



Lincoln County Health Department  
418 Mineral Avenue  
Libby, MT 59923  
Phone: (406) 283-2442  
Fax: (406) 293-5640  
[www.lincolnmthealth.com](http://www.lincolnmthealth.com)

December 6, 2018

Tim Stepp  
Montana DEQ Solid Waste Program  
PO Box 200901  
Helena, MT 59620-0901

RE: License Expansion Application

Dear Mr. Stepp:

This letter is in response to the notice of deficiency that you sent on November 21, 2018.

1. I have attached a map of the proposed boundary and fenced area of the proposed Class IV expansion area.
2. The Libby Landfill property is surrounded by United States Forest Service property and there are no other adjacent property owners. (see attached)
3. The deed notation for geocode 56428328101020000 is attached. This deed notation is for the entire Libby Landfill property including the proposed expansion area and was approved by DEQ in 2010.
4. It is our intent to follow the design for proposed development of the Class IV expansion area that was approved in the EPA/CDM submission dated February 2008. (layouts attached)
5. It is our intent to follow previously approved air and groundwater monitoring plans.
6. The updated O&M plan is attached.
7. It is our intent to adopt the approved closure and post-closure plans. Updates will be made if necessary.
8. The entire landfill property is covered under general liability and comprehensive coverage purchased through Glacier Insurance. There will be no change to insurance cost when operation of the asbestos disposal area is taken over by Lincoln County.
9. It is our intent to continue use of our trust account at First Interstate Bank in Polson, Montana as our financial assurance mechanism.
10. The updated closure and post-closure cost estimates are attached.
11. a. As described in the Asbestos Class IV Landfill O&M plan and the previously approved air monitoring plan, asbestos will be prevented from entering the air so there are no potential air impacts from the disposal of RACM.  
b – c. The environmental assessment Landfill Conveyance document submitted to DEQ in December 2004 (attached) concluded that there are no known cultural or historic sites on the landfill property and no sensitive species will be impacted. This Landfill Conveyance document is for the entire landfill property including the proposed expansion area. In addition, this expansion is a continuation of the current use of the area.  
d. There are no sage grouse habitats identified in Lincoln County (map attached).

Sincerely,

A handwritten signature in blue ink, appearing to read "Kathi Hooper".

Kathi Hooper  
Director



November 21, 2018

Kathi Hooper  
Lincoln County Environmental Health  
418 Mineral Ave.  
Libby, MT 59923-1926

**RE: NOTICE OF DEFICIENCY—LICENSE EXPANSION APPLICATION**

Dear Ms. Hooper:

So that we may proceed with your license expansion application please provide the following:

1. A map of the proposed boundary and fenced areas
2. An updated list of adjacent residents
3. A deed notation with property boundaries and geocodes (for the Class IV expansion area)
4. An updated approved design for the proposed development of the Class IV unit
5. A statement of intent to follow previously approved air and groundwater monitoring plans
6. An updated operation and maintenance plan for phasing in of the Class IV waste
7. A statement of intent to adopt the approved closure and post-closure plans (with updates for changes)
8. Updated insurance cost estimate
9. Financial assurance mechanism
10. Updated closure and post-closure cost estimates
11. Items for completion of the environmental assessment and Montana Environmental Policy Act process:
  - a. An assessment of the potential air impacts from disposal of regulated amphibole asbestos wastes (RACM)
  - b. An assessment of potentially impacted animal and plant species
  - c. A list of any heritage sites within the proposed expansion
  - d. An assessment from the Montana Sage Grouse Habitat Conservation Program regarding potential impacts to sage grouse

Kathi Hooper  
Page 2  
November 21, 2018

Please contact me for assistance.

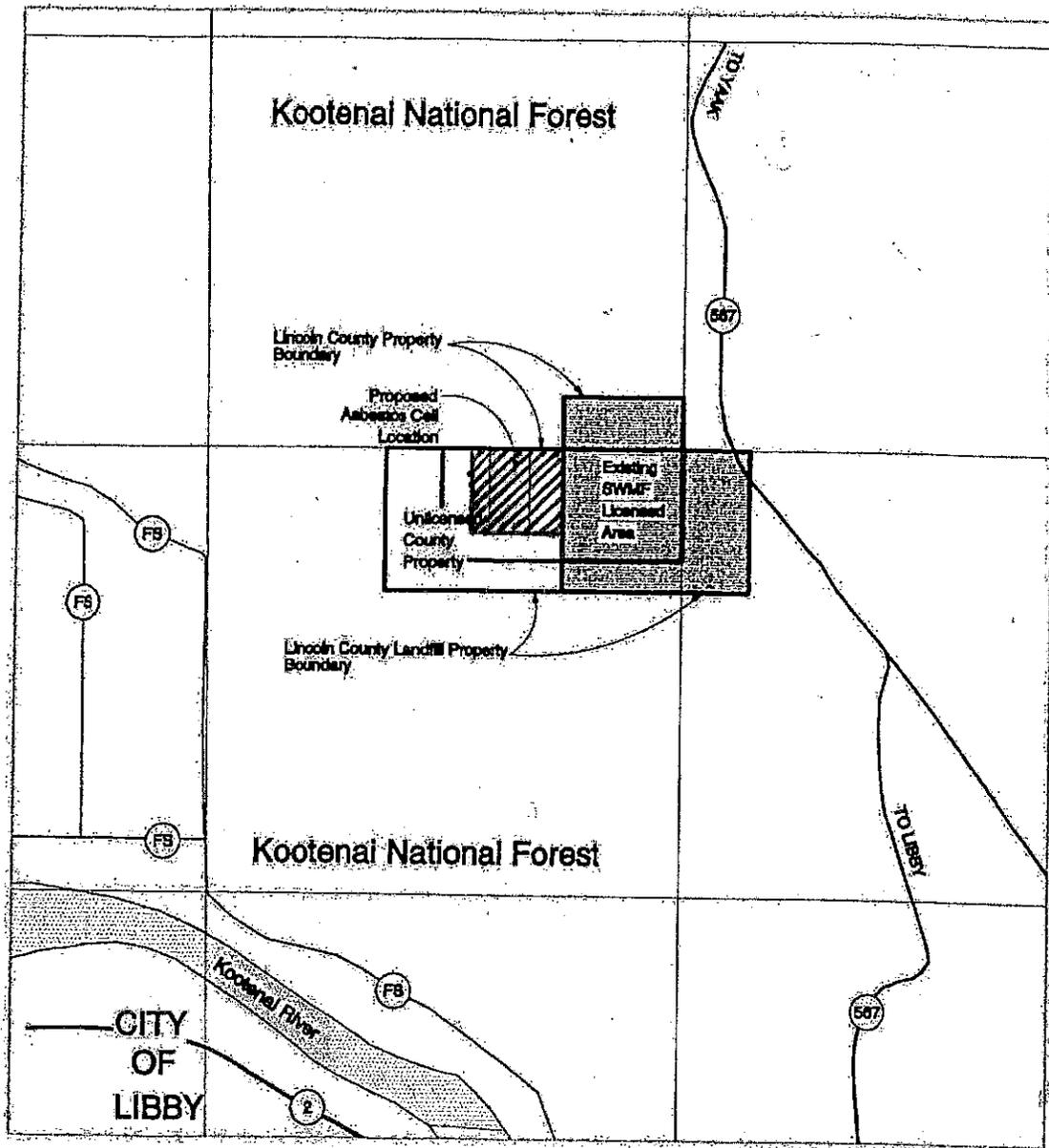
Sincerely,

A handwritten signature in blue ink that reads "Tim Stepp". The signature is cursive and includes a checkmark at the beginning.

