcement consists of methods for addressing issues related to improper or incomplete implementation of ICs, maintenance of ICs, and breaches of ICs. Generally, enforcement at the site will be the responsibility of the EPA or DEQ and MDT. In the event that 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.

At the site, enforcement of Section 75-10-727, MCA, institutional controls (deed restriction) is an administrative process that can be supported by legal action if necessary. In the case of easements, legal action is often necessary in the event of enforcement problems or issues. 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 as designed.

Guidance recommends that often 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.

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Section 8

Institutional Control Modification and Termination

At the site, modification of ICs may be required in the event of a change in land use or ownership. If an event occurs that could lead to a modification, this plan should be reviewed and revised accordingly to ensure the ICs at the site continue to provide adequate protection. Termination of ICs may occur if all remaining contamination at the site is removed to a level below that which poses an unacceptable risk to health and the environment. The EPA is responsible for determining modification of this document. The EPA, DEQ (for Section 75-10-727, MCA, institutional controls), and/or MDT are responsible for termination of ICs related to this site.

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Section 9

References

CDM Smith. 2013a. *Sampling and Analysis Plan/Quality Assurance Project Plan: 2013 Post Construction Activity-Based Sampling*, Libby Asbestos Site, Operable Unit 1, Revision 0, June 20.

_____. 2013b. *Final Remedial Action Report, Operable Unit 1 – Former Export Plant Site*, Libby Asbestos Superfund Site, Lincoln County, Montana. July 8.

_____. 2013c. *Operations and Maintenance Plan, Former Export Plant Site,* Operable Unit 1, Libby Asbestos Superfund Site, Lincoln County, Montana, July 15.

EPA. 2009. *Final Remedial Investigation Report, Operable Unit 1 – Former Export Plant Site*, Libby Asbestos Site, Libby Montana. August 3.

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

_____. 2012. *Institutional Controls: A Guide to Preparing Institutional Control Implementation and Assurance Plans at Contaminated Sites*, OSWER 9200.0-77, EPA-540-R-09-002. December.

Meeker GP, Bern AM, Brownfield IK, Lowers HA, Sutley SJ, Hoeffen TM, Vance JS. 2003. The Composition and Morphology of Amphiboles from the Rainy Creek Complex, Near Libby, Montana. *American Mineralogist*. 88:1955-1969.

MCA. 2013. Title 69. Public Utilities and Carriers, Chapter 4. Utility Lines and Facilities, Part 5. Excavations Near Underground Facilities, 69-4-501. Definitions.

