

**East Helena Public Schools  
Dartman Field Reclamation Project  
2016 Reclamation and Development Grant Application**



**Prepared For:**

**East Helena Public Schools, School District No. 9  
P.O. Box 1280  
East Helena, Montana 59620-0701**

**Prepared by:**

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### A. Figures and Photos

Figure 1. East Helena Public Schools Dartman Field Reclamation Project Location Map

Figure 2. Dartman Field Soil Sample Locations and Lead Concentrations

Figure 3. Dartman Field Soil Sample Locations and Arsenic Concentrations

Figure 2-1. Selected Cleanup Areas (from the OU2 ROD)

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Photo 1. Photo looking west across the center of Dartman Field.

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Photo 3. Barren area in the southeast portion of the Dartman Field.

Photo 4. Barren area in the eastern portion of the Dartman Field.

Photo 5. Barren area in the central portion of the Dartman Field looking north.

Photo 6. Barren area in the central portion of the Dartman Field looking southeast.

Photo 7. Photo of the former Dartman residence area looking south (the residence was demolished in 2010).

Photo 8. Photo of a dry flood channel in Dartman Field looking north (EPA remediated soil in several flood channels in 2002).

### B. East Helena Public Schools Dartman Field Proposal Map

### C. Results of EPA Data Query for Dartman Field Property

### D. Real Estate Purchase Agreement between EHPS and METG

### E. Emails from DEQ and DOJ-NRD Approving the Purchase Agreement

### F. Letters of Project Support:

Montana Department of Environmental Quality

Montana Department of Justice – Natural Resource Damage Program

U.S. Environmental Protection Agency

City of East Helena

Montana Environmental Trust Group LLC

State Senator Jill Cohenour

State Representative Mary Ann Dunwell

Helena Small Fry Football Association.

### G. METG Letter to EPA Regarding Availability of Cleanup Funds for Remediation of Dartman Field Soils

### H. Email Response from EPA to METG Letter Regarding Availability of Cleanup Funds

### I. Letter from Custodial Trust Counsel Regarding Past, Current, and Future Potential Responsible Parties



## STEP 1 - GRANT APPLICATION SUMMARY

### I. APPLICANT INFORMATION

Applicant Name East Helena Public Schools, School District No. 9

Mailing Address P.O. Box 1280

City, State, Zip East Helena, MT 59635

Telephone Number(s) (406) 227-7700

Contact Person Ron Whitmoyer, Superintendent

Address (if different from applicant)

Telephone (406) 227-7700 Email rwhitmoyer@ephs.k12.mt.us

Senate District 42 House District 84

### II. PROJECT INFORMATION

Project Title Dartman Field Reclamation

Brief Project Description Reclamation of land impacted by heavy metals related to the former East

Helena smelter so that it can be developed into school(s) to accommodate population growth.

(For ex., reclamation, Brownfields cleanup, Voluntary Cleanup & Redevelopment Act, oil & gas well plugging, or hazardous substances cleanup)

X This project repairs, reclaims or mitigates environmental damage to public resources from non-renewable resource extraction or hazardous materials

- X Mining reclamation
- Oil and gas well plugging and reclamation
- Brownfields
- X Hazardous substances cleanup
- Voluntary Cleanup and Redevelopment Act project
- X Superfund area
- Other

       This project is a crucial state need

- Project is of statewide importance
- Project prevents or eliminates sever damage to natural resources
- Supporting documentation has been provided (see Step 11)

Estimated project start date: May 1, 2017 Estimated project end date: October 31, 2017

Latitude (decimal degrees) 46.59621° Longitude (decimal degrees) -111.91962°

## Budget Summary

Project Total Cost and Funding Sources: Please enter the total estimated project cost and the sources and amounts of ALL funding that may be used to complete the proposed activity. Indicate if alternate sources of funding are other than cash, such as in-kind services.

Funding Source	Amount	Committed (Yes or No)
RDG Grant Request	\$500,000.00	
Applicant	\$145,298.40	Yes
Other Source (METG)	\$360,000.00	Yes
Other Source	\$	
Other Source	\$	
Other Source	\$	
<b>PROJECT TOTAL COST</b>	<b>\$1,005,298.40</b>	

Note: DNRC will recommend no more than **\$300,000** for most projects. DNRC may recommend up to \$500,000 for a project if the applicant has clearly demonstrated the financial need and unavailability of other funds to complete the project.

## III. AUTHORIZING STATEMENT

I hereby certify that the information and all statements in this application are true, complete and accurate to the best of my knowledge and that the project or activity complies with all applicable state, local and federal laws and regulations.

I further certify that this project will comply with applicable statutory and regulatory standards protecting environ-mental quality. I further certify that I am (we are) authorized to enter into a binding agreement with the Department of Natural Resources and Conservation to obtain a grant if this application receives legislative approval.

\_\_\_\_\_  
Signature and Title of Authorized Representative

\_\_\_\_\_  
Date

Ron Whitmoyer, Superintendent

Please print name and title of representative signing above

## **STEP 2 – PROJECT ABSTRACT**

The grant applicant is East Helena Public Schools, School District No. 9 and the project is known as the Dartman Field Reclamation Project. The goal of the project is to remediate heavy metals contamination, particularly arsenic and lead, in the Dartman Field surface soil so that the property can be developed for construction of up to three school structures and associated facilities on a 50-acre parcel to accommodate increasing school enrollment. The project also addresses the urgent need to expand school facilities to accommodate current and projected elementary and middle school student enrollment in the East Helena Public Schools. The Dartman Field was formerly owned by the Merritt-Dartman homesteaders and their descendants. The property was later acquired by ASARCO, who formerly operated the East Helena Smelter. Ownership of the property was transferred to the Montana Environmental Trust Group, LLC (METG), as the Court-approved Trustee of the Montana Environmental Custodial Trust (the Custodial Trust).

East Helena was the home of the Asarco lead smelter for more than 100 years. The school district in East Helena has 1,205 students that are educated in three school buildings, which are located within that East Helena Superfund Site. East Helena is a growing community that is being impacted by new home construction from multiple subdivisions. With the future of expansion of classroom space necessitated by this growth, it is imperative that the school district locate property for up to three new elementary and/or middle schools, which is projected to serve the district for the next 50 years.

The proposed work includes initial deep tilling and amending of the site surface soil to reduce metal concentrations. This treatment is the preferred alternative selected by the U.S. Environmental Protection Agency in the Record of Decision for residential and undeveloped areas in the East Helena Superfund site.

## **STEP 3 – ALTERNATIVE ANALYSIS**

### **1. Goals and Objectives**

The goal of the project is to reduce heavy metal concentrations, particularly arsenic and lead, so that the property can be developed for up to three school structures and associated facilities. Project objectives are as follows:

- Use the grant funding to hire a qualified engineering firm to prepare a project design and bid documents, and provide construction oversight and administration by May 2017
- Advertise for reclamation contractors by July 2017.
- Use grant funding to hire a reclamation contractor to complete the in-place treatment, soil amendments, oversize rock removal, and reclamation seeding.
- Complete the project, including reclamation seeding by the end of October 2017.

### **2. Problem History**

The City of East Helena is located within the East Helena Superfund Site. Cleanup of the Superfund site is administered by the U.S. Environmental Protection Agency (EPA) Region 8. The East Helena Superfund Site consists of the decommissioned Asarco smelter, an industrial facility operated by American Chemet Corporation, all of the City of East Helena, Montana, nearby residential subdivisions, numerous rural developments such as homes on small acreage plots, and several large farms or ranches and their associated cultivated fields or pastures, including the Dartman Field. Figure 1 (Attachment A) shows the location of the Dartman Field.

The former Asarco lead smelter operated from 1888 until 2001. For more than 100 years, lead and zinc smelting operations deposited heavy metals and other hazardous chemicals into the soil, surface water and groundwater of the Helena Valley. The sources of this contamination included the smelter stack, fugitive emissions from plant operations, process ponds, and direct surface water discharges. Historically, the mode of transport for the contaminants was air and surface water.

Photographs documenting the existing conditions of the Dartman Field are included in Attachment A. The Dartman Field is generally well vegetated as shown in Photos 1 and 2; however, there are significant barren areas on the property as documented in Photos 3 through 6. Photo 7 shows the area of the former homestead residence that was demolished in 2010. Photo 8 shows a dry flood channel that was remediated by EPA in 2002.

### **EPA Investigations**

Numerous studies and investigations of the East Helena Superfund Site have been completed by or on behalf of the U.S. Environmental Protection Agency and/or Asarco. The Dartman Field is part of Operable Unit 2 (OU2) of the Superfund Site, which includes residential soils and undeveloped lands. The relevant studies related to the OU2 are summarized in the Record of Decision (ROD) OU2 completed by EPA in 2009 (EPA, 2009). The OU2 ROD presents a summary of major studies that were completed to assess OU2 and select the preferred remedy for cleanup of the site. A summary of these studies are presented below.

- Investigations in the early 1970s by the State of Montana's Air Quality and Water Quality Bureaus revealed elevated levels of metal contamination in air, soil, and surface water in East Helena. Evidence of impacts included large areas of barren soils, reduced agricultural production, and reduced abundance and diversity of aquatic vertebrates in Prickly Pear Creek, which flows

adjacent to the southwest corner of the Dartman Field (EPA, 2009). Subsequent investigations that began in the 1980's and continue to the present have revealed elevated concentrations of metals in soils, vegetation, livestock, surface water, and groundwater.

- A Preliminary Assessment of the Site was conducted in 1981 and a Site Inspection was conducted in 1983. In September 1984, EPA listed the Site on the National Priorities List (NPL) pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, i.e., Superfund).
- 1983 Center for Disease Control and Prevention (CDC) and Montana DEQ Study - In 1983, DEQ (formerly the Montana Department of Health and Environmental Sciences), in cooperation with the CDC, conducted a comprehensive epidemiologic study in the Helena Valley to assess children's blood-lead levels and the relationship of these levels to different environmental media, including soil. The CDC study involved the collection of 674 soil samples from the 0- to 1-inch depth in yards at 296 residences in and around the City of East Helena.

The investigation found that lead concentrations ranged from 3.1 to 7,965.0 mg/kg in the 674 surface soils samples collected from the yards of homes within a 2.25-mile radius of the plant site. A statistical comparison of the geometric mean lead levels from four zones (0 to 0.5 mile, 0.5 to 0.75 mile, 0.75 to 1.0 mile, and 1.0 to 2.25 miles from the smelter) indicated that soil lead levels decreased significantly with each increasing distance zone away the smelter property. The highest soil lead concentrations by city block were found in the first two streets north of the plant where there were geometric mean concentrations of 1,807 and 1,870 mg/kg, respectively.

- Phase I Remedial Investigation for Soil, Vegetation, and Livestock - In 1984, EPA collected a total of 157 soil samples throughout the 100-square-mile Helena Valley using a geometric grid sampling plan. Metal analyses were conducted for total silver, arsenic, cadmium, chromium, copper, mercury, manganese, lead, selenium, and zinc, as well as aluminum, barium, beryllium, cobalt, iron, nickel, tin, thallium, and vanadium. These data were used to calculate metal concentrations in the East Helena area relative to background samples, and to generate spatial distribution maps using geostatistical techniques.

The Phase I RI found that silver, arsenic, cadmium, copper, mercury, manganese, lead, selenium, tin, thallium and zinc concentrations on the average were 1.3 to 27.3 times higher than background. Cadmium and lead had the highest factors of 27.3 and 17, respectively. In general, the maximum concentrations of metals in soils were located immediately east of the smelter and decreased in all directions toward the valley perimeter. Soil contamination tended to be skewed to the east with the prevailing wind direction. The maximum concentrations of lead, arsenic, and cadmium detected in soil were 8,300 mg/kg, 570 mg/kg, and 104 mg/kg, respectively. The lowest soil pH values (4.7 – 5.3) were located immediately east of the smelter. The Phase I results indicated that a Phase II investigation was warranted.

- Asarco Comprehensive Phase II Remedial Investigation - In 1987, Asarco collected 24 soil samples from within the city limits of East Helena. Of these samples, 20 were collected from the same locations sampled by the CDC/MDHES in 1983 in order to assess the quality of the larger CDC/MDHES database. The other four 1987 samples were collected from two public schools and two parks that had not been previously sampled.