Tim Stepp  
Environmental Engineer  
Solid Waste Program  
406-444-4725  
[tstepp@mt.gov](mailto:tstepp@mt.gov)

cc: Kathi Hooper, Environmental Health Director, [khooper@libby.org](mailto:khooper@libby.org)  
file-#99/Lincoln Co/Class II/License Expansion

# Asbestos Cell Proposed Boundary



## LEGEND

- Roads Improved 
- Roads Unimproved 
- Topography (40 Ft) 
- SWMF Boundary 



Location Plan - Lincoln County Landfill - Libby, Montana

LOCATION PLAN  
FIGURE 1

## Asbestos Cell Fenced Boundary





The Lincoln County Landfill is surrounded by United States Forest Service property on all sides.

The nearest private property is more than ½ mile from the proposed Class IV cell.

USA  
1101 US Hwy 2 W  
Libby, MT 59923-3104



NOTICE OF LANDFILL OPERATION  
Montana Department of Environmental Quality  
Waste & Underground Tank Management Bureau  
Solid Waste Program

PLEASE TAKE NOTICE as required by the Administrative Rules of Montana (ARM) 17.50.1113 that the deeded tract described below has been or is being used as a landfill facility for the licensed disposal of solid wastes. Future uses are now subject to certain restrictions as to the use of the land according to Administrative Rules of Montana (ARM) 17.50.1404 and Section 75-10-204, Montana Code Annotated (MCA). The deeded tract is described as follows:

Geocode 56-4283-28-1-01-02-0000

Deeded Tract 1A & 4A on file in Lincoln County, Montana, located in the N2NE N2N2S2NE E2NENW & N2NESENW of Section 28, Township 31N, Range 31W, P.M.M.

**RESTRICTIONS:**

Following closure of the above-described landfill facility (License No. 99), the owner's use of the described property must not disturb the integrity of the landfill final cover, liners (if any), or any other components of the containment systems, or the functioning of the monitoring systems (if any) without the written approval of the Montana Department of Environmental Quality. The Department may approve a disturbance if it is necessary to comply with the requirements of the solid waste laws and rules or if the owner demonstrates in writing that it will not increase the potential threat to human health or the environment. ARM 17.50.1404(3)(c); Section 75-10-204, MCA.

DATED: November 28, 2018

PROPERTY OWNER: [Signature]  
(Signature)

BY: Kathi Hopper, Solid Waste Director  
Printed Name & Title

STATE OF Montana  
County of Lincoln :SS

This instrument was subscribed and sworn before me on the 28 day of November, 2018, by Kathi Hopper (name) as Solid Waste Director (e.g. officer, trustee, etc) of Lincoln County, MT (property owner).

Maranda Davis  
(Signature)

Printed name: Maranda Davis

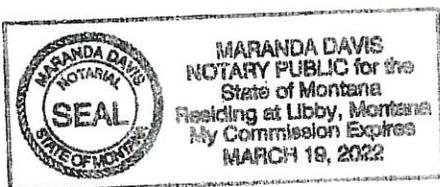
Title: Notary Public

Notary Public for the State of Montana

Residing at: Libby, Montana

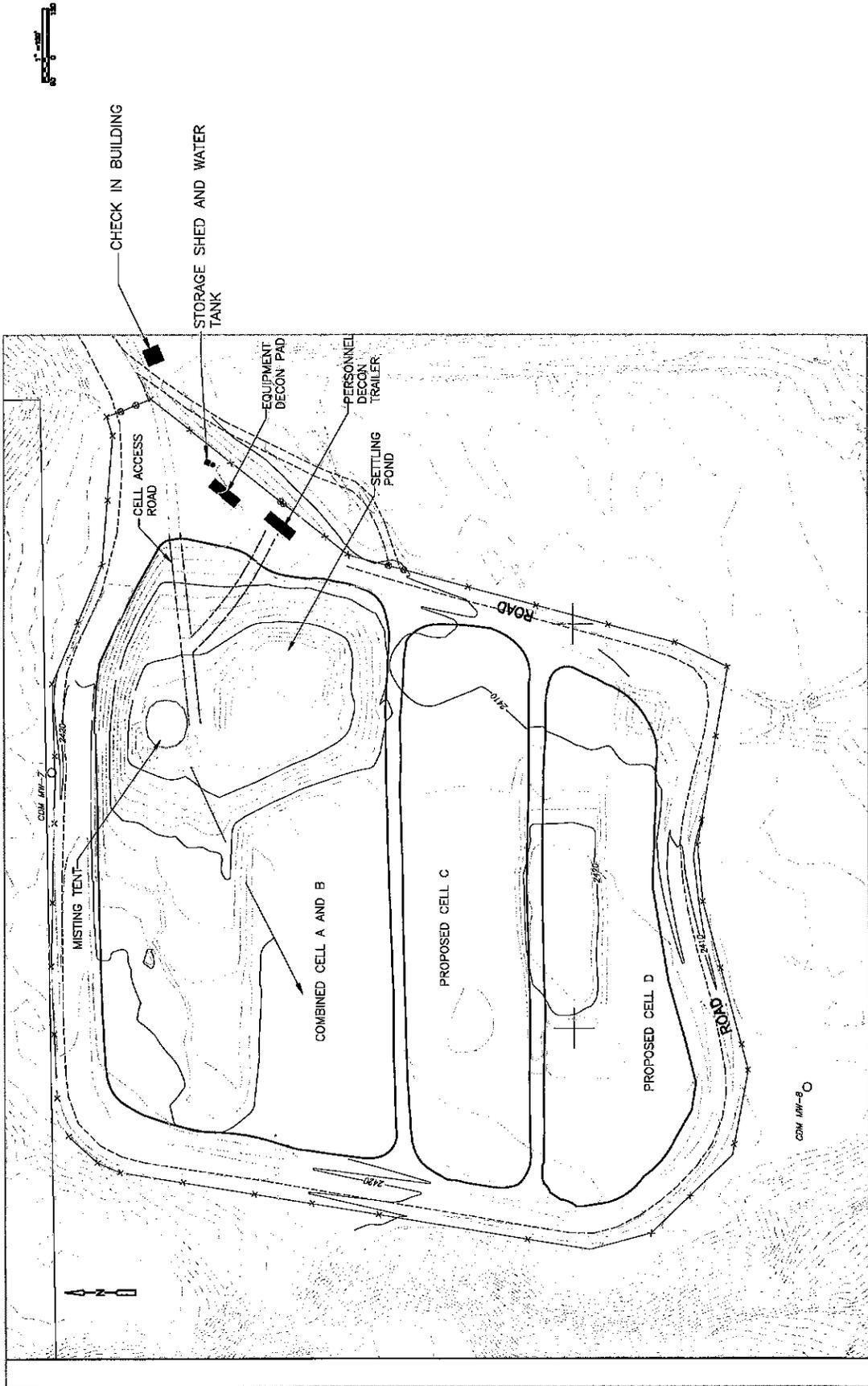
My commission expires: March 19, 2022

[SEAL]



277177 BOOK: PF PERM/FILES PAGE: 14395 Pages: 1  
STATE OF MONTANA LINCOLN COUNTY  
RECORDED: 11/28/2018 11:17 KOI: PERM/FILE  
ROBIN A. BENSON CLERK AND RECORDER  
FEE: \$0.00 BY: Chris Nelson Deputy





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Figure No. 2  
ACTIVE AND PROPOSED LANDFILL CELLS LAYOUT



## LIBBY CLASS II LANDFILL SPECIAL WASTE MANAGEMENT POLICY

Subject: Asbestos Containing Materials

Lincoln County Solid Waste accepts properly contained and transported ACM at the Libby Class II landfill. The non-friable ACM is deposited in the class II landfill and covered. The location coordinates and elevation are then recorded and placed into an electronic file for future reference. The friable ACM is deposited in a designated locked container for storage until deposited in the Asbestos Class IV landfill during scheduled dumping events.