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Figures

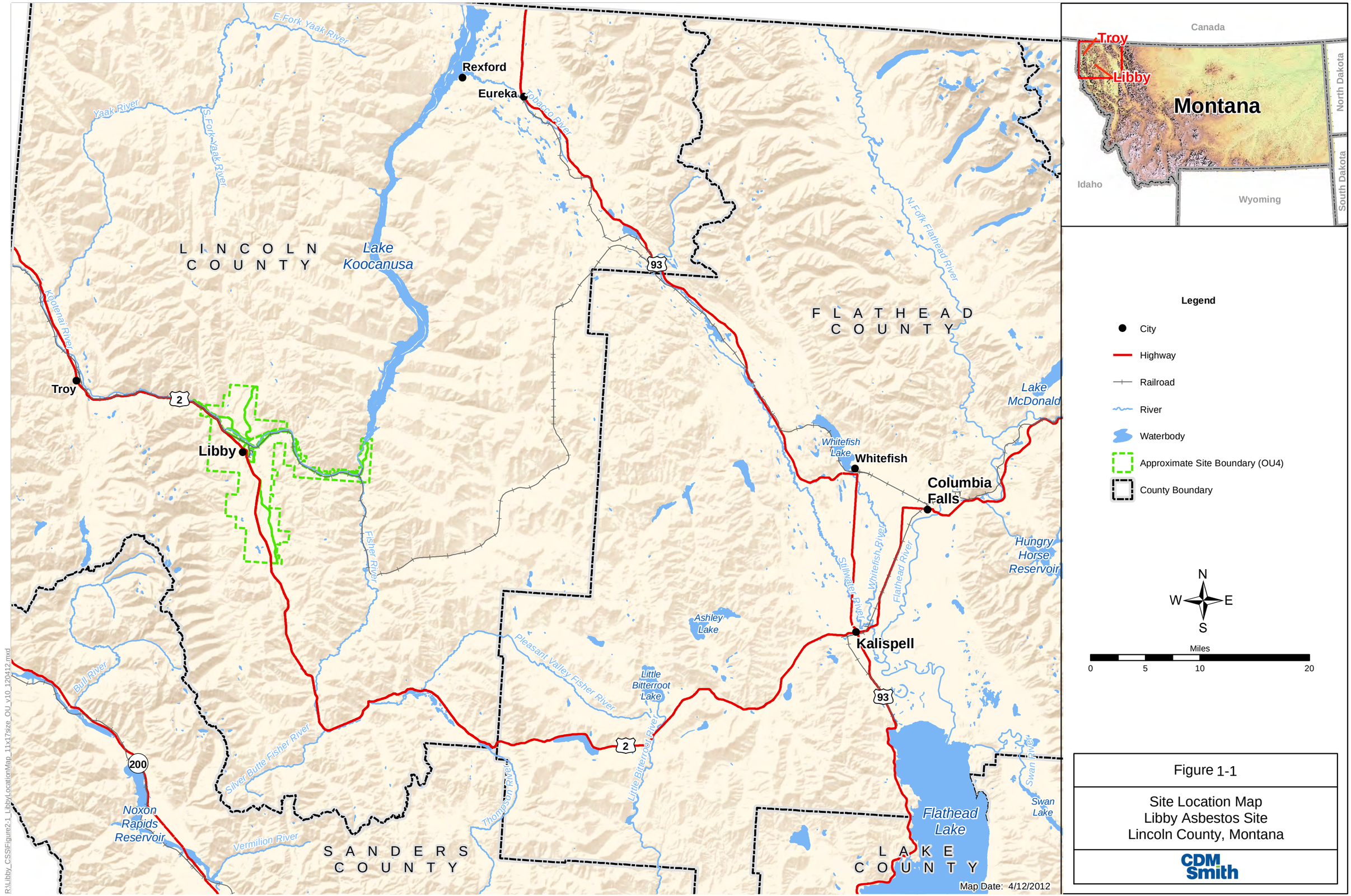


Figure 1-1

Site Location Map