Based on the similarity of the 1983 data to the 1987 data that were collected from the same locations, the lead data from the 1983 CDC/MDHES soil investigation were determined to be suitable to include in the data set of the Phase II RI.

A summary of the Superfund Site soil characteristics based on the combined 1984 and 1987 data showed:

- For 42 surface soil samples collected within East Helena during 1984 and 1987, total concentrations of cadmium ranged from 4.2 to 112.0 mg/kg, lead ranged from 126.0 to 7,225.0 mg/kg, and arsenic ranged from 8.8 to 218.0 mg/kg.
  - Of the 42 surface sampled sites distributed across the East Helena residential area, 90 to 100 percent had silver, cadmium, copper, mercury, manganese, lead, and zinc concentrations above background. Seventeen to 88 percent of these sites were above background for arsenic, chromium, antimony, selenium, and thallium.
  - Total concentrations of each element, except for chromium and manganese, appear to be elevated in the two public parks. Concentrations of lead in both parks exceeded 1,000 mg/kg. The highest arsenic concentration was 140 mg/kg, and the highest cadmium concentration was 50 mg/kg.
  - Concentrations of lead in surface soils (0 to 1 inch) at East Gate School were 152 mg/kg, and 1,160 mg/kg at Radley School. Concentrations of arsenic were 23 mg/kg and 75 mg/kg, and concentrations of cadmium were 4.2 mg/kg and 20 mg/kg, respectively.
  - Lead levels were highest nearest the smelter facility in the 0-to 0.5-mile zone and decreased significantly as distance from the facility increased with each 0.25-mile increment.
- Removal Action Characterization - Additional characterization of soil lead concentrations was conducted as part of the residential soil removals beginning in 1991. A sampling protocol developed by EPA, DEQ, and Lewis & Clark County was used to collect and analyze soil samples from residential yards, business property, playgrounds, parks, and along streets and alleys in the East Helena project area during the soil Removal Action.

All sampling results were evaluated in an effort to delineate the areal extent and degree of lead concentrations in the soils in and around the smelter property, and to identify the outer sampling boundary for all residential areas around the smelter and East Helena. Analytical results from soil samples collected from 1991 through 1996 were plotted annually to determine which residential yards were candidates for remediation. By 1996, more than 1,400 residential samples were collected and analyzed. No samples from undeveloped areas were included.

Figure 5-3 from the OU2 ROD (Attachment A) presents the extent of soils in the East Helena area with lead concentrations likely to be greater than 1,000 mg/kg, based upon removal action sampling results. It should be noted that the Dartman Field is located in the southern portion of the area labeled "North Fields" and is located within the area likely to have lead concentrations greater than 1,000 ppm. Properties outside of this boundary may have lead concentrations in soil greater than 1,000 ppm, however, it is expected that these will be relatively few in number.

Figure 5-4 from the OU2 ROD (Attachment A) presents the general extent of arsenic contamination; however, a limited number of residential areas outside of the contours shown on Figure 5-4 have had arsenic concentrations above 176 mg/kg and 100 mg/kg, respectively.

- Agricultural/Undeveloped Lands - Since 1987 soil sampling of agricultural/undeveloped lands for arsenic and lead has been focused primarily on the fields east of the smelter in order to conduct experimental studies and to identify areas for disposal of the excavated residential soils. Based on this sampling and RI data, EPA believes that soil as far as 2 to 3 miles from the smelter may contain lead concentrations ranging from 500 to 1,000 mg/kg (Attachment A - Figure 5-6 from the OU2 ROD). Figure 5-4 from the OU2 ROD (Attachment A) presents the extent of arsenic contamination in soil in the East Helena area. Concentrations of lead or arsenic may exceed the

values shown on the contours in areas beyond the contours; however, as undeveloped lands within a several mile area of East Helena are developed, sampling and additional characterization for arsenic and lead will be conducted.

Soil sampling conducted on several hundreds of acres of agricultural land and other undeveloped lands around East Helena reveals fairly uniform and predictable lead concentrations. For example, the concentrations of lead in soil in the West Fields exhibit relatively little variability when compared to residential areas as shown on Figure 5-7 from the OU2 ROD (Attachment A). Uniformity in lead concentrations in the soils of undeveloped lands is expected because they have not yet been subjected to development activities that disturb soils during excavation, construction, laying out of streets, alleys, sidewalks and driveways, and yard development.

### In-Situ Treatment Studies

The following treatability studies/response actions conducted in the East Fields and East Helena have shown that in-situ treatment (deep tillage with and without lime amendment) can be successful in reducing concentrations of lead in surface soils:

- East Fields Land Application/Direct Haul Project
- East Field Treatability Study
- Baker Plow Study
- La Casa Grande Subdivision
- Diehl Fields
- Manlove Addition

These studies demonstrated the success of in-place treatment by deep tilling to reduce lead concentrations in surficial soils with or without the addition of lime (EPA, 2009). The results of these studies support the use of capping and in-place treatment as elements of the cleanup remedy for undeveloped land. The studies most representative of the conditions at the Dartman Field include the Baker Plow Study, LaCasa Grande Subdivision, Diehl Field, and the Manlove Addition. These studies are summarized below.

The areas of the La Casa Grande subdivision, Diehl fields, and Manlove Addition were remediated to lower levels of lead concentrations and have been subsequently developed into residential and public use areas that require no further remedial action.

Baker Plow Study (Deep tilling). EPA used a "Baker Plow" in 1995 to reduce surface metals concentrations at the East Fields. Deep tilling with the Baker Plow, which has 38-inch discs, was also intended to improve vegetation and stabilize soil to prevent particulate migration during wind storms and reduce infiltration of water.

Surface samples were collected before and after tilling. In addition, samples were collected throughout the soil profile to a depth of 24 inches and in some pits to the depth of till, which averaged 31 inches. The Baker Plow technique was able to reduce surface lead concentrations from 1,800 mg/kg to 500 mg/kg. Arsenic, cadmium, and zinc concentrations were also reduced in the demonstration area. Lead concentrations in soil after tilling at the Baker Plow demonstration area were less than lead concentrations in the cap of residential soils.

The Baker Plow study successfully demonstrated that this approach is useful on large parcels of land, to:

- Reduce surface soil concentrations of arsenic, cadmium, and lead

- Raise surface soil pH
- Eliminate any metals/pH gradient in the surface soil by mixing soil in the plow zone

After the demonstration, Western Reclamation, the contractor who owned the Baker Plow, modified the plow to couple the discs more closely to the pulling dozer to facilitate a shorter turning radius. The modified plow, of which the Baker Plow was a prototype, is called the Western Reclamation Plow.

The Western Reclamation Plow was used to remediate 31 acres in the eastern portion of the East Field that might otherwise have been capped. Deep tilling this acreage, which lay along the 1,400 to 1,700 mg/kg lead isocontours, contributed to the cost effectiveness of the remediation, and allowed residential soils to be applied as a cap where there were greater surface metals concentrations.

In 1996, EPA also used the Western Reclamation Plow to deep till the western part of the East Fields prior to covering it with contaminated residential soils. This area is directly east of the Asarco smelter and west of the Montana City Highway (State Highway 518). A tillage depth of approximately 20 inches was achieved, rather than the goal depth of 30 inches, because of rocky soils. The results showed that the achievable tilling depth is dependent on the stratigraphy and the pre-tillage ripping depth and intensity.

This effort showed that surface lead concentrations in excess of 7,000 mg/kg can be reduced to less than 2,700 mg/kg by deep tilling. The mean post-tillage surface lead concentration was 1,419 mg/kg. This concentration is lower than the mean surface lead concentrations on the East Fields directly across the Montana City Highway, which did not have the benefit of deep tilling prior to capping with residential soil.

La Casa Grande Subdivision. La Casa Grande Park is a 6.5 acre park in La Casa Grande Subdivision, north of East Helena (see Attachment A - Figure 2-1 from the OU2 ROD). In July 1993, 22 surface soil samples (0-1 inch bgs) were collected throughout the park. Ten of these samples showed lead concentrations above 1,000 mg/kg. In addition, five pit samples were collected from 4 to 5, 5 to 6, 6 to 7, 7 to 8, and 8 to 9 inches bgs and lead concentrations in these samples were 1,875 mg/kg, 134 mg/kg, 701 mg/kg, 119 mg/kg, and 132 mg/kg, respectively. EPA concluded that lead concentrations above the trigger level of 1,000 mg/kg are confined primarily to the 0 to 8 inches bgs soil horizon, indicating that deep tillage/liming treatment might be effective to reduce soil lead concentrations, increase soil pH, and reduce costs of excavation in the outlying areas of East Helena. The La Casa Grande Homeowners Association volunteered their 6.5-acre park as a demonstration area.

Before tillage or liming, 0 to 8 inch bgs soil samples were collected from six random locations and analyzed for pH. A dozer was used to till and mix 6 tons/acre of minus 1/4 inch agricultural limestone to a depth of 12 inches. A composite of 5, 0 to 1 inch bgs post treatment surface soil sampling points were collected from each sampling unit. Deep tilling and liming of La Casa Grande Park was completed by October 1994.

Deep tillage significantly decreased lead concentration in the 0 to 1 inch bgs zone from a pretreatment concentration average of 836 mg/kg to a post-treatment mean of 536 mg/kg, an average decrease of 300 mg/kg. Soil pH also increased as a result of the lime treatment. Deep tillage successfully remediated this large public area and provided a cost-effective alternative to soil excavation.

Diehl Fields. The Diehl property was an approximately 40 acre agricultural field on the eastern boundary of East Helena's city limits that was considered a candidate for residential development (Attachment A - Figure 2-1 from the OU2 ROD). The field lies within a subdivision where surface (0 to 1 inch) lead concentrations generally exceed 1,000 mg/kg and occasionally exceed 2,000 mg/kg. The subdivision is in an area where EPA requires lead soil sampling for every residence.

The field was prepared by ripping with a dozer (D-8) and 15-inch ripper teeth to loosen the soil prior to tilling. Lime was applied at 0.6 tons  $\text{CaCO}_3$ /acre based on twelve soil samples with a pH of less than 7.0. Four right-angle passes of the Western Reclamation Plow were conducted, achieving an average tilling depth of 19.9 inches. Rocks and cobbles in the subdivision soils prevented the plow from attaining its full tillage depth of 30 inches and reduced the amount of soil available for mixing. After tilling, the property was rolled flat.

Sixteen pre-and post-tillage composite surface samples (0 to 1 inch) were collected per acre and analyzed by X-ray fluorescence (XRF) for lead, arsenic, and cadmium. Eighty-three percent of the pre-tillage surface lead concentrations in the subdivision exceeded 1,000 mg/kg, while 23 percent exceeded 2,000 mg/kg. The mean surface lead concentration before tilling was 1,539 mg/kg. Tilling reduced ninety percent of post-tillage soils to lead concentrations less than 500 mg/kg, and 100 percent of all samples were less than 1,000 mg/kg. The post-tillage mean surface lead concentration was 401.6 mg/kg.

In addition to surface sampling, soil profile samples were collected from three intervals (0 to 4 inches, 4 to 16 inches and 16 to 30 inches) at a frequency of 1 pit per acre (40 total) and analyzed for lead, arsenic and cadmium. Pre-tilling lead concentrations decreased with depth throughout the soil profile. The post-tilling soil profile samples had mean concentrations of lead in each horizon less than 500 mg/kg and no single sample exceeded 1,000 mg/kg. After tilling lead concentrations throughout the soil profile were more or less uniform to a depth of approximately 16 inches.

Tilling proved successful in reducing lead concentrations to below the cleanup level of 1,000 mg/kg in all of the acres tilled. The plow was only partially effective in mixing soils deeper than 16 inches, in part because rocky soil hindered the plow's ability to reach a specified depth. EPA expects that where this remedial approach is applied, future soil treatments will include deeper ripping of the soil before tilling. Even with more shallow soil ripping prior to tilling, however, the Western Reclamation Plow has proven to be a cost-effective remediation tool for lead contamination in soil.

The Diehl Fields have been developed into a residential area including a public middle school.