## **Asbestos Class IV Landfill Operations**

For the purpose of these operations, the “landfill manager” will be an Asbestos Resource Program (ARP) employee and the “landfill operator” will be a qualified contractor.

During landfill operations, the landfill operator shall comply with the CSHASP, this landfill operations plan, and their own site-specific health and safety plan (SSHASP) created for landfill operations.

State and federal regulations dictate elements of Class IV and active asbestos waste disposal site operation. The following sections of this landfill operations plan describe the procedures to be followed during operation of the Lincoln County Class IV landfill. According to ARM 17.50.511(3), Class IV landfills must be designed, constructed, maintained and operated so as to control litter, insects, rodents, odor, aesthetics, residues, wastewater, leachate, and air pollutants. During all phases of construction and operations, the landfill operator shall comply with Occupational Safety and Health Administration (OSHA) Standards 29 CFR 1910.120.

The Class IV landfill shall be staffed by the County’s landfill operations contractor. Bulk vermiculite and other non-bagged ACM from project removals shall be transported to the asbestos landfill in vacuum boxes. Other double bagged ACM and contaminated demolition debris shall be transported to the asbestos landfill in covered trucks.

The following subsections describe the methods by which the landfill will be operated in order to comply with these regulations.

### **1. Asbestos Landfill Entrance**

Haul trucks and other Class IV asbestos landfill traffic shall enter the Lincoln County property via the existing road to the Class II landfill, then bear onto the northern Class IV asbestos landfill access road. The Class IV asbestos landfill is fenced at its perimeter with a locked gate to prevent unauthorized access. With the exception of the initial entrance and support zone inside the northeast gate, the Class IV landfill’s fence line shall also serve as the exclusion zone. All landfill operator personnel entering the exclusion zone shall be trained and wear the proper PPE.

A wood frame check-in building is located at the main gate to the Class IV asbestos landfill. Each haul truck (vacuum truck, dump truck, or truck carrying a roll-off container) shall stop at the check-in building and, if dumping material, provide the guard with the completed Asbestos Waste Shipment Record (WSR) for that load. The landfill operator attendant shall review the WSR, and if complete, signed and accepted, open the gate to the Class IV landfill and allow the truck to enter. The guard, an employee of the landfill operator, shall provide copies of the manifests to the site manager. Following acceptance of the completed asbestos waste manifest, the haul truck shall proceed down the ramp and into the misting tent to dump.

All trucks entering the exclusion zone shall be supplied with positive pressure units (PPU) and the drivers shall not be allowed to exit the vehicle while in the exclusion zone. Windows must be up, heaters/AC units shut off while in the exclusion zone. Roll off truck personnel that are dumping gross ACM must also be in level C, along with positive pressure. Support personnel assisting in dumping gross ACM material must vacate the misting tent once the door of the vacuum box is opened for 10 minutes or until visible dust emissions are gone from inside the tent.

## **2. Waste Disposal**

### **2.1 Vacuum trucks and roll-off vacuum boxes**

After entering the fenced landfill area, vacuum trucks and trucks disposing of vermiculite insulation in roll-off vacuum boxes shall go to the misting tent.

The dumping of waste stored in vacuum trucks or roll-off vacuum boxes by the landfill operator shall occur inside of the misting tent. The misting tent has been installed in a relatively permanent manner at the base of the cell.

Waste shall be dumped into a 3-sided reinforced concrete loading bin inside the misting tent, enclosed and located on the unloading ramp. Inside the misting tent, the landfill operator shall sprinkle water via a pump through numerous "misting" type sprinklers above and along the sides of the unloading vehicle. After the vacuum truck or roll-off dumps into the loading bin inside the misting tent, the landfill operator shall transport the waste to the working face of the asbestos cell using appropriate equipment. The landfill operator shall spray water on the waste when it is dumped in the active cell to prevent material from becoming airborne.

The application of water during waste disposal will be particularly important during the disposal of bulk vermiculite from vacuum trucks and roll-off vacuum boxes. Care must be taken by the landfill operator to ensure that all dumped materials are disposed of in the cell and that no material is allowed to become airborne. The misting tent must be in operation during (gross vermiculite dumping events)

### **2.2 Dump trucks**

Tarped or covered vehicles with double bagged vermiculite, demolition debris, small amounts of asbestos containing soil, and other double bagged ACM shall proceed directly to the working face, bypassing the misting tent. The haul trucks shall drive to the designated area selected by the landfill operator.

The landfill operator shall use a dedicated landfill water truck to apply water to the waste materials as they are dumped into the working face of the asbestos landfill. This application of water will prevent asbestos material from becoming airborne and control dust. The landfill operator shall spray water from the water truck directly onto the waste material.

### **2.3 Temporarily Stored ACM**

The landfill operator may temporarily store double bagged ACM or burrito wrapped ACM , outside of the asbestos landfill perimeter, in the “warm” containment area identified by having two concrete jersey barrier walls and caution tape in the event vacuum boxes or roll off boxes are full.

Properly bagged ACM shall be placed by the landfill operator in a roll-off box and stored in a designated location. The roll-off box shall be labeled as containing asbestos, and shall be in accordance with all applicable OSHA, state, and federal regulations. The landfill operator is responsible for the rental of the roll-off box each season.

Vacuum boxes, which shall be steel and airtight, shall also be stored in a designated location by the landfill operator while awaiting dumping.

Oversized ACM (e.g. used vacuum hose) may be temporarily stored near the jersey barriers in warm zone. The jersey barriers are located at the top of the asbestos landfill between the decontamination pad and the access road.

### **2.4 Non-Project Related ACM**

A container is located at the Lincoln County Landfill, distinct from those used for project-related ACM storage, for the disposal of ACM generated from home/commercial renovation or other non-project related activities. The licensed asbestos contractor must contact the Lincoln County Landfill for approval prior to bringing properly packaged ACM to the landfill.

The container has a 20-cubic yard capacity and is compatible with the asbestos class IV disposal roll-off trailers. The Lincoln County Landfill staff shall be responsible for maintaining the disposal container, including security (locking and holding the key), maintaining records of the materials disposed of in the container, and ensuring that only ACM that is properly packaged is placed in the container. The container shall be labeled “Asbestos.”

The landfill operator will determine the exact days for disposal of this roll-off in their submitted schedule at the beginning of each construction season. On the scheduled disposal days, the landfill operator shall empty the container into the Class IV asbestos landfill as described in this landfill operations plan and return the container to its storage area following decontamination. This ACM shall be accompanied by an Asbestos Waste Shipment Record for transfer to the Class IV asbestos landfill.

## **3 Waste Handling**

The landfill operator shall use appropriate equipment to distribute the waste in the asbestos landfill in uniform, compressible lifts no greater than 3 ft. in depth before placing a 6-inch layer of daily cover soil (obtained from the soil stockpile located adjacent to the cell) over the waste materials. At a minimum of one time at the end of each work day, 6-inches of cover soil shall be applied by the landfill operator over the waste material.