Libby Asbestos Site
Lincoln County, Montana

CDM Smith

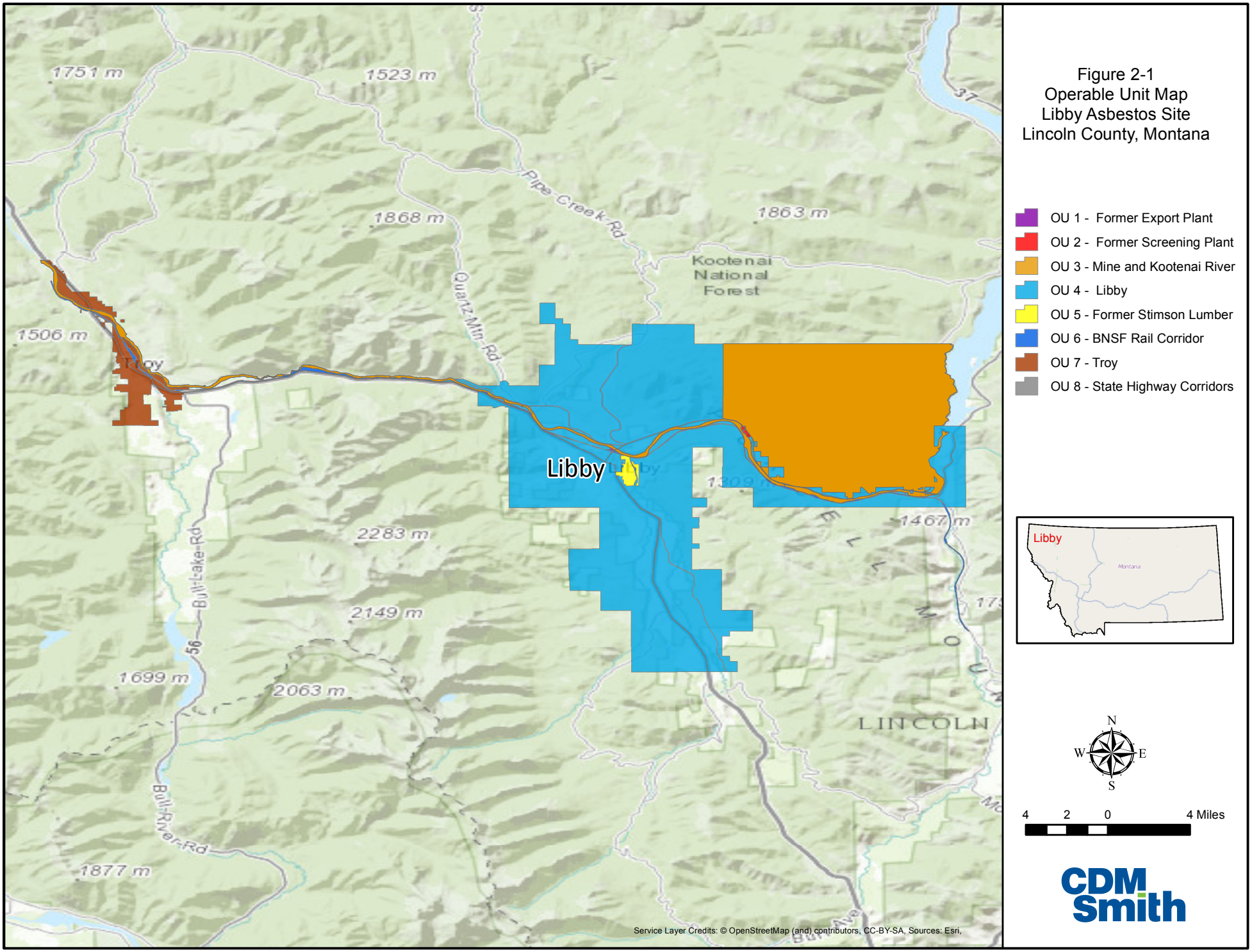
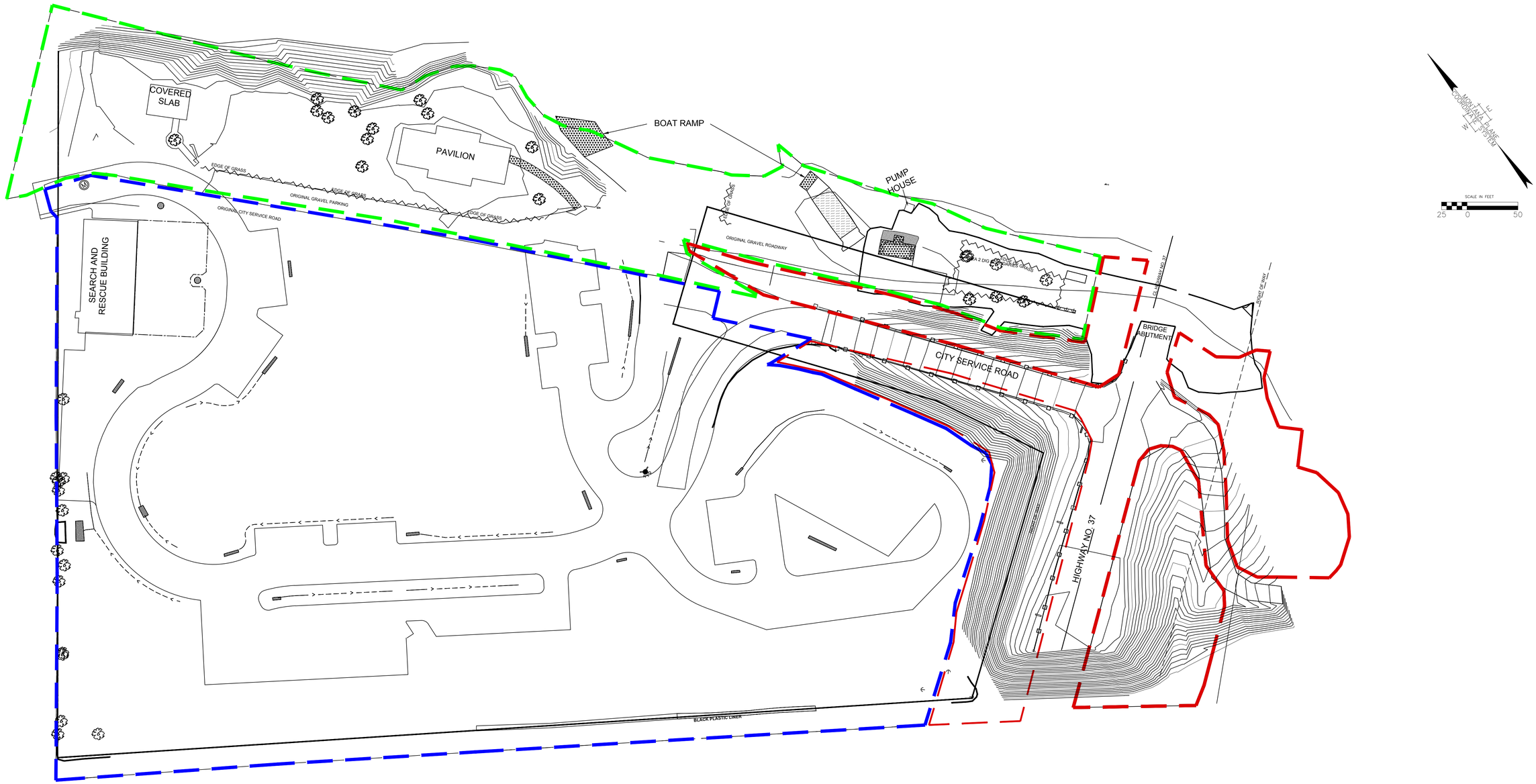