Manlove Addition. The Manlove Addition of East Helena is 0.84 acres in size and consists of 6 vacant lots, which were proposed for residential development in 1997 (see Attachment A - Figure 2-1 from the OU2 ROD). In October 1996, surface soil samples were collected from 9 units that were 60 feet by 60 feet in size. Eight of the 9 units had lead soil concentrations above 1,000 mg/kg, and the site qualified for the application of deep-tilling remediation technology.

First, the site was ripped by a dozer with 15-inch ripper teeth from east to west and south to north. Then the Western Reclamation Plow was used to deep till the area with 38-inch discs. The plow made 4 passes at right angles to accomplish an estimated plowing depth of 25 to 30 inches.

In addition, individual pre-and post-tillage pits were excavated approximately within the same location and soil samples were collected from the 0 to 4 inch, 4 to 16 inch, and the 16 to 30 inch depths. Samples were analyzed for lead, arsenic, and cadmium. The results indicated that the tilling was successful in reducing the surface lead concentrations to below the cleanup action level of 1,000 ppm.

The plow depth achieved by tilling was 25 inches. The depth of tilling appears to be partially related to soil stratigraphy, where soils containing cobbles limit the plow's ability to achieve greater depths. This effort also confirmed that ripping of the soil to a greater depth before tilling would result in deeper tilling and mixing of soils over a greater interval. The final phase of deep-tillage remediation of this site consisted of fertilizing and seeding.

Deep tilling was successful in remediating this site so that it could be developed for residential use.

#### East Helena Public Schools, District No. 9 – School Site Evaluation Study

The EHPS commissioned a school site evaluation study that was completed by Great West Engineering in December 2014. Great West researched new site and facility alternatives, while Schlenker and McKittrick Architects planned a facility school footprint for 400 students to use during the site evaluations. Great West evaluated nine site alternatives in detail including:

- Lamping Field,
- Dartman Field,
- Helena Sand and Gravel Property,
- Hamlin Alternative 1A,
- Hamlin Alternative 1B,
- Hamlin Alternative 2,
- Mountain View Meadows,
- East Fields, and
- Diehl Fields.

The focus of the study was to evaluate and compare alternative sites for a new school based on several criteria. A primary purpose of the study was to help the District determine the best property or properties to acquire for new school construction. The study determined and compared capital costs, technical feasibility, operations and maintenance considerations, access and safety, long-term flexibility, environmental impacts and public opinion for each site the District elected to evaluate in detail. Construction costs of the actual school building(s) were expected to be nearly identical at each site, therefore this study focused on evaluating and comparing the costs of the supporting infrastructure needed as well as the suitability of each site as a school property.

The preferred alternative for the proposed project is the Dartman Field site. The site received the highest aggregate score from the decision matrix. The decision matrix scored each site alternative based upon seven weighted criterion. The evaluation criterion were:

- financial feasibility,
- public opinion,
- environmental impacts,
- operation and maintenance,
- technical feasibility, access and safety, and
- long-term flexibility.

The Dartman Field site was selected as the best candidate for numerous reasons. The site is cost effective and has the second lowest overall capital cost among sites evaluated. The site has up to 80 acres and is the most centrally located among the sites researched. Being that the site is located within the East Helena city limits, a water and wastewater connection is readily available which promotes lower costs and less operation and maintenance. The site topography provides the proper gradient for a gravity collection system versus a costly lift station. The surrounding transportation network and corresponding levels of service would not be as adversely affected as the other sites evaluated. The Dartman Field and surrounding area would only require minimal transportation infrastructure improvements.

The Lamping Field site, HSG Property site, and East Field site were also strong candidates for a new school site. These sites shared some of the same qualities as the Dartman Field but did not score as high consistently among the criteria weighted in the decision matrix.

#### East Helena Public Schools, District No. 9 - SDL Enterprises Sampling of Dartman Field

The East Helena School Public Schools commissioned soil sampling and analytical report to evaluate concerns that past waste materials from flooding have impacted the surface and sub-surface of the Dartman Field. The purpose of the study was to assist the East Helena School Board and the METG, Trustee of the Montana Environmental Custodial Trust (the Custodial Trust), with evaluating a potential purchase of the property. The remediation potential of the site has been considered by the school board for the purpose of acquisition of the parcel for a future building for additional elementary and middle schools, along with playing fields and recreational walkways and bikeways. The study was completed by SDL Enterprises, LLC.

The parcel was divided into 56 sections approximately one acre in size to form a grid pattern. Each grid was divided into 16 subsections and surface soil samples were collected from the 0- to 1-inch depth interval and composited into one sample representing each grid. The 56 composite surface soil samples were analyzed by Energy Laboratories for arsenic, cadmium, and lead. Figures 2 and 3 (Attachment A) show the locations of the soil samples and the lead and arsenic concentrations, respectively. Additionally, a total of ten test pits were excavated to collect samples at depth intervals of 0 to 4 inches, 4 to 6 inches, 8 to 8 inches, and 8 to 12 inches. The test pit locations are shown on Figures 2 and 3 (Attachment A).

The results of the composite surface soil samples were as follows:

- Arsenic concentrations ranged from 61 to 193 mg/kg, with an average of 114 mg/kg.
- 31 of the 56 samples had arsenic concentrations that exceeded 100 mg/kg.
- Lead concentrations ranged from 784 to 2,910 mg/kg, with an average of 1,508 mg/kg.
- 50 of the 56 samples had lead concentrations that exceeded 1,000 mg/kg.
- 7 of the 56 samples had lead concentrations that exceeded 2,000 mg/kg.

The report concludes that the surface soil arsenic and lead concentrations of all 56 sections of the property require remediation.

Lead concentrations in sample results from the ten test pits were as follows:

- samples from the 0 to 4 inch depth interval ranged from 132 to 1,050 mg/kg, with a mean concentration of 576 mg/kg,
- samples from the 4 to 6 inch depth interval ranged from 30 to 701 mg/kg, with a mean concentration of 291.5 mg/kg,
- samples from the 6 to 8 inch depth interval ranged from 29 to 406 mg/kg, with a mean concentration of 199.4 mg/kg, and
- samples from the 8 to 12 inch depth interval ranged from 34 to 322 mg/kg, with a mean concentration of 128.1 mg/kg.

Arsenic concentrations in sample results from the ten test pits were as follows:

- samples from the 0 to 4 inch depth interval ranged from 35 to 151 mg/kg, with a mean concentration of 71.5 mg/kg,

- samples from the 4 to 6 inch depth interval ranged from 8 to 108 mg/kg, with a mean concentration of 44 mg/kg,
- samples from the 6 to 8 inch depth interval ranged from 15 to 55 mg/kg, with a mean concentration of 31.5 mg/kg, and
- samples from the 8 to 12 inch depth interval ranged from 11 to 34 mg/kg, with a mean concentration of 19.5 mg/kg.

#### 2016 EHPS RDG Grant Application Soil Sample Collection

During negotiations between the EHPS and the Custodial Trust regarding the potential acquisition of the Dartman Field, the property configuration changed between the time when the SDL soil samples were collected and the preparation of this grant application (see Attachment B "East Helena Public Schools Dartman Field Proposal" Map). The 55-acre parcel that was sampled as part of the SDL study was oriented north-south along Valley Drive. The property has been reconfigured as a 50-acre parcel that is oriented east-west along the southern boundary of the Dartman Field, and immediately north of Radley Elementary School. As part of this grant application, EHPS had Olympus Technical Services, Inc. (Olympus) collect surface soil samples (0-1 inch depth interval) from the 25-acre portion of the property that was not sampled as part of the SDL study. The property was sampled according to the EPA surface sampling protocol. The property was divided into 25 one-acre portions. Each acre was divided into 16 equal areas and a grab sample was collected from each grid and composited, resulting in a 16-point composite sample each of the 25 one-acre parcels. The metal concentrations were as follows:

- Arsenic concentrations ranged from 37 to 138 mg/kg, with an average of 80.9 mg/kg.
- 6 of the 25 samples had arsenic concentrations that exceeded 100 mg/kg.
- Cadmium concentrations ranged from 15 to 44 mg/kg, with an average of 27.8 mg/kg.
- Lead concentrations ranged from 571 to 1,960 mg/kg, with an average of 1,192 mg/kg.
- 15 of the 25 samples had lead concentrations that exceeded 1,000 mg/kg.
- None of the samples had lead concentrations that exceeded 2,000 mg/kg.

The overall arsenic and lead concentrations in the samples collected by SDL were greater than the concentration in the samples collected by Olympus, as demonstrated by comparison of the maximum and mean concentrations. The maximum (193 vs. 138 mg/kg) and mean (114 vs. 80.9 mg/kg) arsenic concentrations were greater in the SDL data set, and the maximum (2,910 vs. 1,960 mg/kg) and average (1,508 vs. 1,192 mg/kg) lead concentrations were greater in the SDL data set compared to the 2016 samples collected by Olympus.

Considering only the portion of the SDL samples (21 of the 56 samples) that are within the current property configuration being considered for the sale, the summary statistics for the SDL samples are:

- Arsenic concentrations ranged from 86 to 193 mg/kg, with an average of 143 mg/kg.
- 17 of the 21 samples had arsenic concentrations that exceeded 100 mg/kg.
- Lead concentrations ranged from 965 to 2,910 mg/kg, with an average of 1,799 mg/kg.
- 20 of the 21 samples had lead concentrations that exceeded 1,000 mg/kg.

For the combined data sets collected by SDL (21 samples within the current property boundary) and Olympus (25 samples), the combined summary statistics are:

- Arsenic concentrations ranged from 37 to 193 mg/kg, with an average of 109.2 mg/kg.
- 23 of the 46 samples had arsenic concentrations that exceeded 100 mg/kg.
- Lead concentrations ranged from 571 to 2,910 mg/kg, with an average of 1,469 mg/kg.

- 35 of the 46 samples had lead concentrations that exceeded 1,000 mg/kg.
- 6 of the 46 samples had lead concentrations that exceeded 2,000 mg/kg.

### EPA Data Query

As part of the grant application, existing analytical data was acquired from EPA for the Dartman Field property. Hydrometrics, Inc., an EPA contractor, provided the results of the data query, which are attached (Attachment C). The results of the query include two maps and a database listing of analytical results from the Dartman Field property. Figure 1 in Attachment C shows the locations of soil samples collected from METG (former Asarco) properties, and the range of arsenic, cadmium, and lead concentrations for property groups outlined on the map. Data collected east of Wylie Drive after the year 2000, which includes the Dartman Field and adjacent property to the west and north, had the following concentrations:

	Arsenic	Cadmium	Lead
Average (mg/kg)	82	16	845
Minimum (mg/kg)	<5	<1	23.5
Maximum (mg/kg)	243	58	4,427
No. Samples	92	92	86

A second figure shows data from the Dartman Field from the original and reconfigured boundaries for the property purchase per the map in Attachment B. The following summary shows data that was collected from the Dartman Field property:

- Two soil samples were collected in June 1984 had surface (0-4 inches) arsenic and lead concentrations ranging from 50 to 60 mg/kg and 670 to 742 mg/kg, respectively.
- One subsurface sample had arsenic and lead concentrations of 30 and 479 mg/kg, respectively at a depth of 4 to 8 inches, arsenic and lead concentrations of 25 and 113 mg/kg, respectively at a depth of 8 to 15 inches, and arsenic and lead concentrations of 17 and 18 mg/kg, respectively at a depth of 15 to 30 inches.
- Four soil samples collected in November 1991 had surface (0-1 inch deep) arsenic and lead concentrations ranging from 49 to 349 mg/kg and 742 to 3,687 mg/kg, respectively.
- A series of samples were collected in July 1998 from the area of the former Dartman residence.
- A series of samples were collected from flood channels on the eastern portion of the Dartman property.

Subsequent data provided by EPA confirmed that soil remediation was completed at the former residence on the Dartman property in 1998. Pre- and post-removal samples show that post-removal lead concentrations ranged from 102 to 505 mg/kg, while post-removal arsenic concentrations ranged from 25 to 74 mg/kg. A summary of pre-and post-remediation soil samples is included in Attachment C.

Additional data provided by EPA indicates that flood channels were remediated in and around the Dartman Field property in 2002. A flood channel map in Attachment C shows that flood channels in approximately the eastern half of the Dartman property were remediated by soil removal in October and November of 2002. The portion of the flood channel soil removal on the Dartman Field property that EHPS is purchasing from METG is labeled S4FD1. Analytical results show that post-soil removal lead concentrations from S4FD1 ranged from 41 to 678 mg/kg, while arsenic concentrations ranged from 41 to 99 mg/kg. The analytical results are included in Attachment C.