No dumped material or ACM shall be left uncovered overnight by the landfill operator.

Additional applications of cover soil may be required by the landfill operator to prevent dust or debris from becoming airborne. Once the cover soil has been applied, the waste/soil shall be compacted with appropriate equipment by the landfill operator.

Material shall be placed by the landfill operator in a manner that prevents any significant sinking and allows for landfill equipment and vehicles to safely drive over it in future dumping operations. Lifts shall be placed by the landfill operator to match the existing grade/contour of the disposal location.

#### **4. Asbestos Landfill Egress**

After disposing of the waste, each truck shall exit the cell and drive to the decontamination pad where it will be decontaminated by landfill operator personnel before exiting the exclusion zone. Landfill operator personnel are required to decontaminate all exterior portions of the truck, vehicle, or equipment exiting the exclusion zone, as detailed in Section 8 of this document. Landfill truck traffic shall be directed by the landfill operator.

#### **5. Daily Cover**

Waste shall be covered each day that disposal occurs at the landfill. No less than 6 inches of cover soil shall be placed over the waste material. The landfill operator shall apply cover soil at least daily during periods of landfill operation in accordance with OSHA Standards 40 CFR 61.154(c) (1). The application of daily cover will also control litter, disease vectors, and improve aesthetics at the Class IV asbestos landfill.

#### **6. Dust and Airborne Particulate Control**

During all phases of transportation, unloading, placement of waste, and covering of asbestos-containing wastes, no visible airborne contamination shall be permitted by the landfill operator.

The landfill operator shall have a dedicated landfill water truck available to water down the waste material during and following disposal in the landfill. The landfill operator shall prevent the generation of any visible airborne particulates. The landfill operator shall transport the asbestos waste to its final disposal location using appropriate equipment. The asbestos waste shall be covered by the landfill operator with cover soil as often as needed to disallow airborne asbestos and any visible particulate generation, but no less than once at the end of each day that the landfill is in operation.

All roads within the Class IV asbestos landfill, shall be watered or treated with magnesium chloride (or equivalent) by the landfill operator as necessary to prevent generation of dust. The landfill operator shall add water to soil stockpiles and cover soils should airborne dust become apparent during dry, windy conditions. If watering or treatment methods are not successful in eliminating dust or other particulate matter, landfill operations shall cease until conditions for operation improve.

## **6.1 Stop Work Situations**

Because they pose an immediate danger to public health and the environment, the occurrence of the following shall result in a shutdown of operations at the landfill:

- Visible dust emissions
- Failure by landfill operator personnel to operate the misting system within the tent during dumping activities
- The landfill operator does not provide water that is either suitable nor available for operations
- A lack of acceptable radio communication means between landfill operator personnel in the support and exclusion zones
- Insufficient PPE
- Lightning

## **6.2 Work Process Review**

Asbestos landfill operations are considered to be hazardous, and historical occupational air monitoring results inside of the misting tent have been highly variable, but often are above the OSHA PEL of 0.1 fibers per cubic centimeter (f/cc). Typically, occupational results above the PEL can be correlated to engineering controls and work practices utilized by the landfill operator.

The main engineering control utilized at the landfill to reduce occupational exposures is the misting system inside of the tent. The landfill operator must use the misting system during all landfill dumping events of gross vermiculite, and work shall be immediately stopped if the misting system is not operational (refer to Section 6.1 of this document for Stop Work Situations).

Work practices can dramatically impact occupational monitoring results. If the vacuum boxes are hastily dumped, and time is not provided for the misting system to adequately knock down dust, occupational results are typically higher. Diligence and care shall be exerted on behalf of the landfill operator to ensure the safety and health of landfill personnel.

The intent of the Work Process Review is to ensure that the landfill operator is exerting all feasible efforts to minimize dust levels in the misting tent and entire landfill during dumping operations.

If either of the following events occur, the landfill operator shall complete a Work Process Review:

- If two consecutive landfill dump events have task based occupational air results above the respective OSHA PEL, or
- If ambient air results indicate two (2) or more LA structures per sample as analyzed by (Transmission Electron Microscopy) TEM method

The Work Process Review shall consist of an evaluation performed by the landfill operator SHSO to identify factors that contributed to elevated air results. These factors can relate to the number of boxes dumped, the time it took to dump the boxes, misting system operation, or any other additional factors that contributed to the elevated air results.

The landfill operator shall complete the Work Process Review Form and submit this for review to the landfill manager within five (5) working days of receiving the air results. In addition to listing contributing factors, the landfill manager must provide suggested improvements and corrective actions to attempt to reduce dust levels for future dump events.

## **7. Stormwater and Erosion Control**

According to ARM 17.50.511 (1)(k)(l), runoff from the active landfill must not cause a discharge of pollutants into waters of the US, including wetlands, that violates any requirements of the Federal Clean Water Act, including National Pollutant Discharge Elimination System (NPDES) and Montana Pollutant Discharge Elimination System (MPDES), or that causes the discharge of a non-point source of pollution to waters of the US, including wetlands, that violates any requirement of an area-wide or state-wide water quality management plan that has been approved under Section 208 or 319 of the Federal Clean Water Act, as amended.

A run-on control ditch and a run-off storm water drainage ditch were constructed on the outside and inside of the gravel access road to and surrounding the landfill. The ditches will channel storm water off the road and away from the waste disposal site and toward a series of storm water retention ponds located southeast of the Class IV asbestos. The primary retention pond is located in the southeast corner of the Class IV asbestos landfill footprint. Sediment from within the asbestos landfill disposal area will settle within this pond and water will be channeled via a culvert under the road toward a secondary sediment pond. Sediment will settle in the secondary sediment pond and the water will be diverted through a culvert, under a dam, to the Lincoln County landfill ditch.

Erosion control fencing shall be installed and maintained by the landfill operator on the down-slope side of all soil stockpiles. The erosion control fencing shall be filter fabric sediment barrier or equivalent.

The landfill operator will perform maintenance activities to ensure appropriate system-wide drainage.

## **8. Decontamination**

### **8.1 Equipment Decontamination**

The landfill operator shall thoroughly decontaminate any vehicle or equipment leaving the exclusion zone. These decontamination operations shall be conducted by the landfill operator at

the site's decontamination pad. For dump trucks, the landfill operator shall unlock tailgate locks and spray the truck bed, tailgate seal and entire vehicle exterior, including the truck tires, with a pressure washer before allowing the truck to leave the exclusion zone. All means and methods shall be used to ensure all material is removed from the truck bed, once that truck is done hauling ACM. The truck shall then be visually inspected by the landfill operator for remaining debris. The tailgate shall be re-locked upon satisfaction of the landfill operator before the truck is allowed to leave.

For all other vehicles leaving the exclusion zone, the entire exterior, including the tires, shall be sprayed with a pressure washer by the landfill operator before being allowed to leave the zone. In addition, all equipment dedicated to the landfill exclusion zone (e.g., dozer, front end loader) that is leaving the exclusion zone shall undergo decontamination by the landfill operator as stated in Section 8.2 of this document.

All dump trucks leaving the landfill shall be covered in a manner such that no visible or detectable dust emissions are generated during transport. Truck covers shall extend a minimum of one foot below the top of the truck body and shall be secured to the truck body with elastic tie down straps. Each truck cover shall be checked by the landfill operator for condition and fit on the truck prior to the truck leaving the landfill. The landfill operator shall notify the removal contractor and the Site Manager if truck covers become damaged or torn. Damaged covers shall be replaced or removed from service by the removal contractor immediately following notification.