Figure 2-1
Operable Unit Map
Libby Asbestos Site
Lincoln County, Montana
OU 1 - Former Export Plant
OU 2 - Former Screening Plant
OU 3 - Mine and Kootenai River
OU 4 - Libby
OU 5 - Former Stimson Lumber
OU 6 - BNSF Rail Corridor
OU 7 - Troy
OU 8 - State Highway Corridors
Libby
Montana
N
W
E
S
4 2 0 4 Miles
CDM Smith
Libby
Troy
Kootenai National Forest
Pipe Creek Rd
Quartz Mtn Rd
Bull Lake Rd
Bull River Rd
LINCOLN
1751 m
1523 m
1868 m
1863 m
1506 m
2283 m
2149 m
1699 m
2063 m
1877 m
1467 m
Service Layer Credits: © OpenStreetMap (and) contributors, CC-BY-SA, Sources: Esri,



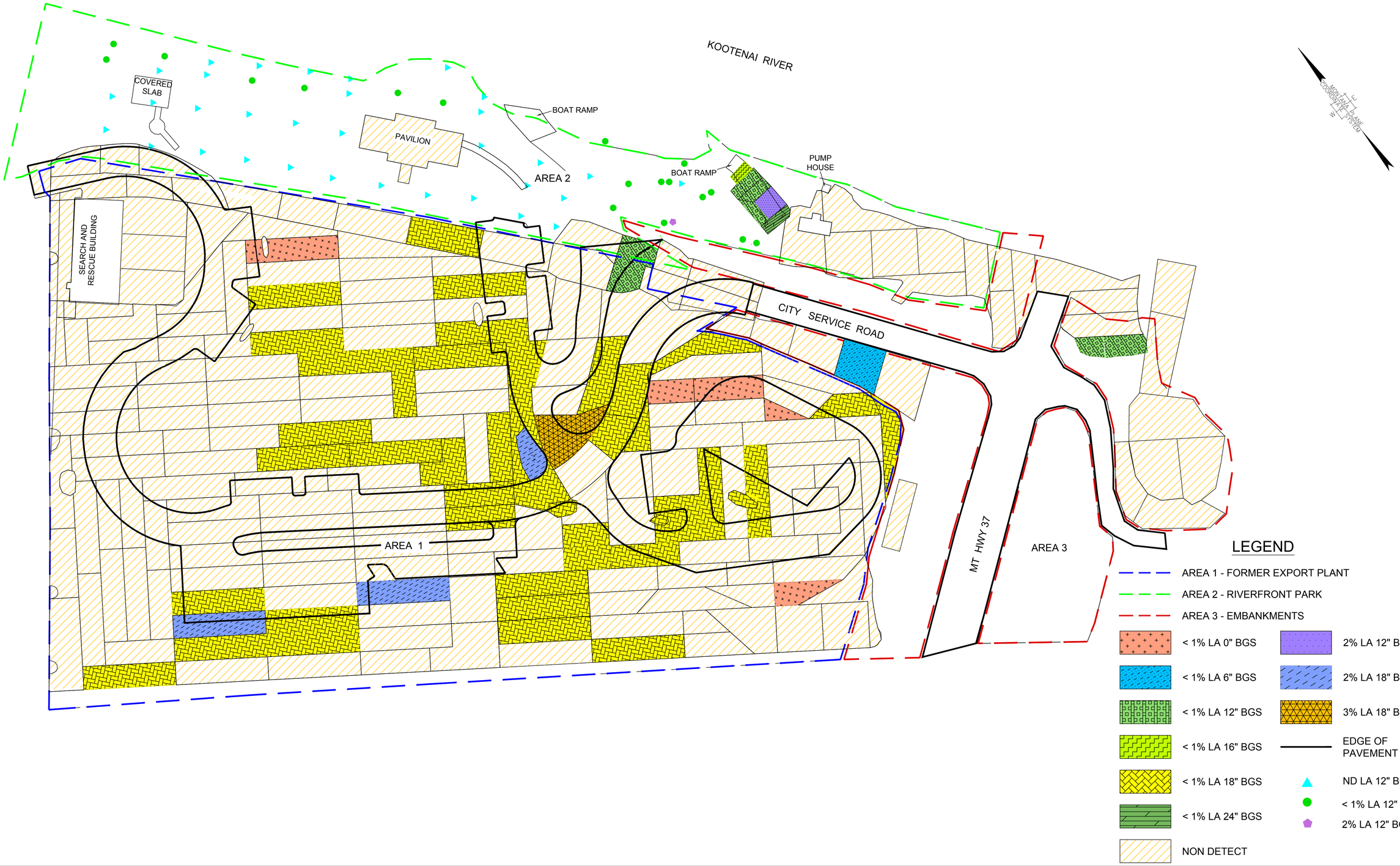
LEGEND

- AREA 1 - FORMER EXPORT PLANT
- AREA 2 - RIVERFRONT PARK
- AREA 3 - EMBANKMENTS

SCALE IN FEET
25 0 50

OU1 SITE MAP
FIGURE 3-1
LIBBY ASBESTOS SUPER FUND SITE
LINCOLN COUNTY, MONTANA

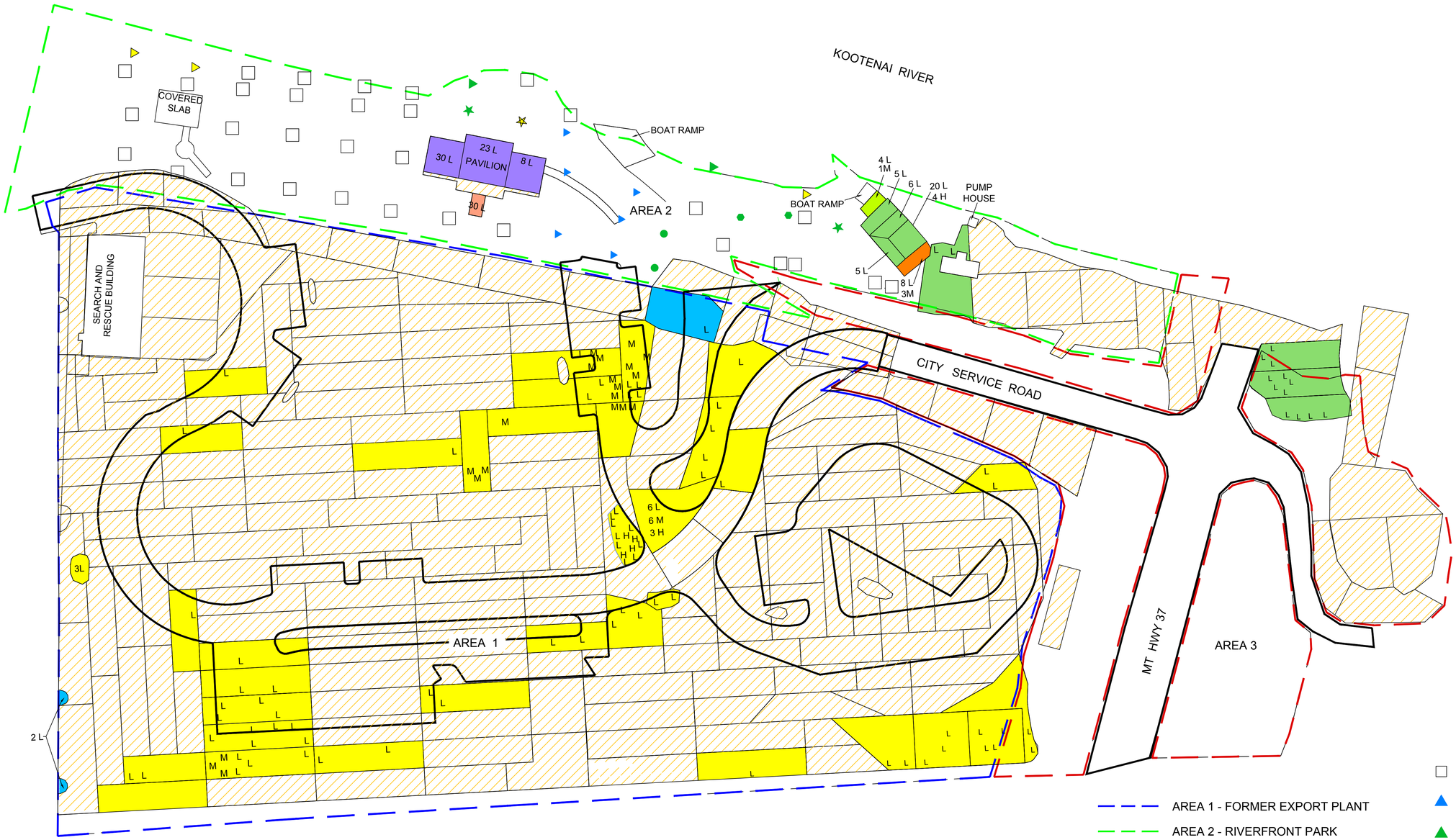
CDM Smith
CDM Federal Programs
60 Port Boulevard
Libby, MT 59923
Tel: (406) 293-8595



SCALE IN FEET
25 0 50

LOCATION AND DEPTH OF LIBBY AMPHIBOLE ASBESTOS AT OPERABLE UNIT 1
FIGURE 3-2
LIBBY ASBESTOS SUPER FUND SITE
LINCOLN COUNTY, MONTANA

CDM Smith
CDM Federal Programs
60 Port Boulevard
Libby, MT 59923
Tel: (406) 293-8595