In summary, limited remediation has taken place on the Dartman Field property; however, this remediation covered a small percentage of the Dartman Field and subsequent sampling on behalf of EHPS by SDL and Olympus indicates that additional remediation is required before redevelopment of the property for construction of school facilities can be completed.

### **3. Project Alternatives**

Since this project is located within the East Helena Superfund Site, EHPS is required to comply with the ROD for OU2 (EPA, 2009). EPA evaluated four alternatives in the OU2 ROD, for reclamation of undeveloped lands within the East Helena Superfund Site. The alternatives are:

- Alternative 1U – No Further Action
- Alternative 2U – Soil Removal and Replacement
- Alternative 3U – Capping
- Alternative 4U – In-Place Treatment

These alternatives are described below.

#### **Alternative 1U – No Further Action**

Under this alternative, no further action is implemented. Existing conditions would remain as they are, including the elevated heavy metal concentrations. Risks posed to human health and the environment would not be reduced. The presence of elevated metal concentrations would preclude development of the property for use by the EHPS.

#### **Alternative 2U – Soil Removal and Replacement**

Cleanup of undeveloped lands under Alternative 2U consists of excavation, generally by means of heavy equipment, such as large scrapers or dozers and excavators. Excavation continues at depth until sample results indicate that surface or near-surface soil concentrations are less than the cleanup levels for the proposed new use. Based on the results of samples from test pits excavated on and adjacent to the proposed school site, approximately 6 inches of soil would require removal to meet the OU2 ROD cleanup goal of 500 mg/kg. The removed soils would be loaded into haul trucks that can be covered, and are then taken to an EPA-approved repository. Clean replacement soil, topsoil for landscaped areas and structural fill for building foundations and parking lots, would be hauled to the site and placed according to design plans for the school development.

The City of East Helena has expressed concerns over the volume of haul truck traffic that would be required to remove a 6-inch soil layer (over 2,000 truckloads) and replace it with clean soil (over 2,000 truckloads). The increased traffic would have serious negative impacts on the community including safety hazards, inconvenience for residents, and degradation of city streets. In order to avoid truck traffic on City roads, excavation and off-site disposal of contaminated soils will be limited to certain areas to be developed, such as future playground facilities.

Following development, institutional controls and monitoring would be implemented and administered by the Lewis and Clark County Planning and Zoning Commission and the Lead Education and Abatement Program, consistent with the Regulations Governing Soil Displacement and Disposal in the East Helena Superfund Area in Lewis and Clark County, Montana, adopted by the City-County Board of Health in 2013 (the Soils Ordinance)..

### Alternative 3U – Capping

Under Alternative 3U, cleanup of undeveloped lands in the future would consist of a cap, or cover, over surfaces that do not meet remedial goals for the intended new use. Caps do not reduce the concentrations of metals or arsenic in the soil; however, they do provide a barrier to exposures that would otherwise occur. Caps may be a layer of soil, or gravel, or pavement placed over the surface of the undeveloped area. The pathway for exposure is therefore interrupted.

Capping can be a cost-effective alternative and can be protective when the intended new use is industrial, commercial, or recreational. In these cases, because exposure is limited, the thickness of the cover material can be as little as a few inches yet still provide an effective barrier. Athletic fields could be constructed over some undeveloped lands surrounding East Helena with little preparation but leveling and a few inches of cover soil and vegetation. Capping reduces or eliminates the need for extensive alteration of the land and hauling removed soils to a soil repository.

Capping is rarely used in areas where the intended new use is residential. The few known examples of capping for future residential areas require a cap that is at least 24 to 48 inches thick. That usually results in capping becoming costlier than other alternatives suited to the future use. Capping is also not a suitable alternative in areas that are subject to periodic erosion by flooding, such as in or near an active flood plain or along drainage ditches or water conveyance channels.

Following development of lands capped, or covered under Alternative 3U, institutional controls and monitoring would be implemented similar to Alternative 2U and consistent with the Soils Ordinance.

### Alternative 4U – In-Place Treatment

Under Alternative 4U cleanup of undeveloped lands undergoing a change in use in the future would consist of deep tillage of the surface and near-surface soils and simultaneous application and incorporation of lime and other soil amendments. Highly specialized plows that mix, rather than turn over the soil, are used in this innovative technique. Multiple, perpendicular passes of the plow ensure mixing and incorporation of the amendments. This technique is also known as in-situ treatment of soils.

In-place treatment can be most successfully applied when the surface soil (i.e., 0 to 4 inches or 0 to 6 inches) concentrations of lead or arsenic are above acceptable levels for a new use, but the subsurface soil concentrations of the same contaminants are significantly lower or near natural levels. This remedial alternative does not remove contaminants from the soil, but reduces their concentrations to levels that are safe and protective for the new use.

Amendments, such as lime, organic matter, phosphorus, and fertilizers can be incorporated into the soils at the time of deep tillage. These amendments render lead less mobile in the soil and less bio-available. In some soils, lime enhances arsenic mobility. However, the concentrations of arsenic found in soils of undeveloped lands that are likely to be changed to residential development are low under existing conditions.

Under Alternative 4U, neither excavation nor replacement of soil is required in undeveloped areas, but is frequently required in existing residential areas. Therefore, there is no need for large numbers of haul trucks or heavy equipment. There is no need for a repository because no soil would be excavated. In addition, there is no need for mining large areas of productive farmland topsoil to be used as replacement fill. Implementation costs are a fraction of the implementation costs required for other remedial alternatives.

Most undeveloped lands that are likely to be developed in the future for residential and commercial uses, near East Helena, are well suited to in-place treatment. In-place treatment can readily be implemented in large open areas being prepared for residential development. Once lands are developed, they will be subject to institutional controls already in place as set forth in the Soils Ordinance...

### Selected Remedy

The preferred remedy selected by EPA for currently undeveloped land within the East Helena Superfund Site, OU2 (EPA, 2009) is Alternative 4U, In-Place Treatment. This alternative consists of in-place treatment of currently undeveloped lands that have soil lead concentrations, and possibly soil arsenic concentrations, above cleanup levels. However, any of the four alternatives for undeveloped lands, either singly or in combination, are viable and may be appropriate depending upon the proposed use (EPA, 2009).

The proposed remedy for the Dartman Field is Alternative 4u (In-Place Treatment), potentially supplemented by capping (for parking areas and structures) as well as possible excavation and off-site disposal of select areas (e.g., playgrounds) if there are grant funds remaining after deep tilling is completed. The purpose of this grant application is to achieve funding to complete the in-place treatment of the entire 50 acres of the Dartman Field using deep tilling methods with soil amendment. This technique has been successfully applied to the Diehl Field and other areas within the East Helena Superfund Site. A lead cleanup level of 500 mg/kg and an arsenic cleanup level of 100 mg/kg in soil is applied by EPA to undeveloped land proposed for residential use, which includes school development. Achieving a lead soil concentration of less than 500 mg/kg cleanup level will leave the entire property in a protective state that will allow for immediate use of the property by the school district. Further cleanup will be accomplished during the construction of school facilities including Alternatives 2U and 3U, as outlined in the EHPS conceptual remediation plan discussed below.

Based on test pit data from the SDL Enterprises sampling and comparison of surface metal concentration from the Dartman Field with data from previous deep tilling studies completed at the East Helena Superfund Site, in-place treatment by deep tilling appears to be a viable option for the Dartman Field. The study completed at the Diehl Fields is the most representative of the conditions at the Dartman Field. The Diehl is approximately the same distance from the former smelter as the Dartman Field, with the Diehl Fields being located about 2,000 feet farther east. Pre-remediation samples from the Diehl Fields (described above) had lead concentrations in which 83% and 23% of the samples collected exceeded 1,000 and 2,000 mg/kg, respectively, with a mean surface concentration of 1,539 mg/kg. This is slightly greater than the 76% and 13% of samples that exceeded 1,000 and 2,000 mg/kg of lead, respectively, and the mean surface lead concentration of 1,469 mg/kg in surface samples collected from the Dartman Field. Thus, the lead concentrations at the two sites are comparable, with the concentrations being somewhat lower at the Dartman Field. The Diehl Fields were successfully remediated using deep tilling and the property was developed into a residential area including a public middle school.

As described above, SDL Enterprises collected soil samples from 10 test pits excavated at the original configuration of the Dartman Field (oriented north-south along Valley Drive – see Attachment B “East Helena Public Schools Dartman Field Proposal” Map). Soil samples were collected from each test pit at depth intervals of 0 to 4 inches, 4 to 6 inches, 8 to 8 inches, and 8 to 12 inches. The mean arsenic and lead concentrations decrease with depth interval. Lead and arsenic concentration data from the 10 test pits were used to calculate the 95% Upper Confidence Level (UCL) for each depth interval. The 95% UCLs were calculated using EPA’s ProUCL software package, and are as follows:

Sample Depth Interval in inches	95% UCL of Mean Metal Concentration (mg/kg)			
	0-4"	4-6"	6-8"	8-12"
Arsenic	98.34	67.38	42.96	26.74
Lead	757.7	429.8	281.1	184.8

The 95% UCL is a conservative estimate of mean concentration that is frequently used in environmental analyses to make sure that the mean is not under estimated. Using the 95% UCLs of the mean arsenic and lead concentrations weighted by the depth interval, the expected post-deep tilling lead and arsenic concentrations would be approximately 433 and 60 mg/kg, respectively. These calculated values would meet the cleanup standards set by EPA in the OU2 ROD. This calculation assumes that the deep tilling thoroughly mixes the upper 12 inches of soil. Deeper mixing could conceivably incorporate more soil with lower metal concentrations and result in lower arsenic concentrations in the remediated soil.

The Dartman Field is intended to serve the school district's development needs for the next 50 years. As the property is developed over time, elements of Alternative 2U (Soil Removal and Replacement) and Alternative 3U (Capping) will likely be incorporated into design plans for future construction and development. The school district has developed a Conceptual Plan EHPS Soil Remediation of Dartman Field (Exhibit C of Attachment D - Real Estate Purchase and Sale Agreement between the Montana Environmental Trust Group, LLC. and East Helena Public Schools, School District No. 9). The conceptual plan is based on a preliminary school facility footprint for 400 students. Up to three of these facilities (elementary and middle schools, depending on future needs) could be built on the property over the next 50 years. The conceptual remediation plan contemplates elements of soil removal and replacement in portions of the properties, such as where soil is replaced with structural fill for building foundations and parking lots, removing soil and importing appropriate materials for playground areas, and removing soil and importing better quality topsoil for landscaped/lawn areas storm water detention area). Other areas could eventually be capped, including parking lots. This type of future reclamation is consistent with the OU2 ROD, which states that "in respect to implementation of a remedy that may be decades into the future, any of the four alternatives for undeveloped lands, either singly or in combinations, are viable and may be appropriate depending upon the proposed use, the physical and chemical properties of the particular parcel of land, and the role of institutional controls in place at that time." The future reclamation elements that may be incorporated into school construction are beyond the scope of this grant and will be funded by EHPS through bonds for facility construction.

#### **4. Project Costs**

In developing costs for evaluating alternatives in the OU2 ROD for OU2, EPA calculated costs on a per acre basis for each of the alternatives evaluated. The following costs in 2008 dollars were presented by EPA for each of the alternatives evaluated above and are presented here for comparison:

- Alternative 1U – No Further Action ..... \$0.00 per acre
- Alternative 2U – Soil Removal and Replacement ..... \$40,700.00 per acre
- Alternative 3U – Capping ..... \$36,400.00 per acre
- Alternative 4U – In-Place Treatment (Deep Tilling and Amendments) ..... \$4,800.00 per acre

The estimated costs for the alternatives on a per acre basis show that In-Place Treatment by deep tilling is clearly the lowest cost alternative.

The anticipated costs for the Dartman Field in-place treatment were calculated using adjusted cost data and are presented below.

