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Hello,

The Helena National Forest has prepared a Draft Concept Alternatives Technical Memorandum for the Mike Horse Dam and Tailings Impoundment at the Upper Blackfoot Mining Complex on national forest system lands in the Mike Horse area. As part of this process, I'd like to give you the opportunity to review and provide site-specific comments on the summary of the range of concept alternatives presented in this letter. The complete document can be accessed at our website at http://www.fs.fed.us/r1/helena/projects/blkfoot_mine.shtml.

Background

The Upper Blackfoot Mining Complex (UBMC) is located approximately 15 miles east of Lincoln, Montana, as displayed in the attached map (Figure 1-1). Mining activity in the UBMC began with the discovery of silver, lead, and zinc bearing ores in the late 1800s. Individual historic mines at the UBMC include the Mike Horse and others on private land. Development and production occurred at these various mines beginning in 1900 with the most significant production occurring at the Mike Horse Mine in the late 1930s and 1940s. As part of processing ores, mill tailings were disposed of in Beartrap Creek, which eventually led to development of a large tailings pile held in place by an impoundment constructed of wood cribbing.

Historic mining activities have resulted in significant land disturbance and impairment of surface water quality at the UBMC. Investigations identify discharge from several mine adits as significant sources of metals loading to the headwaters of the Blackfoot River. Other identified metals loading sources include accumulated mine waste rock and tailings in drainage bottoms and on hillsides. A breach of the tailings impoundment in 1975 washed tailings downstream and deposited tailings within the floodplains of Beartrap Creek and the Upper Blackfoot River on National Forest land. An earthen dam was constructed after this 1975 event to repair the breach and reinforce the tailings impoundment.

The UBMC was identified in 1991 by the State of Montana for reclamation cleanup and has been listed as a State superfund site. In 1993, ASARCO, Incorporated LLC (ASARCO) and Atlantic Richfield Company (ARCO) began a remedial program to address environmental impacts from historic mining activities at the UBMC and an agreement was entered with Montana Department of Environmental Quality (MDEQ) to conduct voluntary cleanup actions at the site. ASARCO worked for the next five years with the State to reclaim mine wastes, install waste repositories, and build an active adit treatment system on private land owned by ASARCO.

In 1996 the Forest Service initiated negotiations with ASARCO and ARCO to develop an agreement to address the wastes and tailings impoundment on federal land. While discussions and data collection continued at the site, nothing formal transpired until 2002 when ASARCO, in financial difficulty, signed an Administrative Order on Consent (AOC) with the Forest Service on this site and negotiated a global cleanup settlement. The global cleanup settlement resulted in formation of a cleanup trust fund managed by a trustee and EPA.



Moving into Actions on National Forest System Lands

The removal and cleanup of wastes on public lands administered by the Forest Service will be conducted through a process outlined in the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The Forest Service will act as the lead agency on lands that it administers and is responsible for oversight of all investigations and cleanup of hazardous substances on national forest system lands.

In 2002, ASARCO and the United States Department of Agriculture, Forest Service, Northern Region entered into an AOC for development of an Engineering Evaluation Cost Analysis (EECA) at the Upper Blackfoot Mining Complex Site. The purpose and scope of the EECA is to control threats to human health and contain environmental contaminants on National Forest System lands. Specifically, the EECA will evaluate various removal action alternatives for mining related impacts on two major components; 1) the floodplains of Lower Mike Horse Creek, Beartrap Creek and the Upper Blackfoot River, and 2) the Mike Horse Dam and impounded tailings.

The first component described above was investigated in a previous technical alternative memorandum "Technical Alternatives Technical Memorandum for removing wastes from the floodplain areas" (Final Alternatives Technical Memorandum for Mine Waste Removal at the Upper Blackfoot Mining Complex, Hydrometrics, Inc. January 2005). That document was prepared for ASARCO by Hydrometrics, Inc. and described conceptual alternatives that will be carried forward into the EECA for the floodplain portions of the site. A public review period accompanied the release of a draft version of that document in the fall, 2004 and comments during that period led to the alternatives which appear in the January 2005 Final document. That document is posted on the Helena National Forest internet website at http://www.fs.fed.us/r1/helena/projects/blkfoot_mine.shtml .

The second component, the dam and impounded tailings, is being addressed in this technical memorandum. Although public input during review of the memorandum is not required under CERCLA, the Helena National Forest feels public input is necessary for the success of this project. The Forest Service is also committed to working cooperatively with Montana DEQ and other agencies on this effort. The Concept Alternatives Technical Memorandum for the Mike Horse Dam and Tailings Impoundment at the Upper Blackfoot Mining Complex is being released in a draft form in order to garner agency, company and public review prior to development of a final slate of alternatives in the EECA for the dam and impounded tailings.