LEGEND

DEPTH IN INCHES

- 2" BGS
- 6" BGS
- 12" BGS
- 16" BGS
- 18" BGS
- 24" BGS
- 57" BGS
- NON DETECT

- AREA 1 - FORMER EXPORT PLANT
- AREA 2 - RIVERFRONT PARK
- AREA 3 - EMBANKMENTS
- EDGE OF PAVEMENT
- L LOW VISIBLE VERMICULITE
- M INTERMEDIATE VISIBLE VERMICULITE
- H HIGH VISIBLE VERMICULITE

- NON DETECT VISIBLE VERMICULITE
- LOW VISIBLE VERMICULITE @ 12" BGS
- INTERMEDIATE VISIBLE VERMICULITE @ 12" BGS
- HIGH VISIBLE VERMICULITE @ 12" BGS
- INTERMEDIATE VISIBLE VERMICULITE @ 18" BGS
- INTERMEDIATE VISIBLE VERMICULITE @ 24" BGS
- INTERMEDIATE VISIBLE VERMICULITE @ 36" BGS
- HIGH VISIBLE VERMICULITE @ 36" BGS

SCALE IN FEET
25 0 50

LOCATION AND DEPTH OF VISIBLE VERMICULITE AT OPERABLE UNIT 1
FIGURE 3-3
LIBBY ASBESTOS SUPER FUND SITE
LINCOLN COUNTY, MONTANA

CDM Smith
CDM Federal Programs
60 Port Boulevard
Libby, MT 59923
Tel: (406) 293-8595

Appendix A

Montana Department of Transportation (MDT) Encroachment Application and Permit and Addendum

STATE OF MONTANA - DEPARTMENT OF TRANSPORTATION
HELENA, MT 59620-1001
ENCROACHMENT APPLICATION AND PERMIT

– To be filled in by Department of Transportation Personnel –

AGREEMENT NO.: _____ **MAINTENANCE NO.:** _____

PROJECT NO.: _____ **SIGN ROUTE:**_____

PROJECT NAME: _____ **ID NUMBER:** _____

CORRIDOR: _____ **RB:** _____ **MP:** _____

COUNTY: _____

– To be filled in by Department of Transportation Personnel and the requesting Company –

COMPANY OR CORPORATION	**Date**	**MONTANA DEPARTMENT OF TRANSPORTATION**	**Date**
TITLE		**TITLE**	
SIGNATURE		**SIGNATURE**	

Subject to the terms and conditions shown on Page 2 hereof; this permit is hereby approved and granted.

The "Permittee" agrees to the terms of this permit.

APPLICANT (PROPERTY OWNER)

APPLICATION FOR PERMISSION TO: _____*_____
(Give sufficient detail to permit thorough understanding and submit blueprints or sketches in triplicate.)
***If work involves Environmental-Related cleanup or monitoring, also complete Section 7.**

Township	Range	Section
_____	_____	_____

1. Name of Applicant: _____
2. Address of Applicant: _____
3. Applicant's Phone #: _____ Fax #: _____ Email: _____
4. If Applicant is a Corporation, give State of Incorporation and names of President and Secretary:
   _____
5. Highway survey stations, milepost, distances to centerline, and distance from right-of-way line (in metric units) near which installations or structures will be installed:
   _____
6. For how long a period is the permit desired?: _____
7. Nature of Permit: _____
8. Environmental actions involving hazardous waste sites? (Superfund, Spills, Underground Storage Tanks, Old Mines, etc.)

   YES: ☐ If YES is checked continue to **Page 3** to complete the **Environmental Questions Pertaining to #8 on Page #1.**

   NO: ☐ If No is checked continue to **Page 2**, **Instructions Concerning Use of this Form**.

(INSTRUCTIONS
CONCERNING USE OF THIS FORM)

Applicant will complete this form along with plans, sketches and an environmental checklist and send to the appropriate District Maintenance Chief for review and approval.

AN ENVIRONMENTAL CHECKLIST MUST BE COMPLETED BY APPLICANT AND MUST BE ATTACHED TO THIS PERMIT. THE PERMIT MUST NOT BE PROCESSED WITHOUT AN ENVIRONMENTAL CHECKLIST.

IF THE PROPOSED INSTALLATION WILL RESULT IN SIGNIFICANT, PERMANENT OR LONG TERM IMPACTS TO THE TRANSPORTATION NETWORK IN TERMS OF SUBSTANTIAL INCREASE TRAFFIC VOLUMES, WEIGHT OR DELAYS TO TRAFFIC ON STATE ROADWAYS, SUCH AS MAJOR MINES GREATER THAN FIVE ACRES, A RAILROAD AT–GRADE CROSSING, RAILROAD UNDER OR OVERPASS, OR STRIP MINES, OR IF THE PROPOSED ACTION HAS PERMANENT IMPACTS TO OTHER FORMS OF TRANSPORTATION (RAIL, TRANSIT, OR AIR MOVEMENT), THE ENCROACHMENT PERMIT MUST BE SUBMITTED TO THE TRANSPORTATION PLANNING DIVISION FOR REVIEW PRIOR TO ISSUANCE OF THIS PERMIT.

Subject to the following terms and conditions, the permit applied for upon the reverse side hereof, is hereby granted:

1. TERM. This permit shall be in full force and effect from the date hereof until revoked as herein provided.

2. FEE. The fee for issuance of this permit is ._____.

3. REVOCATION. This permit may be revoked by State upon giving **45** days notice to Permittee by ordinary mail, sent to the address shown herein. However, the State may revoke this permit without notice if Permittee violates any of its conditions or terms.

4. COMMENCEMENT OF WORK. No work shall be commenced until Permittee notifies the Maintenance Chief shown in application the date the Permittee proposes to commence work.

5. CHANGES IN HIGHWAY. If State highway changes necessitate changes in structures or installations installed under this permit, Permittee will make necessary changes without expense to State.