Work Item	Quantity	Unit	Rate	Cost	Source
Mobilization	\$435,200.00	LS	8%	\$34,816.00	8 percent of construction cost
Deep Soil Tilling	50	Acres	\$5,328.00	\$266,400.00	2009 EPA OU2 ROD cost is \$4800/acre (2008). Includes multiple tilling passes and soil amendment. CPI from 2008 - 2016 is 111%
Oversize Rock Removal	10,100	CY	\$13.00	\$131,300.00	Quantity estimated as 10% of the tilled soil volume. Assumes oversized rock can be recycled to a gravel pit for beneficial use.
Post Remediation Sampling	50	Acres	\$400.00	\$20,000.00	Based on 4 samples per acre
Post Remediation Seeding	50	Acres	\$350.00	\$17,500.00	
Engineering/Oversight	\$470,016.00	LS	15%	\$70,502.40	
Total				\$540,518.40	

## **5. Cost/Benefit Analysis**

EPA completed a detailed comparative analysis of alternatives in the OU2 ROD, as required by the National Contingency Plan (NCP). The NCP requires that each remedial alternative analyzed in detail be evaluated according to specific criteria. The purpose of this evaluation is to promote consistent identification of the relative advantages and disadvantages of each alternative, thereby guiding selection of remedies offering the most effective and efficient means of achieving site cleanup goals. Feasible remedial alternatives are evaluated against nine criteria, as described below. EPA evaluated the relative benefits and costs of each alternative for undeveloped lands using the following nine standard criteria required by the NCP. The EPA evaluation was generic in nature (i.e., not site specific) and included both residential and undeveloped lands. The EPA evaluation from the OU2 ROD has been modified as appropriate to reflect the construction of schools at the Dartman Field consistent with the OU2 and to the cleanup standard required for residential land use.

### **Threshold Criteria**

- Overall Protection of Human Health and the Environment
- Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)

### **Primary Balancing Criteria**

- Long-term Effectiveness and Permanence
- Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment
- Short-term Effectiveness
- Implementability
- Cost

### Modifying Criteria

- State acceptance
- Community acceptance

The first two criteria, overall protection of human health and the environment, and compliance with regulations (Applicable, Relevant, and Appropriate Requirements - called "ARARs"), are considered threshold criteria. Threshold criteria must be attained by the action selected for implementation, otherwise the alternative is rejected from further consideration. The next five criteria, short-and long-term effectiveness, treatment, implementability and cost, are considered balancing criteria. Balancing criteria permit tradeoffs to achieve the best overall cleanup solution. The last two criteria, state and community acceptance, are considered modifying criteria. They are last, but not because they are least important. Rather, comments and concerns expressed by the State and affected communities are important. EPA can modify a preferred remedy based on state and community input.

The comparison of alternatives with respect to these criteria is discussed below.

### Overall Protection of Human Health and the Environment

Overall protection of human health and the environment addresses whether each alternative provides adequate protection of human health and the environment and describes how risks posed through each exposure pathway are eliminated, reduced, or controlled, through treatment, engineering controls, and/or institutional controls.

The No Further Action Alternative (1U) ultimately would not provide overall protection of human health. Many undeveloped areas surrounding East Helena have elevated levels of lead, and in some instances arsenic, which would preclude redevelopment for use as elementary and middle school facilities.

For the undeveloped areas, Alternatives 2U and 4U are considered equally protective because both alternatives will meet the specified cleanup levels. Alternative 3U, capping, is the least protective of the alternatives because high concentrations of lead remain beneath the cap; however, capping can be effective as long as there is long-term compliance with institutional controls, including the Soils Ordinance. In all three cases, residual levels of lead will remain in the soils above natural levels.

### Compliance with ARARs

Section 121(d) of CERCLA and NCP §300.430(f)(1)(ii)(B) require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate federal and state requirements, standards, criteria, and limitations, which are collectively referred to as ARARs, unless such ARARs are waived under CERCLA §121(d)(4). Compliance with ARARs addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other federal and state environmental statutes or provides a basis for invoking a waiver.

EPA evaluated the alternatives in terms of compliance with ARARs. All of the action alternatives can be implemented in ways that would meet federal and state regulations and requirements. The no action alternative is not expected to meet ARARs.

### Long-term Effectiveness and Permanence

Long-term effectiveness and permanence refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once cleanup levels have

been met. This criterion includes the consideration of residual risk that will remain on site following remediation and the adequacy and reliability of institutional controls.

The No Action Alternative (1U) would not be applicable to use of the land for school facilities due to elevated lead and arsenic concentrations in surface soil.

For undeveloped lands proposed for residential development (including schools), Alternative 2U is rated highest. Removal and replacement (2U) would be more permanent than either capping (3U) or in-place treatment (4U) at the point that property is being developed. Excavated soils would be placed in the EPA-approved soil repository at no cost to EHPS. Depth of removal and replacement must be sufficient to achieve levels less than 500 ppm lead, whereas in-place treatment can achieve levels significantly less than 500 ppm lead. The surface soils (backfill) of removed and replaced areas will have lower lead concentrations than surface soils of treated areas.

The removal/replacement and capping alternatives include the environmental consequences of mining, or stripping farmland topsoil from the north Helena Valley. As the area and depth of removal increases, so does the area and depth of removing high quality topsoil from productive agricultural areas, which can be prone to weed infestations and the loss of remaining subsoil due to erosion. Thus, in-place treatment is rated higher than either removal/replacement or capping in terms of land disturbances and associated environmental consequences.

#### Reduction of Toxicity, Mobility, and Volume

Reduction of toxicity, mobility, or volume through treatment refers to the anticipated performance of the treatment technologies that may be included as part of a remedy.

The No Action Alternatives (1U) for undeveloped lands would do nothing to reduce toxicity, mobility, or volume of hazardous substances at the site.

For undeveloped areas, Alternative 4U (in place treatment) is rated higher than the other alternatives because it would reduce the in-situ lead and arsenic concentrations, which reduces the toxicity. Consequently, the volume of soil that contains concentrations of lead above cleanup levels is reduced. Soil amendments, such as lime increase the soil pH, which reduces the mobility of lead. Alternatives 2U and 3U would not reduce toxicity, mobility, or volume. Alternative 2U (excavation and disposal) requires placement of the materials in the East Fields Soil Repository. Alternative 3U (capping) is protective (as there is long-term compliance with institutional controls), but does not reduce the volume of impacted soil.

#### Short-term Effectiveness

Short-term effectiveness addresses the period of time needed to implement the remedy and any adverse impacts that may be posed to workers, the community, and the environment during construction and operation of the remedy until cleanup levels are achieved.

The No Action Alternatives (1U) would provide some limited effectiveness in the short term, since the exposure risk in undeveloped areas is currently low; however, as development of the property occurs, the No Action Alternative is not effective in the short term.

For undeveloped areas, Alternatives 3U and 4U are rated highest for short-term effectiveness because they would pose the least safety risks and disruption to residents and workers during construction. Alternative 2U is less effective because it would generate more construction traffic, greater disruption,

and more short-term environmental consequences, both at the construction sites and the areas from which topsoil would be mined.

In addition, the City of East Helena has expressed concerns that soil removal and replacement and capping would be a safety hazard because of the increased truck traffic, a community disruption, and damaging to the city streets. The project would require more than 2,000 truckloads for removal of impacted soil and approximately the same for soil replacement.

### Implementability

Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as availability for services and materials, administrative feasibility, and coordination with other government entities are also considered.

All of the alternatives are considered implementable. Technologies and equipment for each method of cleanup are well developed and are currently widely used in Montana as well as across the United States.

### Cost

The No Action Alternatives (1U) would be the least costly, requiring only costs associated with environmental monitoring, and if continued, the Lead Education and Abatement Program.

For the majority of undeveloped lands, which may or may not undergo a change in land use from agricultural to residential, recreational, or commercial, costs are estimated on a per-acre basis and at 2008 prices. Alternative 2U would be the most costly because it involves removal and replacement of very large volumes of soil. Alternative 3U (capping) is slightly less costly than Alternative 2U because capping requires little or no excavation (some ground leveling may be needed). Approximately an equivalent volume of imported soil as required for Alternative 2U would be required for a soil cap, or cover (Alternative 3U). Alternative 4U is, by a substantial margin, the least costly because it involves no removal or importation of topsoil for backfill.

- Alternative 1U – No Further Action ..... \$0.00 per acre
- Alternative 2U – Soil Removal and Replacement ..... \$40,700.00 per acre
- Alternative 3U – Capping ..... \$36,400.00 per acre
- Alternative 4U – In-Place Treatment (Deep Tilling and Amendments) ..... \$4,800.00 per acre

### State Acceptance

DEQ is on record as supporting the purchase agreement between EHPS and METG, including the Conceptual Plan for EHPS Remediation of Dartman Field that is attached to the purchase agreement (Attachment D). Both DEQ and the Montana Department of Justice – Natural Resource Damage Program (DOJ-NRD) have provided emails stating their approval of the purchase agreement (Attachment E) and letters of support for the grant application and reclamation project. Both letters reference the cleanup standards in the OU2 ROD. Letters of support from DEQ, DOJ-NRD, and EPA are included in Attachment F to this application.

### Community Acceptance

This criterion evaluates whether the local community agrees with EPA's analyses and selected remedy.

The East Helena City Council has expressed support for the selected remedy presented in the OU2 ROD. The council supports current cleanup protocols and a continuation of the Lead Education and Abatement Program. The council emphasizes that the combination of the residential soil cleanup, as conducted to date, and the education and abatement program, have more than met goals set for protection of East Helena's children. The council further emphasized that all cleanup options described in the proposed plan, for future development of undeveloped lands surrounding East Helena, must be retained and made available for landowners and developers. Otherwise, the city will remain "land-locked," unable to expand its much-needed tax base. The City of East Helena has provided a letter of support for the grant application and the reclamation project, which is attached to this application (Attachment F). Letters of support have also been provided by State Senator Jill Cohenour, State Representative Mary Ann Dunwell, the Montana Environmental Trust Group LLC (the Custodial Trust), and the Helena Small Fry Football Association and are included in Attachment F to this application.

The Lewis and Clark County has been supportive of the ongoing Removal Action with a cleanup level of 1,000/500 ppm for the last 10 to 15 years, and with the actions taken to date on undeveloped lands. The County has also assumed responsibility for administration and enforcement of the OU2 ROD as set forth in the Soils Ordinance.

The EPA believes that the selected remedy is fully protective of human health and the environment, while providing the best balance of trade-offs in terms of the five balancing criteria while also considering the statutory preference for treatment as a principal element and bias against off-site treatment and disposal and considering state and community acceptance.

### **References**

U.S. EPA, East Helena Superfund Site, Operable Unit No. 2, Residential Soils and Undeveloped Lands – Final Record of Decision, prepared by U.S. EPA Region 8, September 2009.

SDL Enterprises, LLC, Montana Environmental Trust Group Property Soil Sampling & Analytical Report, prepared for East Helena Public Schools (undated, work was completed in the Fall of 2012).

Great West Engineering, East Helena School District No. 9 School Site Evaluation Study, prepared for East Helena School District, December 2014.

### **Additional Information**

Additional information attached to support the application is listed below.

#### **A. Deeds, Easements, Rights-of-Way**

The Real Estate Purchase Agreement between EHPS and METG and documentation of approval by DEQ and the DOJ-NRD Program are included in Attachment s D and E, respectively.

#### **B. Permits**

The project must comply with the requirements of the OU2 ROD and the Soils Ordinance as described above. The property has been included in the DNRC-adopted East Valley Controlled Groundwater Area, which includes the subject property.

The primary permit that would be required is a Montana Pollutant Discharge Elimination System (MPDES) General Permit for Storm Water Discharges Associated with Construction Activity. This permit

is required by DEQ for projects that disturb more than 1 acre of land. It is common that permits are not required on Federal Superfund Sites as long as the substantive requirements of the permit are met. EHPS will obtain a storm water permit from DEQ if required. Permits required to perform activities in the floodplain will be reviewed with the US Army Corps of Engineers and the Lewis and Clark Conservation District, if applicable.

### C. Maps and Photos

The following maps are included in Attachment A to this application.