Summary of Draft Alternatives

The following is a summary of the draft alternatives. Additional details of each conceptual action alternative are in the Draft Concept Alternatives Technical Memorandum for the Mike Horse Dam and Tailings Impoundment at the Upper Blackfoot Mining Complex, which is posted on the Helena National Forest internet website at http://www.fs.fed.us/r1/helena/projects/blkfoot_mine.shtml .

Table 1. Summary of Draft Alternatives

Draft Alternative	Description
1	No Action - Current conditions would continue for dam and impounded tailings with no action to be taken place except for annual piezometer monitoring, trash rack maintenance, and the Emergency Action Plan in place.
1A	Interim Spillway and Beartrap Creek Diversion - This addresses the concern for the dam not having the capacity to handle design flood flows/events and would be an interim response while a long term response is developed. Beartrap Creek would flow into an engineered diversion above the reservoir and discharge below the dam into Beartrap Creek. Current maintenance, monitoring, and emergency response measures would continue with additional need to ensure diversion is functioning.
2	Stabilization of the Dam In Place – Secure the dam in place by installation of a permanent spillway cut approximately five feet deep to provide water to pass if reservoir nears crest and provide passage for design flood flow, install a synthetic liner to prevent seepage from reservoir, and construct drains at toe of dam to dewater the base of the tailings. Reservoir levels would be maintained at a lower level with more exposed tailings along shoreline. Beartrap Creek would continue to flow into reservoir. Current maintenance, monitoring, and emergency response measures continue with monitoring to ensure performance of liner, drains, and spillway.
3	Removal of Dam from Service and Partial Removal of Impounded Tailings from Beartrap Creek – Includes elimination of the function of the dam by removing enough of the dam and tailings to provide for replacement of Beartrap Creek as an engineered channel in the valley bottom. Removed dam and tailings material would be placed on top of tailings remaining in place and these wastes would be stabilized and have an engineered cap and drain system. Current maintenance, monitoring, and emergency response measures would continue with additional monitoring to ensure channel flow and proper function of repository.
4	Partial Removal of Dam and Impounded Tailings from Beartrap Creek Floodplain with Onsite Repository Disposal Options – This includes removal of all material of the dam and tailings located within the historic floodplain of Beartrap and Mike Horse Creeks with enough valley bottom area to restore the historic floodplain and natural channel flow. Due to the increased amount of tailings removed, a portion would be placed similar to Alternative 3 and the remainder in another identified repository site somewhere in the UBMC area. Current maintenance, monitoring, and emergency response measures would continue with additional monitoring to ensure channel flow and proper function of repositories.
5	Total Removal of Dam and Impounded Tailings from Beartrap Creek Floodplain with Onsite and Offsite Repository Disposal – This includes the complete removal of all contaminated material located with the dam, Beartrap Creek, and Mike Horse Creek valley bottom that was not historically there. Material would be excavated and hauled to multiple local repositories or a yet to be determined offsite repository. In the short term, current maintenance, monitoring, and emergency response measures would continue to ensure restoration measures stabilize.

Public Involvement and Project Timeline

The comments we receive on the Draft Concept Alternatives Technical Memorandum will be considered in finalizing these alternatives and developing a draft EECA. The draft EECA will identify the objectives of the alternatives and analyze the effectiveness, implementability, and costs that may satisfy these objectives. Table 2 displays a timeline for this project.

Table 2. Schedule for EECA Process

Activity	Schedule
Public Review of Draft Concept Alternatives Technical Memorandum	through March 13 th , 2006
Finalize Concept Alternatives Technical Memorandum	March 30 st , 2006
Draft EECA	May 2006
Final EECA	July 2006
Decision (Action Memorandum) and initiate preparation of the engineering/geotechnical design of selected alternative	August 2006
Engineering/geotechnical design of selected alternative 100 % complete	February 2007

A field trip and open house has also been scheduled for those interested in visiting the site, sharing information, and visiting with individuals involved in the project. On March 2nd, 2006 a hosted field trip to the Mike Horse site is planned from 1 to 4 p.m. Those who wish to attend are asked to meet at the Lincoln Ranger District at 1 p.m. An RSVP by telephone (362-4265) is requested, but is not required. The open house will follow the field trip and will be located at the Lincoln Ranger District from 4:30 to 6:30 p.m.

A copy of the draft concept alternatives technical memorandum can also be viewed or retrieved from our website at http://www.fs.fed.us/r1/helena/projects/blkfoot_mine.shtml . If you are not able to access the internet, and wish to receive the document, please call the Lincoln Ranger District at (406) 362-4265. Copies may also be obtained from Forest Service offices in Lincoln, Helena, and Townsend or viewed at the Lewis and Clark County Libraries in Lincoln and Helena.

Please contact Amber Kamps, District Ranger, or Mandy Alvino, Resource Specialist at the Lincoln Ranger District, (406) 362-4265 or Beth Ihle, Forest Geologist, at the Townsend Ranger District, (406) 266-3425 if you have any comments, questions, and/or need additional information.

Sincerely,

/S/ KEVIN T. RIORDAN
Helena National Forest Supervisor