6. STATE SAVED HARMLESS FROM CLAIMS. As a consideration of being issued this permit, the Permittee, its successors or assigns, agrees to protect the State and save it harmless from all claims, actions or damage of every kind and description which may accrue to, or be suffered by, any person or persons, corporations or property by reason of the performance of any such work, character of materials used, or manner of installations, maintenance and operation, or by the improper occupancy of said highway right-of-way, and in case any suit or action is brought against the State and arising out of, or by reason of, any of the above causes, the Permittee, its successors or assigns, will, upon notice to them of the commencement of such action, defend the same at its sole cost and expense and satisfy any judgment which may be rendered against the State in any such suit or action.

7. PROTECTION OF TRAFFIC. The Permittee shall protect the work area with traffic control devices that comply with the Manual of Uniform Traffic Control Devices. The Permittee may be required to submit a traffic control plan to the Maintenance Chief for approval prior to starting work. During work, the Maintenance Chief or designee may require the Permittee to use additional traffic control devices to protect traffic or the work area. No road closure shall occur without prior approval from the District Engineer.

8. HIGHWAY AND DRAINAGE. If the work done under this permit interferes in any way with the drainage of the State highway affected. Permittee shall, at the Permittee's expense, make such provisions as the State may direct to remedy the interference.

9. RUBBISH AND DEBRIS. Upon completion of work contemplated under this permit, all rubbish and debris shall be immediately removed and the roadway and roadside left in a neat and presentable condition satisfactory to the State.

10. INSPECTION. The installation authorized by this permit shall be in compliance with the attached plan and the conditions of this permit. The Permittee may be required to remove or revise the installation, at sole expense of Permittee. If the installation does not conform with the requirements of this permit or the attached plan.

11. STATE'S RIGHT NOT TO BE INTERFERED WITH. All changes, reconstruction or relocation shall be done by Permittee so as to cause the least interference with any of the State's work, and the State shall not be liable for any damage to the Permittee by reason of any such work by the State, its agents, contractors or representatives, or by the exercise of any rights by the State upon the highways by the installations or structures placed under this permit.

12. REMOVAL OF INSTALLATIONS OR STRUCTURES. Unless waived by the State, upon termination of this permit, the Permittee shall remove the installations or structures installed under this permit at no cost to the State and restore the premises to the prior existing condition, reasonable and ordinary wear and tear and damage by the elements, or by circumstances over which the Permittee has no control, excepted.

13. MAINTENANCE AT EXPENSE OF PERMITTEE. Permittee shall maintain, at its sole expense, the installations and structures for which this permit is granted, in a condition satisfactory to the State.

14. STATE NOT LIABLE FOR DAMAGE TO INSTALLATIONS. In accepting this permit, the Permittee agrees that any damage or injury done to said installations or structures by a contractor working for the State, or by any State employee engaged in construction, alteration, repair, maintenance or improvement of the State highway, shall be at the sole expense of the Permittee.

15. STATE TO BE REIMBURSED FOR REPAIRING ROADWAY. Upon being billed, therefore, Permittee agrees to promptly reimburse State for any expense incurred in repairing surface of roadway due to settlement at installation, or for any other damage to roadway as a result of the work performed under this permit.

16. The Permittee shall not discharge or cause discharge of any hazardous or solid waste by the installation or operation of the facility of a State Right-of-Way.

17. The Permittee will control noxious weeds within the disturbed installation area for two (2) years.

18. In accordance with Mont. Code Ann. § 76-3-403(2), Permittee shall, at Permittee's expense, employ the services of a Montana Licensed Professional Land Surveyor to re-establish all existing survey monuments disturbed by work contemplated under this permit.

19. The use of explosives is prohibited for the installation.

20. Any condition of this permit shall not be waived without written approval of the appropriate District Engineer.

21. OTHER CONDITIONS AND/OR REMARKS: _____

Environmental Questions Pertaining to #8 on Page #1- Environmental actions involving hazardous waste sites? (Superfund, Spills, Underground Storage Tanks, Old Mines, etc.)

8a. Name of Facility:_____ Facility ID:_____

Address: _____

City: _____State:_____Zip: _____

8b. Leaking underground storage tank site? ☐ Yes ☐ No

If yes, provide MDEQ identification number: _____

Petro Fund Eligible? ☐ Yes ☐ No

8c. Remediation Response Sites (State Superfund Site)? ☐ Yes ☐ No

If yes, identification number and/or site name: _____

8d. Federal Superfund Site? ☐ Yes ☐ No

If yes, identification number and/or site name: _____

8e. Active Mine: ☐ Yes ☐ No **OR** Abandoned Mine: ☐ Yes ☐ No

If yes, list the Mine Site ID#: _____

Mine Description or Name: _____

8f. Spill: ☐ Yes ☐ No

Spill Site: _____

Spill Description: _____

8g. Other Environmental Action: _____

For each well installed in MDT R/W, provide GPS coordinates in state plane coordinates (preferred) or well survey information in another format (continue on another sheet if necessary).

NOTE: Each well request needs to be submitted on a separate application form.

Well Designation	**Easting**	**Northing**

Control Number	Project Identification Number	Name/ Location Description	Route/Corr.	Fed Funds Involved? Yes ☐ No ☐

(↑For MDT Use Only↑)

ENVIRONMENTAL CHECKLIST for:

☐ **Approach Permit** ☐ **Encroachment/Occupancy (incl. Utility)**

☐ **Maintenance Projects (with No Right-Of-Way Acquisition, Sale or Transfer)**

Location: Highway or Route: _____ Milepost(s): _____

Physical Address: _____ City: _____

Legal Description: County: _____ Township: _____ Range: _____ Section(s):