Figure 1. East Helena Public Schools Dartman Field Reclamation Project Location Map

Figure 2. Dartman Field Soil Sample Locations and Lead Concentrations

Figure 3. Dartman Field Soil Sample Locations and Arsenic Concentrations

Figure 2-1. Selected Cleanup Areas (from the OU2 ROD)

Figure 5-3. Soil Lead Contour 1,000 mg/kg (from the OU2 ROD)

Figure 5-4. Soil Arsenic Contours 0-4 inch (from the OU2 ROD)

Figure 5-6. Soil Lead Contours 500 mg/kg (from the OU2 ROD)

Figure 5-7. Example of Soil Lead concentrations in Undeveloped Lands (Asarco Lamping Property) (from the OU2 ROD)

East Helena Public Schools Dartman Field Proposal Map (Attachment B)

The Photos 1 through 8 document the existing conditions on the Dartman Field property and are included in Attachment A.

Photo 1. Photo looking west across the center of Dartman Field.

Photo 2. Photo looking east across the center of Dartman Field.

Photo 3. Barren area in the southeast portion of the Dartman Field.

Photo 4. Barren area in the eastern portion of the Dartman Field.

Photo 5. Barren area in the central portion of the Dartman Field looking north.

Photo 6. Barren area in the central portion of the Dartman Field looking southeast.

Photo 7. Photo of the former Dartman residence area looking south (the residence was demolished in 2010).

Photo 8. Photo of a dry flood channel in Dartman Field looking north (EPA remediated soil in several flood channels in 2002).

### D. Plans and Specifications.

Plans and specifications have not been prepared for the project. A project design and bid documents will be prepared with the funds from the grant. The project is similar in nature to other projects at the East Helena Superfund Site that have used in-place treatment by deep tilling.

## **STEP 4 – SELECTED ALTERNATIVE SCOPE OF WORK**

In order to be eligible for funding, the proposed project must be technically feasible and comply with statutory and regulatory standards protecting environmental quality. Describe in detail the work that needs to be done to complete a successful project. If the project receives RDGP funding, this scope of work will be the basis for the grant agreement between the applicant and DNRC. This statement must include the following.

### **1. Goals and Objectives**

The goal of the project is to reduce heavy metal concentrations, particularly arsenic and lead, so that the property can be developed for up to three schools to reduce school overcrowding. Project objectives to accomplish the goals are as follows:

- Use the grant funding to hire a qualified engineering firm to prepare a project design and bid documents, and provide construction oversight and administration.
- Use grant funding to hire a reclamation contractor to complete the in-place treatment, soil amendments, oversize rock removal, and reclamation seeding.

### **2. Tasks or Activities**

If the grant application is successful, EHPS will contract with a qualified environmental consulting/engineering firm to complete an engineering design, developing bid documents, and assisting the EHPS with the construction oversight and project management. Upon soliciting for bids, the EHPS will award a contract for in-place treatment by deep tilling and soil amendment.

### **3. Project Schedule**

The tentative project schedule is:

May 2017: Hire a qualified engineering firm to prepare the engineering design and bid documents.

July 2017: Advertise for reclamation contractors.

August 2017: Project award and begin reclamation construction.

October 2017: Complete reclamation seeding and project closeout.

### **4. Monitoring Plan**

Soil samples will be collected after the in-place treatment has been completed and analyzed for arsenic and lead to ensure that the cleanup levels specified in the OU2 ROD have been met before EHPS proceeds with developing the property according the EHPS conceptual plan.

### **5. Equipment**

No equipment will be purchased for this project. Required equipment will be provided by reclamation contractor.

## **6. Statutory and Regulatory Standards**

The project will be completed according to the requirements of the OU2 ROD for the East Helena Superfund Site and the Soils Ordinance. The selected alternative complies with all Applicable, Relevant and Appropriate Requirements. The project will comply similarly with the Lewis & Clark County Soil Ordinance and work cooperatively with the authorized staff and EPA.

## STEP 5 – BUDGET

### **Administrative Costs**

1. Personnel Costs – Identify each employee who is needed to complete the project. List the estimated percent of time each employee will work and the overall cost to the project. Include in this category clerical, bookkeeping, reporting, and other support staff services that will be needed to administer the project.

Staff	Position	Hours	Loaded Rate	Expenses
Ron Whitmoyer	Superintendent	200	\$64/hour	\$12,800.00
EHPS Administrative Staff	Administrative	60	\$33/hour	1,980.00

2. Contracted Services – Contracted services would include engineering services to prepare a design, prepare bid documents, and provide construction oversight. A construction contractor would be contracted to complete the reclamation work.

3. Office Supplies, Office Costs and Communications – No office supplies, office costs, and communications will be incurred under Administrative Costs. Office supplies and materials necessary to support the project will be an in-kind contribution by EHPS.

4. Travel – No office supplies, office costs, and communications will be incurred under Administrative Costs.

5. Equipment – No capital equipment costs will be incurred under Administrative Costs. Equipment required for remediation will be provided by the remediation contractor.

6. Miscellaneous – METG (Custodial Trust) is donating the land to the EHPS for the amount of the Custodial Trust's costs of sale, which were incurred over a 6-year period during which the Custodial Trust and EHPS negotiated terms of conveyance of multiple parcels of Custodial Trust property in East Helena. The total costs of sale (\$90,000) were substantially driven by the inability to secure approval of its beneficiaries—the US and the State of Montana—to effect a sale or transfer of land to the EHPS. Typically, the Custodial Trust is required to receive fair market value for the sale of its property. Based on a certified appraisal of the property, the land being conveyed to the EHPS has a fair market value of \$450,000. Therefore, the Custodial Trust is making an in-kind contribution of \$360,000 to the EHPS for the project.

### **Activity Costs**

1. Personnel Costs – Personnel costs are addressed under Administrative Costs above.

2. Contracted Services – Engineering services would be contracted to prepare a project design, bid documents, and provide oversight and contract administration during construction. Reclamation contracting services would be contracted to complete the in-place treatment (deep tilling), soil amendments, oversize rock removal, reclamation seeding, and ancillary tasks specified in the engineering design.

### **Indirect Costs**

No indirect costs will be incurred.

### Project Budget Summary Form

Category	RDGP	EHPS	METG	Source	Total
Administrative Costs					
Personnel Cost		\$14,780.00			\$14,780.00
Office Supplies, Office Costs & Communications					
Travel					
Rent & Utilities					
Equipment					
Miscellaneous		\$90,000.00	\$360,000.00		\$450,000.00
Total Administrative Costs	\$0.00	\$104,780.00	\$360,000.00	\$0.00	\$464,780.00
Activity Costs					
Personnel Cost					
Task: <i>specify activity here</i>					
Contracted Services					
Task: <i>Engineering Design/Oversight</i>	\$70,502.40				\$70,502.40
Task: <i>Reclamation Construction</i>	\$429,497.60	\$40,518.40			\$470,016.00
Total Activity Costs	\$500,000.00	\$40,518.40	\$360,000.00	\$0.00	\$540,518.40
Total Project Costs					
Total Project Costs	\$500,000.00	\$145,298.40	\$360,000.00	\$0.00	\$1,005,298.40

Notes:

RDGP = Reclamation and Development Grants Program

<sup>a</sup> Identify the sources of the matching funds (change column headings in your application)

Identify the tasks or activities that will be performed by applicant personnel or contracted services. Add or delete lines as needed. Tasks should be described in Step 4, Scope of Work.

DNRC will recommend no more than **\$300,000** for most projects. DNRC **may** recommend up to **\$500,000** for a project if the Applicant has clearly demonstrated the financial need and unavailability of other funds to complete the project.

## **STEP 6 – PUBLIC NATURAL RESOURCE BENEFITS**

Provide a short narrative describing the public natural resource benefits of this project. Refer to the technical narrative to avoid duplication. The degree to which the proposed project provides the eight public benefits below will be used to rank the project.

1. Describe how the project repairs, reclaims, or mitigates environmental damage to natural resources from mineral development.

Project entails remediation of contaminated soils from a former lead smelter. The project will reclaim surface soils that are contaminated with arsenic and lead from over 100 years of smelter emissions. Remediation of soils will protect migratory birds that might otherwise come into contact with contaminated surface soils.

2. Describe how the project ensures the quality of natural resources.

The project will lower arsenic and lead concentrations in native soil so that the property can be put to productive use. The property is currently vacant and is not suitable for development because of the elevated concentrations of heavy metals in soil. Project will contribute to the protection of migratory birds because lead levels in soils exceed the “action level” for ecological receptors, including migratory birds. The project will also protect water quality by reducing metal concentrations in surface water runoff and in the portion of the property within the Prickly Pear Creek Floodplain.

3. Explain how the project will conserve natural resources.

By reclaiming the native surface soil, the project will reduce environmental degradation through direct contact with the soil by humans and animals, wind erosion, and potential leaching of metals to groundwater. The Dartman Field will no longer remain a source of elevated lead and arsenic that is subject to wind erosion, storm water runoff, and leaching of metals to groundwater.

4. Discuss how the project protects the public health or the environment.

The project will protect human health and the environment by remediating soils to the cleanup standard for single-family residential standards for undeveloped land as set forth in the EPA OU2 ROD.

5. Describe how Montanans will directly benefit from the project.

Montanans will immediately benefit directly from reduced exposure to heavy metals in the environment. Montanans benefit in the long term from enhanced public education, which will be afforded by reclamation of contamination soil. The Dartman Field is expected to satisfy the EHPS school construction needs for the next 50 years.

6. Describe how Montanans will indirectly benefit from the project.

Increased economic development associated with the reclamation project and construction of schools will provide jobs that contribute to the taxes to support local, state, and federal services. In addition, the economic development will benefit suppliers of goods and services located in surrounding cities or counties. The EHPS development will help catalyze the safe redevelopment of the surrounding undeveloped land, which will create new job centers and contribute to local and state tax rolls.

7. Explain if jobs are created by the project for people who need job training, receive public assistance, or are chronically unemployed.

Jobs will be created in the short term through the engineering and construction contracts that will be executed by EHPS. Jobs will be created in the long-term as additional schools are constructed, requiring teachers, paraprofessionals, administrative and custodial staff, bus drivers. Short-term construction jobs for school construction will also be created.

8. Discuss if the project benefits are certain and long term.

The remediation technology that has been selected has been proven effective at other sites in the East Helena Superfund site under similar conditions. Therefore, the project is expected to be successful at reducing arsenic and lead concentrations. These benefits are certain and long term.

As the property is developed into schools, East Helena and Montana will benefit from the enhanced public education opportunities and expanded jobs for generations to come.

East Helena and Montana will realize benefits in the short-term (cleanup, jobs, protection of public health) and the long-term (enhanced public education, facilitation of redevelopment of surrounding undeveloped lands. These benefits are certain and long term.

## **STEP 7 – NEED AND URGENCY**

### **1. Describe the project need, who is affected, and how they are affected by the problem.**

The town of East Helena is located within the East Helena Superfund Site. The East Helena Superfund Site (Site) consists of the decommissioned Asarco smelter, an industrial facility operated by American Chemet Corporation, all of the City of East Helena, Montana, nearby residential subdivisions, numerous rural developments such as homes on small acreage plots and several large farms or ranches and their associated cultivated fields or pastures. The U. S. Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Site Identification Number for the East Helena Superfund Site is MTD006230346.

### **2. Explain the immediacy of the need or problem, including the cause and how long it has existed.**

East Helena is a growing community that is being impacted by new home construction from multiple subdivisions. With the future of expansion of classroom space necessitated by this growth, it is necessary for the school district to find property for up to three new elementary and/or middle schools.

The Dartman Field property is located immediately north of Radley Elementary School and is a logical move for the EHPS purchase; however, the property cannot be developed in its current state because of elevated lead and arsenic concentrations in the surface soil resulting of emissions from the former East Helena Smelter operated by Asarco from 1888 to 2001 . EHPS has developed a reclamation plan that has been approved by EPA, the Montana DEQ, and the Montana DOJ-NRD program; however, there are no other available funding sources to complete the reclamation of the Dartman Field. The lack of funding is documented in the attached letter from the Custodial Trust to EPA dated May 6, 2016, and EPA response included in Attachments G and H. The former ASARCO lead smelter operated from 1888 until 2001. For more than 100 years, lead and zinc smelting operations deposited heavy metals, and other hazardous chemicals into the soil, surface water and groundwater of the Helena Valley. The sources of this contamination included the smelter stack, fugitive emissions from plant operations, process ponds and direct surface water discharges. Historically, the mode of transport for the contaminants was air and surface water.