The landfill operator shall periodically clean out the sediment and used decontamination water from the sumps at the equipment decon pad and the decon pad in the misting tent. Water and sediment materials shall be disposed of by the landfill operator in the active landfill cell.

Water for decontamination shall be stored by the landfill operator onsite in an appropriate sized storage tank so as not to disrupt landfill operations. The tank shall be filled by the landfill operator via the dedicated site water truck, as needed.

## **8.2 Equipment Demobilization Requirements**

In addition to the daily decontamination operations at the landfill, at the end of the work season, or when equipment is being demobilized from the landfill, the landfill operator shall:

- Decontaminate all interior (with HEPA vacuum and wet wiping) and exterior (with pressure washer) surface areas of any equipment dedicated to the exclusion zone
- Remove and replace all equipment air filters, disposing of the discarded items at the landfill as ACM.
- Remove all belly pans, skid plates, and inspection covers to decon interior portions of equipment.

### **8.3 Personnel Decontamination**

A 3-stage decon trailer is located adjacent to the decon pad to provide for personnel decontamination. The decon trailer consists of a negative air filtrated dirty room, shower area with potable water, and clean room. The landfill operator shall ensure that the decon trailer is provided with a first-aid station, proper fire extinguishers, and full engineering controls including, but not limited to, negative air filtration units, employee PPE, fences, signs, traffic tape, etc. The landfill operator shall provide hot and cold potable water to the decon trailer, for use in personnel decontamination as specified in OSHA Standards 29 CFR 1910.141 (b)(1)(i) and 1926.51. Personnel decontamination facilities and their operations shall be maintained by the landfill operator in accordance with the CSHASP and all applicable OSHA regulations, including those listed above. All disposable PPE shall be collected by the landfill operator in double ACM bags, in accordance with OSHA regulations, and disposed of in the active asbestos landfill cell.

All personnel working in the exclusion zone shall be required to go through the 3-stage personnel decon trailer and undergo full decontamination procedures prior to leaving the exclusion zone.

### **9. Site Security**

ARM 17.50.511(1)(c) states that Class IV landfills must be fenced to prevent unauthorized access and must be supervised when open. Likewise, according to OSHA Standards 40 CFR 61.154(b), fencing must be installed and maintained in a manner adequate to deter access by the general public. The federal asbestos regulations require that warning signs be displayed at all entrances and at intervals of 330 feet along the perimeter of the site where asbestos-containing waste material is deposited. All signage must be posted and maintained by the landfill operator in accordance with these requirements.

The Lincoln County Class IV asbestos landfill is fenced at the perimeter with a 6-foot high chain-link fence topped with three strands of barbed wire segregating the Class IV asbestos landfill from the Lincoln County Class II landfill. The Class IV asbestos landfill shall be staffed by the landfill operator whenever ACM disposal is planned. When the landfill is unattended, the gate shall be locked by the landfill operator. Fencing and signage shall be maintained by the landfill operator during active waste disposal, closure, and post-closure.

Unqualified County landfill employees and the public are not permitted in the active asbestos waste disposal area.

### **10. Waste Screening**

The Lincoln County Class IV asbestos landfill can accept the following categories of wastes:

1. Group III Wastes: include wood and non-water soluble solids. These wastes are characterized by their general inert nature and low potential for adverse environmental impacts. These wastes include inert solid waste such as unpainted brick; dirt, rock, concrete; clean untreated and unglued wood material; brush; unpainted or untreated lumber; vehicle tires; and industrial

mineral wastes which are essentially inert and non-water soluble and do not contain hazardous waste constituents.

2. Group IV Wastes: include construction and demolition debris, and asphalt pavement.

Class IV landfills are not permitted to accept Group II wastes which include decomposable wastes. ARM 17.50.511 prohibits the acceptance of the following materials at Class IV landfills:

- Regulated hazardous waste/polychlorinated biphenyls (PCB) wastes.
- Bulk or noncontainerized liquid waste, unless approved in advance by DEQ or the waste is a household waste (other than septic).
- Containerized liquid waste, unless the container is small and similar in size to that normally found in household waste, the container is designed to hold liquids for use other than storage, or the waste is a household waste.

According to ARM 17.50.511 (1) (e), the Class IV landfill operator must implement a program for detecting and preventing the disposal of regulated hazardous waste/PCB wastes. The waste-screening program must include:

1. Random inspection, unless other steps are taken to ensure that incoming loads do not contain hazardous waste/PCB waste.
2. Records of inspections.
3. Training of personnel to recognize regulated hazardous waste/PCB waste.
4. Notification to DEQ if regulated hazardous/PCB waste is discovered at the facility.

Prior to transporting ACM to the Class IV asbestos landfill for disposal, the County's removal contractors are required to pre-screen the waste for acceptability at the Class IV Facility. Pre-screening involves visual inspection of residential, commercial, industrial, and public buildings planned to have an asbestos removal or to be demolished. Any liquid materials such as paint cans, cleaners, solvents, petroleum products, pesticides, etc. shall be removed from the building prior to vermiculite removal, ACM removal, or demolition. In addition, the County's removal contractor shall remove glues, resins, dyes, oils, pesticides, and any other household hazardous wastes from the building and inspect the building for PCB containing light fixtures. Any unacceptable material found during the pre-screening process shall be removed from the Class IV waste stream by the County's removal contractors and documented, appropriately manifested, containerized and disposed of at facilities licensed to accept such wastes, separately in accordance with state and federal regulations.

In addition to pre-screening by the County's removal contractors, the landfill operator is also required to visually inspect loads as they are deposited in the landfill. The landfill operator shall reject truck loads of unacceptable material when detected during the waste disposal process.

The County's removal contractors shall process demolition debris for disposal in the Class IV asbestos landfill into relatively small sized pieces, such that the debris passes through the tailgate of a dump truck and can be covered with 6-inches of daily cover soil and compacted in place by the tracked machinery used by the landfill operator.

## **11. Record Keeping**

Currently, there is no weigh station at the Lincoln County landfill facility or at the Class IV asbestos landfill. All waste loads for disposal at the Class IV asbestos landfill shall be tracked via the WSR by the landfill operator. The landfill operator shall provide the landfill manager with one copy of each WSR. The WSR shall be maintained by the landfill manager.

OSHA Standards 40 CFR 61.154(e) and 17.50.511(1) (p) specify the requirements of records to be maintained by the landfill. For all asbestos-containing waste material received, the owner/operator of the landfill shall maintain waste shipment records including, at a minimum:

1. The name, address, telephone number of the generator.
2. The name, address, and telephone number of the transporter.
3. The quantity of the ACM in cubic yards.
4. The presence of improperly enclosed or uncovered waste.
5. The date of receipt.

Records maintained by the landfill must also include:

1. Inspection records, training procedures, results and information from the comprehensive employee health monitoring plan, and notification procedures.
2. Any demonstration, certification, finding, monitoring, testing, or analytical data required by department groundwater monitoring regulations found in ARM 17.50.701.
3. Closure and post closure care plans.
4. Cost estimates and financial assurance documentation.
5. Any waste quantity records.

The landfill operator must retain records at the landfill in an alternate location approved by DEQ. Duplicate landfill records will be kept in a separate location, at the Lincoln County Environmental Health office. The owner/operator must notify the DEQ when documents have been placed or added to the record. All information must be made available for inspection by DEQ and the public. According to ARM 17.74.341, records must be maintained and made available to DEQ when requested, for 30 years.