Applicant Information: Name: _____ Phone: _____

Company/Utility _____ Business Phone: _____

Mailing Address: _____ City _____ State _____ Zip Code _____

	Impact Questions Actions that qualify for Categorical Exclusion under MEPA and/or NEPA (See ARM 18.2.261 and 23 CFR 771.117)	**Yes**	**No**	**Comment, Explanation, and/or Informat Source (Attach supporting information, necessary.)**
1.	Will the proposed action impact any known historical or archaeological site(s)?	☐	☐	
2.	Will the proposed action impact any publicly owned parkland(s), recreation area(s), wildlife or waterfowl refuge(s)?	☐	☐	
3.	Will the proposed action impact prime farmlands? (If yes, attach a completed Farmland Conversion Impact Rating Ad-1006.)	☐	☐	
4.	a. Will the proposed action have an impact on the human environment that may result from relocations of persons or businesses, changes in traffic patterns, changes in grade, or other types of changes?	☐	☐	
	b. Has the proposed action received any preliminary or final approval from the local land use authority?	☐	☐	
5.	For the proposed action, is there documented controversy on environmental grounds? (For example, has the applicant received a letter of petition from an environmental organization?)	☐	☐	
6.	Will the proposed action require work in, across or adjacent to a listed or proposed Wild or Scenic River?	☐	☐	
7.	Will the proposed action require work in a Class I Air Shed or nonattainment area?	☐	☐	
8.	Will the proposed action impact air quality or increase noise, even temporarily?	☐	☐	
9.	Will the proposed action have potential to affect water quality, wetlands, streams or other water bodies? If the answer is YES, an environment-related permit or authorization may be required.	☐	☐	
10.	Are solid or hazardous wastes or petroleum products likely to be encountered? (For example, project occurs in or adjacent to Superfund sites, known spill areas, underground storage tanks, or abandoned mines.)	☐	☐	
11.	a. Are there any listed or candidate threatened or endangered species, or critical habitat in the vicinity of the proposed action?	☐	☐	
	b. Will the proposed action adversely affect listed or candidate threatened or endangered species, or adversely modify critical habitat?	☐	☐	
12.	Will the proposed action require an environmental-related permit or authorization? If the answer is "yes," please list the specific permits or authorizations.	☐	☐	
13.	a. Is the proposed action on or within approximately 1 mile of an Indian Reservation?	☐	☐	
	b. If "Yes", will a Tribal Water Permit be required	☐	☐	N/A ☐
14.	Will the proposed action result in increased traffic volumes, increased wait or delays on state highways, or have adverse impacts on other forms of transportation (rail, transit or air movements)?	☐	☐	
15.	Is the proposed action part of a project that may require other governmental permits, licenses or easements? If "Yes", describe the full extent of the project and any other permits, licenses or easements that may be necessary for the applicant to acquire.	☐	☐	

16. ☐ Attach a brief description of the work to be performed, including any subsurface work.

17. ☐ Attach representative photos of the site(s) where the proposed action would be implemented. Photos are to include any structures, streams, irrigation canals, and/or potential wetlands in the project area.

18. ☐ Attach map(s) showing the location(s) of the proposed action(s); Section, Township, Range; highway or route number and approximate route post(s).

Checklist preparer: _____

Applicant Title Date

Reviewed for completeness by:

MDT District Representative	Title	Date

Checklist Approved by:

Environmental Services Bureau (When any of the items 1 through 15 are checked “Yes”)	Title	Date
Transportation Planning (When items 14 or 15 are checked “Yes”)	Title	Date

Checklist Conditions and Required Approvals

A. The Applicant is **not** authorized to proceed with the proposed work until the checklist has been reviewed and approved, as necessary, and any requested conditions of approval have been incorporated.

B. Complete the checklist items 1 through 15, indicating "Yes" or "No" for each item. Include comments, explanations, information sources, and a description of the magnitude/importance of potential impacts in the right hand column. Attach additional and supporting information as needed. Ensure that information required for items 16, 17, and 18, is attached. The checklist preparer, by signing, certifies the accuracy of the information provided.

C. If "Yes" is indicated on any of the items, the Applicant must explain the impacts as applicable. Appropriate mitigation measures that will be taken to avoid, minimize, and/or mitigate adverse impacts must also be described. **Any proposed mitigation measures will become a condition of approval.** Use attachments if necessary. If the applicant checks “No” and the District concludes there may in fact be potential impacts, the Environmental Checklist must be forwarded to Environmental Services Bureau for review and approval.

D. If “Yes” is indicated in item 11 a. (threatened or endangered species), the Applicant should provide information naming the particular species and the expected location, distribution and habitat use in the proposed action area, i.e. within the immediate area of the proposed action; or, in the general area on occasion (seasonally passes through) but does not nest, den or occupy the area for more than a few days.

E. If the applicant checks "Yes" for any item, the approach permit, occupancy agreement or permit, along with the checklist and supporting information, including the Applicant’s mitigation proposal, documentation, evaluation and/or permits must be submitted to MDT Environmental Services Bureau. Electronic format is preferred.

F. When the applicant checks “Yes” to any item, the Applicant cannot be authorized to proceed with the proposed work until the MDT Environmental Services Bureau and/or Transportation Planning, as appropriate, reviews the information and signs the checklist.

G. Applicant must obtain all necessary permits or authorizations from other entities with jurisdiction prior to beginning the proposed action or activity. The Applicant is solely responsible for any environmental impacts incurred as a result of the project; obtaining any necessary environmental permits, notifications, and/or clearances; and ensuring compliance with environmental laws and regulations.

Montana’s Wild and Scenic Rivers system as published by the U.S. Department of Agriculture, or the U.S. Department of the Interior:

1. Middle Fork of the Flathead River (headwaters to South Fork of the Flathead River confluence)
2. North Fork of the Flathead River (Canadian Border to Middle Fork of the Flathead River confluence)
3. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir)
4. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge)

Stream Permitting Guidelines

To be used for informational purposes when filling out the Environmental Checklist for MDT approach permits, encroachment/occupancy permits or Maintenance projects.

The most commonly required permits or authorizations are listed below. **Other permits or authorizations may be required**, and other laws may apply depending on the type and the location of the proposed activity. For more information please refer to “A Guide to Stream Permitting in Montana” available on the Internet at http://www.dnrc.mt.gov/permits/ or from your local conservation district office. (The information provided below was adapted from “A Guide to Stream Permitting in Montana”)

Montana Natural Streambed and Land Preservation Act (310 Permit)

Any private, nongovernmental individual or entity that proposes any activity that physically alters or modifies the bed or banks of a **perennially flowing stream** must obtain a 310 permit before beginning work.