Investigations in the early 1970s by the State of Montana's Air Quality and Water Quality Bureaus revealed elevated levels of metal contamination in air, soil and surface water in East Helena. Impacts included large areas of barren soils, reduced agricultural production, and reduced abundance and diversity of aquatic vertebrates in Prickly Pear Creek, which flows adjacent to the southwest corner of the Dartman Field (EPA, 2009).

### **3. Describe the impact of a "no action" alternative.**

Under the "no action" alternative, the East Helena community will be negatively impacted by overcrowded classrooms and school facilities. Elevated heavy metal concentrations, particularly lead and arsenic, will not be remediated to allow for redevelopment of the land for development for residential or other uses, including the development of school(s).

### **4. Explain the severity of the problem or need, and the extent of the area involved.**

The need for additional school facilities is immediate, as existing East Helena public schools are significantly overcrowded. Remediation of the soils is required to develop the land for school facilities. The Dartman Field is part of an area referred to as the "North Field" in the OU2 ROD. The portion of the Dartman Field that is proposed for purchase by EHPS from METG is the southern-most 50 acres along

the south boundary of the North Fields. The North Fields are within an area mapped by EPA as having surface soil lead concentrations exceeding 1,000 mg/kg. The cleanup level mandated by EPA's OU2 ROD (EPA, 2009) is 500 mg/kg for lead and 100 mg/kg for arsenic in soil for undeveloped land proposed for residential development in the future (including schools).

Surface soil samples collected from the Dartman Field indicate that lead concentrations range from 571 to 2,910 mg/kg, with an average of 1,469 mg/kg, while arsenic concentrations range from 37 to 193 mg/kg, with an average of 109.2 mg/kg. These concentrations exceed the established cleanup levels and preclude the development of the property for school use.

Other sources of funding have been sought out by EHPS, including Brownfields and other grants; however, no other funds are available for remediation of the property.

5. Discuss the number and type of natural resources affected.

Native surface soil is the primary natural resource impacted by past aerial deposition of heavy metals that resulted from emissions from the ASARCO smelter. To a lesser degree, there are also surface water impacts due to site runoff and air impacts due to wind erosion.

The following letters of support for the project are attached to this application (Attachment F):

- Montana Department of Environmental Quality
- Montana Department of Justice – Natural Resource Damage Program
- U.S. Environmental Protection Agency
- City of East Helena
- State Senator Jill Cohenour
- State Representative Mary Ann Dunwell
- Montana Environmental Trust Group LLC, Trustee of the Montana Environmental Custodial Trust
- Helena Small Fry Football Association

## STEP 8 – PROJECT MANAGEMENT AND ORGANIZATION CAPABILITY

The project is being undertaken by East Helena Public Schools, School District No. 9, with support from agencies and other entities that have involvement or regulatory authority over the project, including the Montana Environmental Trust Group (Custodial Trust), United States Environmental Protection Agency, the Montana Department of Environmental Quality, the Montana Department of Justice – Natural Resource Damage Program, Lewis and Clark County Health Department, and the EHPS School Board.

The project is managed by Ron Whitmoyer, Superintendent of EHPS. Mr. Whitmoyer been the Superintendent of EHPS for 14 years and has been involved with issues related to the East Helena Superfund site for that period of time. He has been primary representative of EHPS in the negotiations with the Custodial Trust, agencies and other entities regarding the purchase of the Dartman Field for the past six years.

Ron Whitmoyer is currently serving his 24th year as a school superintendent and a school principal in the East Helena Public School District, overseeing a \$9,120,968 annual budget. He has managed construction projects within the district including overseeing the construction of East Valley Middle School, a \$7 million project, the renovation of Radley School's ventilation and air circulation system a \$400,000 American Recovery & Reinvestment Act (ARRA) funded project, the renovation of the entryway at Radley School, a Quality School Grant Project in excess of \$100,000 and in-numerous other smaller construction projects for the school system. He was also in charge and managed the Great West Engineering study as well as the SDL soil sampling study, both of which had DNRC funded support and requirements that were completed flawlessly.

The superintendent is also a Governing Board Member for the School Administrators of Montana organization that represents the State of Montana Superintendents on a national level. He was appointed by Governor Martz to serve a term on the Youth Justice Council for the State of Montana. He has been awarded the G.V. Erickson Award as the top Administrator in the State of Montana and continues to be active in State and National educational issues.

EHPS has received previously received the following grant funding to support portions of the project. These projects have been successfully completed on time and within budget.

Funding Source	Amount	Purpose	EHPS In-Kind
RDG Planning Grant	\$25,956.00	SDL Enterprises, LLC soil sampling study for Dartman Field	\$756.00
Montana Department of Commerce Community Block Grant Development Program	\$30,000.00	Great West Engineering School Site Evaluation Study (\$94,500 total)	\$35,105.46 (\$30,000 direct funding and \$5,105.46 in-kind)
RDG Planning Grant	\$9,500.00		
Quality Schools Grant	\$25,000.00		
RDG Planning Grant	\$20,000.00	Olympus Technical Services contract to prepare RDG Grant application	\$2,820.00

Mr. Whitmoyer will be assisted in implementing the project by a qualified environmental consultant/engineering firm to prepare the project design and bid documents to procure a qualified contractor to complete the work. Contracts will be reviewed approved by the EHPS School Board, and signed by the Board Chairman

## STEP 9 – ENVIRONMENTAL CHECKLISTS

Applicant East Helena Public Schools, School District No. 9 Project Title Dartman Field Reclamation Project

Project Description Reclaiming elevated lead and arsenic concentrations in Dartman Field to facilitate school construction at the site.

Person Preparing Checklist Kevin Rauch, P.E., Olympus Technical Services Phone (406) 443-3087

Please attach short, written comments to the checklist if you want to explain why you chose “Major, Moderate, Minor, None, or Unknown.”

### POTENTIAL IMPACTS ON THE PHYSICAL ENVIRONMENT

(Check the appropriate column. State whether the impact is adverse or beneficial.)

	Major	Moderate	Minor	None	Unknown	Comments
Topography				X		No known impact
Geology: Stability			X			Deep tilling will temporarily increase erosion potential. Short-term impacts will be mitigated by best management practices for storm water runoff.
Soils: quality, quantity, distribution	X					Beneficial: reduction in metal concentrations in surface soil. Minor disturbance to surface soil during reclamation
Water: quality, quantity, distribution		X				Beneficial: reduction in metal concentrations in surface soil will decrease metals in runoff.
Air: quality		X				Beneficial: reduction in potential airborne soil with elevated metal concentrations should contribute to improved long-term air quality from wind-blown dust. Short-term adverse effect from dust during reclamation.

**STEP 9 – ENVIRONMENTAL CHECKLISTS (cont.)**  
**POTENTIAL IMPACTS ON THE PHYSICAL ENVIRONMENT**

(Check the appropriate column. State whether the impact is adverse or beneficial.)

	Major	Moderate	Minor	None	Unknown	Comments
Terrestrial, avian, and aquatic: species and habitats		X				Beneficial: Protection of migratory birds from lead levels exceeding “action level” for ecological receptors.
Vegetation: quantity, quality, species			X			Vegetation will be disturbed during construction, but will be reseeded. New vegetation will be planted and maintained as part of the long-term operation and maintenance of the school facilities.
Agriculture, grazing, crops, production			X			Development of the property for school use will preclude agricultural uses in the future.
Unique, endangered, fragile or limited environmental resources				X		No known impact
Demands on environmental resources of land, water, air, and energy		X				Beneficial: the project will reclaim elevated heavy metals in soil, windblown dust, and surface water runoff.
Historical and archaeological sites				X		No known impact
Aesthetics				X		No known impact
Social Structures & more	X					Beneficial: reclamation will facilitate school construction on the site which is a benefit to the community
Cultural uniqueness, diversity				X		No impact
Population: quantity and distribution	X					Beneficial: the project is being driven by increased school enrollment and will alleviate school overcrowding

**STEP 9 – ENVIRONMENTAL CHECKLISTS (cont.)**  
**POTENTIAL IMPACTS ON THE PHYSICAL ENVIRONMENT**

(Check the appropriate column. State whether the impact is adverse or beneficial.)

	Major	Moderate	Minor	None	Unknown	Comments
Housing: quantity and distribution	X					Beneficial: the project is being driven by local housing development, which leads to increased school enrollment.
Human health and safety	X					Beneficial: the project reclaims contaminated land to residential cleanup levels dictated in the EPA OU2 ROD.
Community and personal income		X				Beneficial: reclamation will create short-term employment, facilitating future school construction and long-term employment.
Employment: quantity, and distribution		X				Beneficial: reclamation will create short-term employment, facilitating future school construction and long-term employment.
Tax base: local and state			X			Beneficial: reclamation will create short-term employment, facilitating future school construction and long-term employment, which increases the tax base.
Government services: demand on			X			The project is relatively small and requires a small demand on government services.
Industrial, commercial, and agricultural activities			X			Development will transition the property from agricultural to school use.
Recreation and wilderness		X				Beneficial: the project will allow public access to previously held private property with the potential for playgrounds and athletic fields.

**STEP 9 – ENVIRONMENTAL CHECKLISTS (cont.)**  
**POTENTIAL IMPACTS ON THE PHYSICAL ENVIRONMENT**

(Check the appropriate column. State whether the impact is adverse or beneficial.)

	Major	Moderate	Minor	None	Unknown	Comments
Environmental plans and goals, local and regional	X					Beneficial: reclamation will be completed according to the EPA OU2 ROD.
Demands for energy			X			The project requires a small amount of equipment with low energy demand.
Transportation networks and traffic flows			X			Adverse: traffic will increase slightly during reclamation construction. School development will increase local traffic.

List all groups or agencies contacted and the contact person's phone number.

EPA, Betsy Burns, (406) 457-5013

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## STEP 10 – LIABLE PARTY DETERMINATION

Existence of liability does not automatically rule a project ineligible for RDGP funding, but may affect the amount awarded. Applicants **must** furnish the following information at the time of application submittal.

1. What is the legal description of the site?

The legal description of the entire Dartman field is Section 25, Township 10 North, Range 3 West, C.O.S 3254911, Acres 149.79, TRACT B, In NE4, according to the Montana Cadastral Mapping Program data.

The portion of the property that the East Helena Public Schools, District No. 9 is in the process of purchasing is 50 acres across the southern-most boundary of the property.

2. What is the name of the current owner?

Montana Environmental Trust Group, LLC  
Trustee of the Montana Environmental Custodial Trust (the Custodial Trust)

3. When did the damage occur?

The damage occurred between 1888 and 2001 as the result of emissions from the operation of the Asarco smelter.

4. Who was the owner/operator at that time? Provide as much identifying information as possible.

Asarco—American Smelting and Refining Company—a global mining company that filed for bankruptcy in 2005

5. Have there been subsequent owners/operators? Provide as much identifying information as possible.

The Custodial Trust succeeded to Asarco's ownership of property when it was established in 2009 as part of the global Asarco bankruptcy settlement entered into by the United States, the State of Montana and Asarco

6. Who has been paying the property taxes the past 10 years?

Asarco paid property taxes until 2009; since it was established, the Custodial Trust has been paying property taxes

7. Is a nuisance action currently pending? If yes, please describe.

No.

8. Is the project now, or has it ever been, permitted, licensed or regulated by federal, state, or local rules, regulations or statutes? If yes, please list them.

Yes. The property is part of a federal superfund site and a federal RCRA Corrective Action site.

9. If a PRP search or other liability investigation has been conducted, please describe.

Asarco, the PRP under CERCLA and RCRA is no longer a PRP pursuant to the 2009 bankruptcy settlement agreement with the US and the State of Montana. The Custodial Trust succeeded to Asarco's cleanup obligations but is not a PRP. The Custodial Trust performs cleanup activities in East Helena that are approved by EPA and are included in an EPA-approved budget using finite Custodial Trust funds. EPA has not and will not approve funds for cleanup of soils on undeveloped land (including the subject property) unless and until groundwater contamination migrating off-site from the former smelter property has been addressed pursuant to RCRA. If funds are remaining after the groundwater is addressed, EPA may approve the use of Custodial Trust cleanup funds for remediating surface soils. However, that is not expected to happen for many years, if at all. A letter from Custodial Trust's Counsel documenting the PRP status of past, current, and future PRPs is included as Attachment I to this application.