If, for any reason, the landfill operator plans to excavate or otherwise disturb any asbestos containing waste that has been disposed of and covered at the landfill, the landfill operator must

notify the DEQ at least 45 days prior to the disruptive activity. In accordance with OSHA Standards 40 CFR 61.154(j), notification must include:

1. Starting and completion dates.
2. Reason for disturbing the waste.
3. Methods for controlling emissions during excavation, storage, transport, and disposal.
4. Location of temporary storage area and final disposition site.

## **12. Third Party Disposal**

The County may allow selected private parties to dispose of ACM at the Class IV asbestos landfill on a case-by-case basis. Prior to allowing a third party to dispose of ACM at the Class IV landfill, the County will provide the requesting party a copy of the most current landfill operations plan. Prior to scheduling any ACM removals, the third party shall provide the County with a SAP for thorough characterization of the ACM proposed for disposal in the asbestos landfill. The SAP shall provide a description and scaled plan of the removal area, history of land or facility uses, proposed removal activities and quantities, analytical parameters and methods, and the laboratories proposed to perform the analyses. The County may require up to two (2) months for review of the SAP. Following approval of the SAP, the third party shall provide the County with analytical test results for review.

Prior to scheduling any disposal activities, the County shall require that the third party agree in writing to comply with all requirements described in the most current landfill operations plan, including all Addenda, and the CSHASP. In addition, the third party shall submit an SSHASP to the County, prior to beginning any landfill operations, covering its anticipated landfill activities. The third party's SSHASP shall be in accordance with the SSHASP requirements stipulated for the landfill operator.

All contractors, subcontractors, transporters, consultants, engineers, vendors, suppliers and others employed by the third party shall meet the requirements described in this section.

## **13. Methane Gas Generation**

According to ARM 17.50.511(1)(f), the landfill operator must ensure that methane gas generated does not exceed 25 percent of methane's lower explosive limit (LEL) in facility structures and that methane does not exceed the LEL at the facility property boundary. Due to the inert characteristics of the waste materials generally acceptable at the Class IV asbestos landfill, it is not anticipated that significant quantities of methane gas will be generated. Most of the wastes to be accepted are expected to be inorganic wastes such as vermiculite, soil, demolition debris, and concrete. However, some wood waste from structures will be accepted as well. Distances from existing residential, public, commercial, and industrial structures to the asbestos landfill are significant. Therefore, unless the classification of the asbestos landfill changes over the period of landfill operation, or unless significant development occurs adjacent to the landfill, an exemption from monitoring methane gas is requested.



December 5, 2018

Lincoln County Offices  
Ms. Kathi J. Hooper  
417 Mineral Ave.  
Libby, MT 59923

Re: **2018 Landfill Closure and Post Closure Cost Estimates  
Class IV Asbestos Cell**

Dear Ms. Hooper:

Please find enclosed worksheets showing the cost estimates for the closure and post closure care of the Class IV Asbestos Cell of the Lincoln County Landfill at Libby, MT. I have included for your inspection the backup sheets that show how the cost estimates were developed and the assumptions made. The assumptions were made for volumes and areas based on the closure plan you had provided that was prepared by CDM. The 2018 Closure Cost Estimate for the Class IV Asbestos Landfill is **\$193,308** and the Post Closure Cost Estimate (Annual) for 2018 is **\$13,233** (2018 dollars).

Next year, the 2019 cost estimates may be determined by re-assessing the actual costs for each component and any MDEQ-modifications to the Class IV Asbestos Cell operation and closure.

If you have any questions regarding the attached cost estimate please feel free to call me at 406.293.1011.

Sincerely,

David Cosgriff, P.E.  
Arrowhead Engineering, Inc.



Attachment: **2018 Class IV Asbestos Cell Closure Cost Estimate (2 copies)**  
**2018 Class IV Asbestos Cell Post Closure Cost Estimate (2 copies)**

C: File

**Libby Landfill  
Class IV Asbestos Cell**

**Closure and Post Closure Cost Estimates  
December 2018**

**Assumptions used in estimates (obtained from CDM Closure Plan,  
Section 4)**

**Closure:**

Closure Area – Maximum Area = 840-feet by 540-feet, or 453,600 square feet.

The 2 feet of soil initially removed and stockpiled will be used as the final cover.

Barrier Soil Layer – 18 inches of earthen material with permeability no greater than  $1 \times 10^{-5}$  cm/sec.

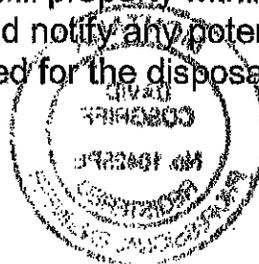
Erosion layer control layer with seed bed layer that contains a minimum of 6-inches of earthen material that is capable of sustaining native plant growth.

A revegetated cover with native plant growth applied within 1 year of placement of the final cover. The seed mix is specified in Section 6 of the Closure Plan (CDM, 2004).

**Post Closure Care:**

Maintain at least 6 inches of compacted, non-ACM and vegetative cover, fencing and signage.

Include a notation on the deed to the landfill property within 60 days after site becomes inactive. The notation would notify any potential purchaser of the property that the land has been used for the disposal of asbestos waste.



**CONSTRUCTION COST ESTIMATE FOR CLOSURE**  
**Class IV Asbestos Cell**

**December 2018**

**BARRIER LAYER:** Clayey soil obtained on site. There is sufficient quantity on site that meets the permeability standard for a barrier layer. Swell factor = 1.2.

Total Acreage = 10.4 Ac

Total acreage of 1.5' barrier layer = 10.4 Ac

Volume of barrier material required:

$$(10.4) \times 1.5 \text{ ft} \times 1.2 \times \frac{43,560 \text{ ft}^2}{\text{Ac.}} \times \frac{1 \text{ yd}^3}{27 \text{ ft}^3} = 30,202 \text{ yd}^3$$

Cost of excavate, haul, spread using scrapers \$1.72/yd<sup>3</sup>

Cost to compact in 8" lifts using a D6, roller and Water truck = \$1.56/yd<sup>3</sup>

Cost to excavate, haul, spread and compact 8" lifts = \$3.28/yd<sup>3</sup>

30,202 yd<sup>3</sup> x \$3.28 = **\$99,063**

**TOPSOIL:** Obtained on site. Nutrient enrichment needed from any local source. There is sufficient quantity on site that has proven ability to grow vegetation. Must be non-ACM.

Volume of 6" topsoil layer (no swell factor) from CDM Closure Plan:

$$\frac{(10.4) \times 0.5 \text{ ft} \times 43,560 \text{ ft}^2}{\text{Ac.}} \times \frac{1 \text{ yd}^3}{27 \text{ ft}^3} = 839 \text{ yd}^3$$

Cost to excavate, haul and spread using scraper = \$1.72/yd<sup>3</sup>

Cost to fine grade using D6 = \$1.15/yd<sup>3</sup>

Total cost to excavate, haul, spread & fine grade = \$2.87/yd<sup>3</sup>

8,390 yd<sup>3</sup> x \$2.87 **\$24,080**



**POST CLOSURE COSTS**  
**Class IV Asbestos Cell**

December 2018

SITE VISITS - Twice Annually

$$(2) \times 4 \text{ Hrs.} \times \$103 = \underline{\$ 824} \text{ Annual Cost}$$

EROSION REPAIR

Year 1: Assumed dozer repair with some additional cover material required.