Contact the conservation district office to obtain a permit application, fill the application out and submit it to the local conservation district prior to any activity in or near a perennial-flowing stream. Once an application is accepted, a team that consists of a conservation district representative; a Department of Fish, Wildlife and Parks biologist; and the applicant may conduct an on site inspection. The team makes recommendations to the conservation district board, which has 60 days from the time the application is accepted to approve, modify, or deny the permit. Local rules apply. There is no charge for a 310 permit.

For more information, contact your local conservation district or the Conservation Districts Bureau – MT Department of Natural Resources and Conservation at (406) 444-6667, or the Montana Association of Conservation Districts (406) 443-5711

Montana Stream Protection Act (SPA 124 Permit)

Any agency or subdivision of federal, state, county, or city government proposing a project that may affect the natural existing shape and form of **any stream** or its banks or tributaries must obtain a SPA 124 permit before beginning work.

Any agency or unit of government planning a project must submit a Notice of Construction (application) to the Department of Fish, Wildlife and Parks, which has up to 60 days to review the application, perform an on-site investigation, and approve, modify, or deny the application. There is no application fee.

For more information contact the Habitat Protection Bureau – MT Fish, Wildlife and Parks (406) 444-2449.

Montana Floodplain and Floodway Management Act (Floodplain Development Permit)

Anyone planning new construction **within a designated l00 year floodplain** must obtain a floodplain development permit before beginning work. New construction includes, but is not limited to, placement of fill, roads, bridges, culverts, transmission lines, irrigation facilities, storage of equipment or materials, and excavation; new construction, placement, or replacement of manufactured homes; and new construction, additions, or substantial improvements to residential and commercial buildings. Check with local planning officials or the Floodplain Management Section of the Department of Natural Resources and Conservation to determine whether a 100-year floodplain has been designated for the stream of interest.

Floodplain Development Permits are available from the local floodplain administrator, who may be the city/county planner, sanitarian, building inspector, town clerk, or county commissioner.
Permit applications are available from the local floodplain administrator or from the Department of Natural Resources and Conservation. Application fees are established by the local government and vary widely throughout the state. The application process may take up to 60 days. Joint application participant-see Permitting Tips section.

For more information contact the Floodplain Management Section – MT Department of Natural Resources and Conservation (406) 444-0860.

Federal Clean Water Act (404 Authorization or Permit)

Anyone proposing a project that will result in the **discharge or placement of dredged or fill material into waters of the United States** must obtain a 404 authorization or permit before beginning work. "Waters of the United States" include lakes, rivers, streams (including perennial, intermittent, and ephemeral channels with an ordinary high water mark), wetlands, and other aquatic sites.

Anyone planning a project must submit an application to the U.S. Army Corps of Engineers (Corps). The U.S. Environmental Protection Agency also has regulatory review and enforcement functions under the law. Permit authorization varies depending on the size and scope of the intended project.

Activities that meet the conditions for a Nationwide or Regional General Permit may be approved in 10 to 45 days. Individual Permits require more extensive review and require a public notice period. Permit approval may take 90 to 120 days. Application fees for Individual Permits may vary from $10 for private individuals to $100 for commercial applicants. Do not send money with the application. Applicants will be notified if a fee applies.

For more information contact the U.S. Army Corps of Engineers, 10 West 15th Street, Suite 2200, Helena, MT 59626, Phone (406) 441-1375.

Short-term Water Quality Standard for Turbidity (318 Authorization)

Anyone initiating construction activity that will cause **short term or temporary violations of state surface water quality standards for turbidity in any "State water"** must obtain a 318 Authorization before beginning work. "State water" includes any body of water, irrigation system, or drainage system, either surface or underground, including wetlands, except for irrigation water where the water is used up within the irrigation system and the water is not returned to other state water.

A 318 Authorization must be obtained prior to initiating a project. The authorization may be obtained from the Department of Environmental Quality, or may be waived by the Department of Fish, Wildlife and Parks during its review process under the Natural Streambed and Land Preservation Act (310 Permit) or the Stream Protection Act (SPA 124 Permit).

Individual applications submitted to the Department of Environmental Quality are normally processed within 30 to 60 days. Authorizations waived under the 310 or SPA 124 permit processes correspond to the time frame under each permit system, usually 30 to 60 days. There is an application fee of $150.00 (make check or money order payable to Water Protection Bureau, Department of Environmental Quality).

For more information contact the Water Protection Bureau – MT Department of Environmental Quality (406) 444-3080.

Storm Water Discharge General Permits

Anyone proposing a construction **activity that will disturb one or more acres**, a defined industrial activity; a mining or oil and gas activity in which storm water will come into contact with overburden, raw material, intermediate products, finished products, or waste products located on the site of such operations (including active and inactive mine sites); or other defined activity that **has a discharge of storm water into surface waters**. Permit authorization is typically obtained under a Montana Pollutant Discharge Elimination System (MPDES) "General Permit".

For storm water discharges associated with construction activity, permit authorization is effective upon Department receipt of a complete Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and fee. This must be received no later than the construction activity start date. For other regulated storm water discharges, a complete Application Form, SWPPP (except for Small MS4s), and fee must be received for review at least 30 days prior to the discharge of storm water from the facility or activity. Fees vary depending on the type of permit. Contact the Department or visit the website listed below for various storm water discharge "General Permits," Application/NOI Forms, fee schedule, and other permitting forms/information.

For more information contact the Water Protection Bureau – MT Department of Environmental Quality, (406) 444-3080, http://www.deq.mt.gov.

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 Co., Montana may contain ubiquitous amounts of amphibole asbestos contamination. This contamination is 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.

(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 EPA 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 EPA or MDT Environmental Services in Helena, MT at (406) 444-7632.

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.