$$\begin{aligned} \text{Dozer} - 12 \text{ Hrs. @ } \$123 &= \$1476 \\ \text{Cover Material} - 50 \text{ yd}^3 \text{ @ } \$18/\text{Yd}^3 &= \$ 900 \\ \text{Topsoil} - 25 \text{ Yd}^3 \text{ @ } \$33/\text{Yd}^3 &= \underline{\$ 825} \\ &= \$3201 \end{aligned}$$

Year 2: Assume 1/2 of Year 1

$$\$3201 \times \frac{1}{2} = \$ 1600$$

Year 3: Assume 1/2 of Year 2

$$\$ 1600 \times \frac{1}{2} = \$800$$

Year 4 – 30: Assumed that erosion problems will have been corrected. Turf well established. Basic costs anticipated in these years.

$$= \$ 500$$

Average Annual Cost:

$$[3201 + 1600 + 800 + (500 \times 27)]/30 = \underline{\$637} \text{ Annual Cost}$$

SETTLEMENT:

It is assumed that the finished grades will be sufficiently sloped to drain any areas experiencing isolated settling. In order to accommodate all eventualities it will be assumed 25 Yd<sup>3</sup> of topsoil will be necessary to fill any low spots every year.

$$\begin{aligned} \text{Topsoil} - 25 \text{ Yd}^3 \text{ @ } \$33/\text{Yd}^3 &= \$825 \\ \text{Grader} - 4 \text{ Hrs @ } \$86 &= \underline{\$344} \end{aligned}$$

**\$1169 Annual Cost**

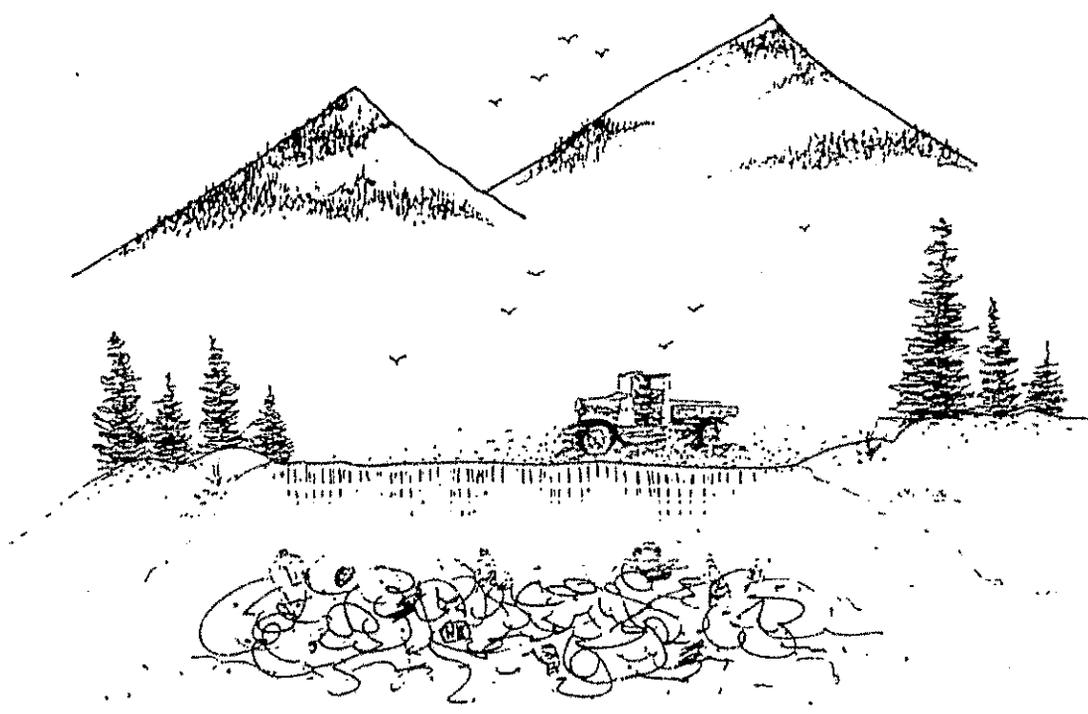
RT  
**RECEIVED**

DEC 03 2004

DEPT. OF ENVIRO. QUALITY  
WASTE & UNDERGROUND TANK  
MANAGEMENT BUREAU

**ENVIRONMENTAL ASSESSMENT**

**LANDFILL CONVEYANCE**



# ENVIRONMENTAL ASSESSMENT LAND OWNERSHIP CONVEYANCE

National Forest Townsite Act of July 31, 1958 (72 Stat. 438; 7 U.S.C. 1012 a; 16 U.S.C. 478 a) as amended by the Act of October 21, 1976 (90 Stat. 2760) and the Sisk Act of December 4, 1967, (P.L. 90-171, 81 Stat. 531 as amended; 16 U.S.C. 484 a).

Libby Landfill Land Sale - MTM 80204 and MTM 80223  
Lincoln County, Montana

United States Department of Agriculture  
Forest Service  
Kootenai National Forest  
Lincoln County, Montana

**RECEIVED**

DEC 03 2004

DEPT. OF ENVIRO. QUALITY  
WASTE & UNDERGROUND TANK  
MANAGEMENT BUREAU

Prepared by:

John W. Peterson

John W. Peterson, R.S.  
Assistant County Sanitarian  
Department of Environmental Health  
Lincoln County, Montana

2/1/93  
Date

Reviewed by:

Ronald L. Anderson

Ronald L. Anderson, R.S.  
County Sanitarian  
Department of Environmental Health  
Lincoln County, Montana

2/2/93  
Date

Reviewed by:

Lawrence R. Cron

Lawrence R. Cron  
Lands Officer  
Kootenai National Forest

1/29/93  
Date

Reviewed by:

Darcy Pederson

Darcy Pederson  
Libby District Ranger

2/3/93  
Date

Reviewed by:

Robert L. Schrenk

Robert L. Schrenk  
Forest Supervisor

5 FEB 93  
Date

Approved by:

Charles E. Wassinger  
Director of Lands and Minerals  
USDA-Forest Service  
Northern Region

\_\_\_\_\_  
Date

The existing 40 acre Libby Landfill contains hazardous materials. Lincoln County is considered a "Potentially Responsible Party" with respect to these hazardous materials. Lincoln County Commissioners have signed a Hold Harmless Resolution and Agreement which will be filled with the conveyance documents. This document releases the United States of America of all liability associated with the hazardous materials and is enforceable in a court of competent jurisdiction.

Based upon the previous information, I conclude that the studies undertaken, the results from groundwater monitoring, the compliance with landfill siting criteria and anticipated future groundwater monitoring present the necessary data to determine that any uncertain and unknown effects are minimal. I have concluded that the benefits of Alternative B far exceed the risk of effects that may be uncertain or known. I have also concluded that the United States of America will not be liable for cleanup of existing hazardous materials in the 40 acre Libby Landfill.

**6. Consideration of the degree to which this action will set a precedent for future actions with significant effects.**

This action will eliminate a Special Use Permit authorizing a Class II Landfill on National Forest Lands. Existing Forest Service policy prohibits landfilling. This action will release the United States of America from liability associated with hazardous materials in the Libby Landfill because Lincoln County is considered a Potentially Responsible Party. Conveyance of lands are authorized under the National Forest Townsite Act for the 130 acres to be used for expansion, and the Sisk Act for the 40 acres currently under Special Use Permit for landfilling. Similar conveyances of land to local governmental subdivisions have occurred in the past. This proposal does not take actions that will be precedent setting.

I conclude that the Proposed Action does not establish precedence for future actions with unknown risks to the environment. Any site-specific proposal must be evaluated on its own merits.

**7. Consideration of the action as related to other actions with cumulative significant impacts.**

Cumulative effects of the Proposed Action and other ongoing activities are not expected to be significant. The cumulative effects associated with landfilling and existing hazardous materials was evaluated in the EA, Chapter IV. Sufficient detailed studies and monitoring adequately evaluated cumulative impacts. Current and anticipated state and federal regulations will prevent significant cumulative impacts to the environment, public health and safety.

Based upon the Environmental Assessment and the associated documents in the Planning record, I conclude that there are not cumulative significant impacts.

**8. Consideration of the degree to which the action may effect listed or eligible Historic Places.**

The Proposed Action will not effect any known cultural sites. A cultural resource overview and survey have been completed. No sites were found that qualify for listing in the National Register. EA page 18.

Based upon this information, I conclude that this decision will not cause loss or destruction of significant scientific, cultural, or historic resources.

**9. Consideration of the degree to which the action may effect Threatened and Endangered Species or their habitat.**

A Biological Evaluation has been completed assessing potential impacts to Threatened and Endangered species and their habitat. Proposed Alternative B would have no effect on grizzly bear, wolves, or peregrine falcons; and is unlikely to jeopardize the continued existence of the bald eagle. The Libby

Landfill may be used as a feeding site for bald eagles, and eagles may roost in the surrounding trees at night. There are no active nesting sites within the study area but a nesting site is located within 1.1 miles of the existing Landfill. The proposed expansion area would be within 3/4 mile of this nest. The biological evaluation concluded that it is unlikely the proposed action of moving the landfill boundary approximately 1/4 mile closer to the nest will result in nest abandonment from the disturbance caused by landfilling activities. It is also unlikely that the proposed action will create a greater possibility of nest destruction by common ravens, or result in secondary poisoning. This opinion was based upon Lincoln County's compliance with state and federal laws related to landfilling.

I conclude that there will be no adverse effect to species or their habitat determined to be critical under the Endangered Species Act.

10. **Consideration of whether the action violates Federal, State, or Local laws or requirements imposed for the protection of the environment.**

No issues were raised by members of the public concerning existing laws or regulations. Conveyance of land will be to Lincoln County, a Potentially Responsible Party, who must comply with all State and Federal laws to receive a permit for operating a Class II Landfill.

The Proposed action does not violate Federal, State, Local laws, regulations, or requirements for the protection of the environment.

## VI. FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

**National Historic Preservation Act:** No cultural resources are expected to be affected by my decision. This project has been given clearance by the State Historical Protection Officer.

**Endangered Species Act:** The District Wildlife Bio/tech wrote the Biological Evaluation on the Proposed Action. The U.S. Fish and Wildlife Service has concurred with the District Bio/tech's findings.

**National Forest Management Act:** The National Forest Management Act and accompanying regulations require that several specific findings be documented at the project level. The alternatives have been evaluated and compared to the Forest Plan Standards, goals, and objectives. It has been determined that the selected alternative will meet Forest Plan standards and will contribute towards reaching Forest Plan goals and objectives.

**E.O. 11990 and E.O. 11988:** A hydrologist evaluated the proposed action in regards to Wetlands - E.O. 11990 and Floodplains - E.O. 11988. The proposed action meets the goals of both E.O.'s. No wetlands or floodplains will be affected.

**Forest Plan Consistency:** Management activities are to be consistent with the Forest Plan {16 U.S.C. 1604(i)}. The Forest Plan guides management activities {36 CFR 219.1(b)}. My decision is consistent with the Forest Plan.

### COMPLIANCE WITH AUTHORIZATION TO CONVEY

#### TOWNSITE ACT

The 130 acre expansion tract as described on page 1 & 2 is within the authorized area of this act. These federal lands are located adjacent to the established community of Libby, Montana and within Lincoln County. The Braun Engineering Study determined that this area meets the siting criteria for a Class 2 Solid Waste landfill. (See Appendices B & C).

## VII. IMPLEMENTATION DATE AND APPEAL RIGHTS

Since the proposed action is a permanent land adjustment, this decision will not take place until at least **forty five (45) days** after the decision is published in the *Western News*, Libby, MT. This decision will also be published in the *Tobacco Valley News*, Eureka, MT.

This decision is subject to appeal pursuant to 36 CFR 217.3.

Lincoln County Commissioners may file a written Notice of Appeal under 251.82 or 217.3. All other persons may appeal under 217.3. For 217 appeals, a written notice of appeal and two copies must be submitted within 45 days of the date of the legal notice of the decision to: Chief of the Forest Service, P.O. Box 96090, Washington, DC 20090. Failure to file the appeal in compliance with the procedures identified in 36 CFR 217 could result in dismissal of the appeal. If Lincoln County Commissioners appeal under 36 CFR 251, then one copy of the Notice of Appeal (NOA) must be sent to the Chief and one copy to the Regional Forester, U.S.F.S. Northern Region, Federal Building, 200 East Broadway, P.O. Box 7669, Missoula, MT 59807. The appeal must meet the requirements under 36 CFR 251.

The results of scoping and the subsequent environmental analysis and mitigation measures are recorded in a project file which is available for public viewing at the Kootenai National Forest Supervisors Office. For more information on this decision contact: Ted Andersen, Kootenai National Forest, (406) 293-6211.

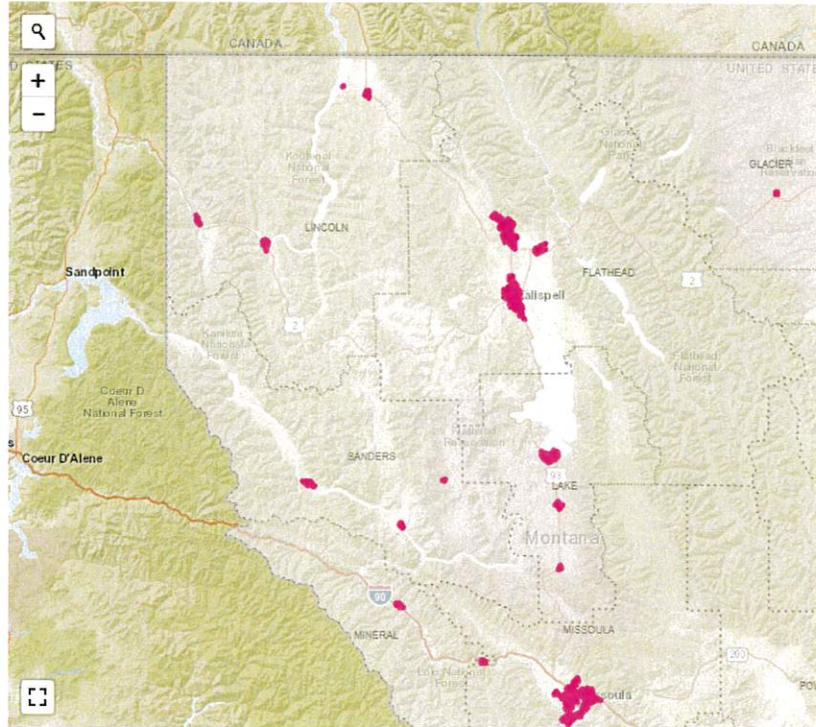


CHARLES E. WASSINGER  
Director of Lands and Minerals  
U.S.F.S. Northern Region  
Federal Building, 200 East Broadway  
P.O. Box 7669  
Missoula, MT 59807

3-5-93

Date

your project's location.



There are no Sage Grouse Habitats identified in Lincoln County, Montana.