The EPA and the State of Montana (through MDEQ and MDOJ/NRD) are the beneficiaries of the Custodial Trust.

10. Is the applicant liable for the contamination at the site? If no, is the present owner liable for contamination?

The EHPS is not liable for contamination and is currently following the EPA requirements for "All Appropriate Inquiry" set forth 40 CFR Part 312 to ensure that it will not be held liable for existing contamination in the future. The Custodial Trust is not a PRP and therefore is not liable for contamination, as presented in letter from Counsel to the Custodial Trust documenting the issues related to liability for site contamination (see Attachment I). The EPA and the State of Montana are the two beneficiaries of the Custodial Trust.

11. Is the project being conducted under Montana's Voluntary Cleanup Program?

No.

12. Has the site or will the site receive funding from other cleanup programs such as:

\_\_\_\_ Brownfields funding                      \_\_\_\_ LUST TRUST funding  
\_\_\_\_ Petrofund                                      \_\_\_\_ Board of Oil and Gas Orphan Well funding  
\_\_\_\_ Surface Mine Control Reclamation Act Funding  
\_\_\_\_ Other \_\_\_\_\_ (identify)  
\_\_\_\_ Other \_\_\_\_\_ (identify)

Please list all past and possible cleanup funding sources and the reasonable availability of the funding.

Funding for remediation of soils contamination is not currently available from the Custodial Trust cleanup account. Since it was created in 2009, the Custodial Trust has been using its finite funds to address contamination on the former Asarco smelter property (including soils contamination and groundwater contamination that is migrating off-site), pursuant to EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action program and EPA-approved cleanup plans and budgets. If sufficient funds are available after the RCRA cleanup is complete, EPA may approve the expenditure of Custodial Trust funds to remediate contaminated soils on its undeveloped lands in East Helena, which include the EHPS Parcel. EPA has advised that it does not expect to decide whether there are sufficient funds available to perform soils remediation for a number of years, if at all. A letter from the Custodial Trust to EPA

documenting the lack of available funding from the bankruptcy settlement is included as Attachment G. EPA's response confirming that no funds are available for EHPS remediation of Dartman Field soils is included as Attachment H.

In light of the urgent need to increase existing East Helena school capacity and the uncertainty as to timing and funding for cleanup of soils by the Custodial Trust, the EHPS cannot wait until such a decision is made.

Additionally, because the project parcel is part of a federal superfund site and soils must be remediated pursuant to the EPA ROD, the EHPS **is not eligible** for EPA Brownfield Assessment Grants, Revolving Loan Fund Grants, Cleanup Grants and/or Area Wide Assessment Grants. Per EPA: "For sites contaminated by hazardous substances, persons, including government entities, who may be found liable for the contamination under CERCLA §107 (the Superfund law) are not eligible for grants."

See: <https://www.epa.gov/sites/production/files/2015-10/documents/epa-oswer-oblr-15-04.pdf>

An RLF grant recipient cannot make a loan or subgrant to a party potentially liable for the contamination at the brownfield site under CERCLA §107, nor may the RLF grant recipient make a loan or subgrant to clean up a site that it is potentially liable for under CERCLA §107.

See: <https://www.epa.gov/sites/production/files/2015-10/documents/epa-oswer-oblr-15-05.pdf>

### **STEP 11 – CRUCIAL STATE NEED DOCUMENTATION**

This proposed project will reclaim environmental damage from mining related activities (i.e., smelting of ores), and therefore, does not fit the crucial state need criteria.

**ATTACHMENT A**  
**FIGURES AND PHOTOS**

**ATTACHMENT B**

**EAST HELENA PUBLIC SCHOOLS  
DARTMAN FIELD PROPOSAL MAP**

**ATTACHMENT C**

**RESULTS OF EPA DATA QUERY  
FOR DARTMAN FIELD PROPERTY**

**ATTACHMENT D**

**REAL ESTATE PURCHASE AGREEMENT  
BETWEEN EHPS AND METG**

**ATTACHMENT E**

**EMAILS FROM DEQ AND DOJ-NRD  
APPROVING THE PURCHASE AGREEMENT**

**ATTACHMENT F**  
**LETTERS OF PROJECT SUPPORT**

**ATTACHMENT G**

**METG LETTER TO EPA REGARDING  
AVAILABILITY OF CLEANUP FUNDS FOR  
REMEDICATION OF DARTMAN FIELD SOILS**

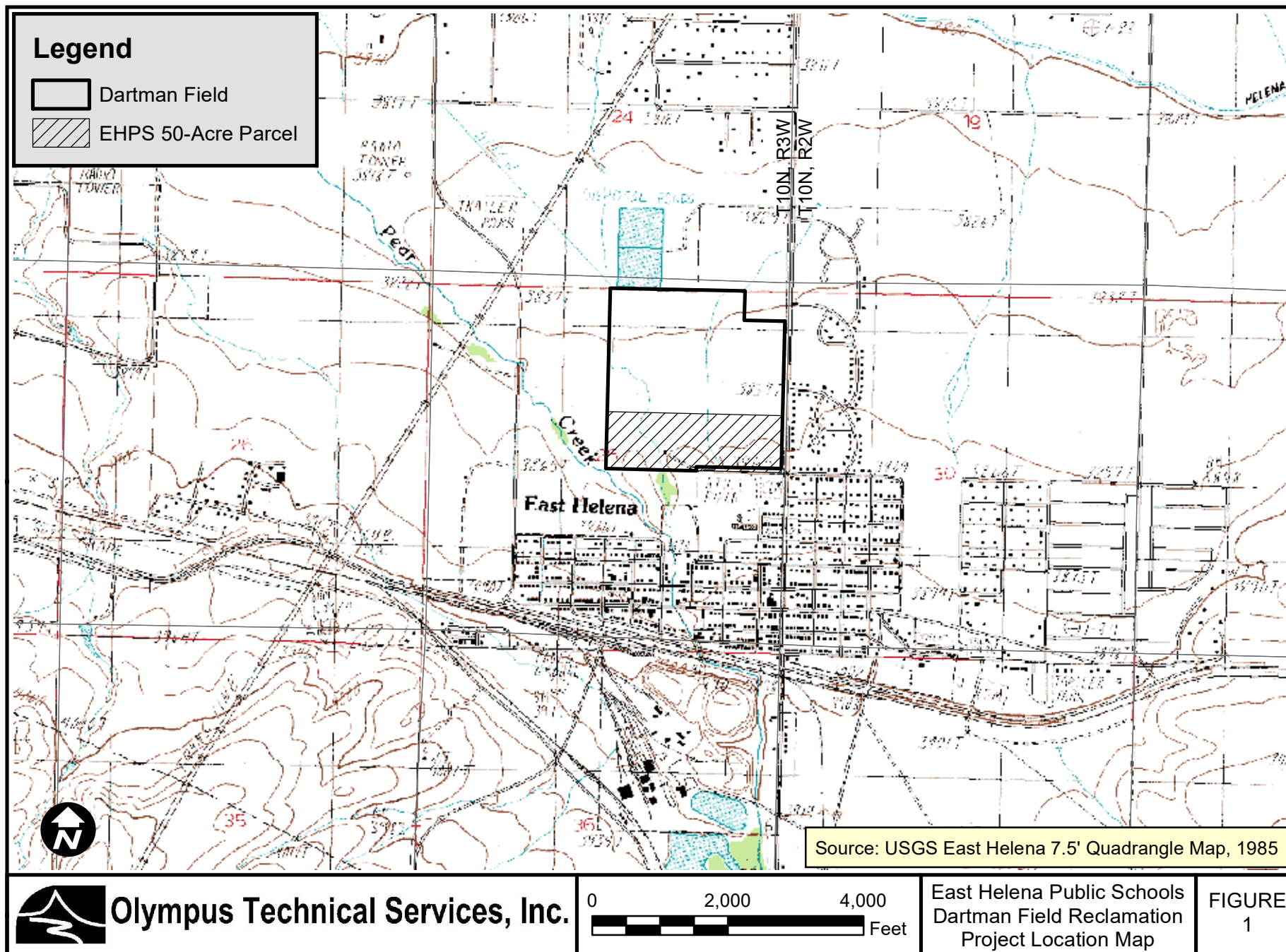
**ATTACHMENT H**

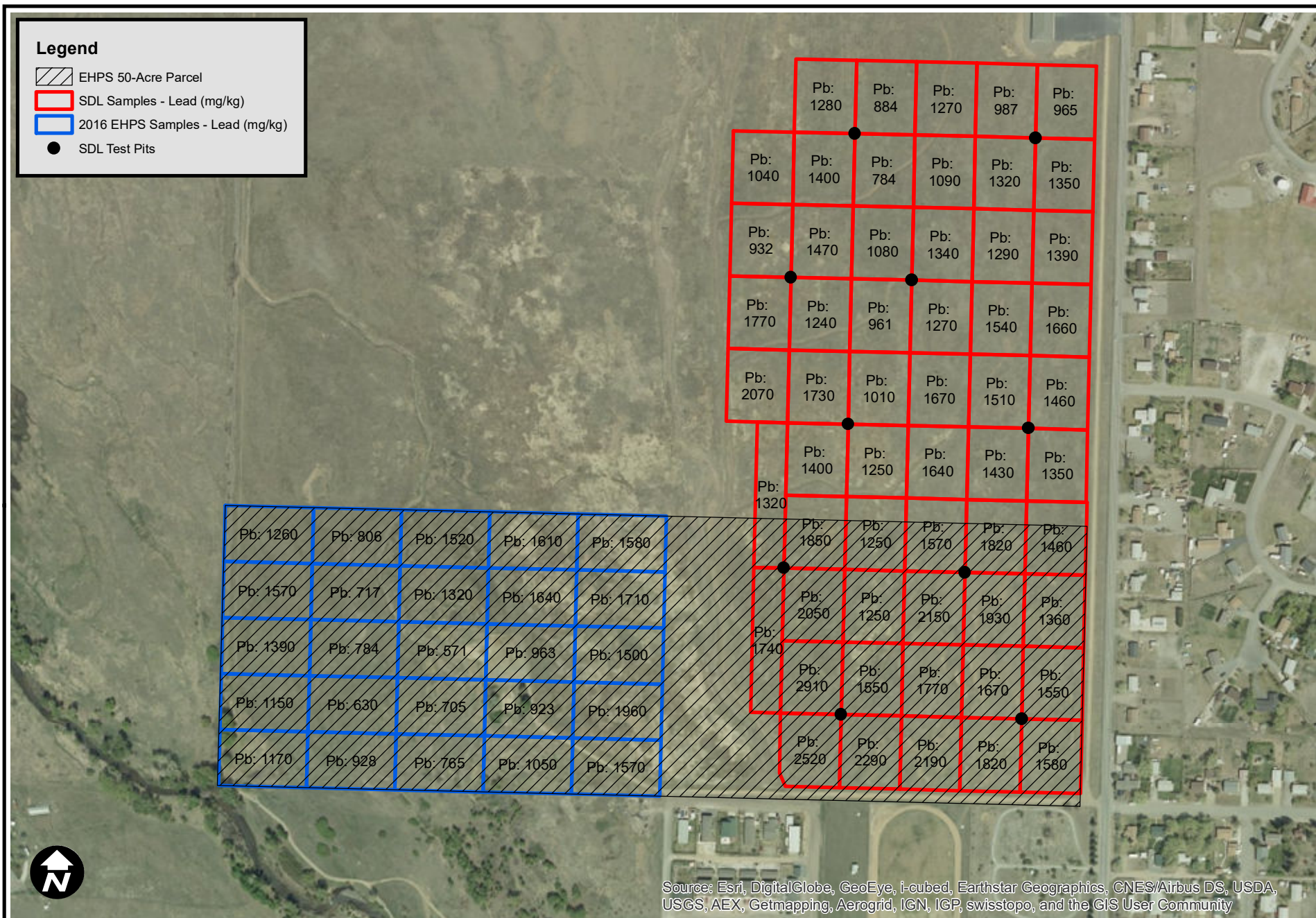
**EMAIL RESPONSE FROM EPA TO METG LETTER  
REGARDING AVAILABILITY OF CLEANUP FUNDS**

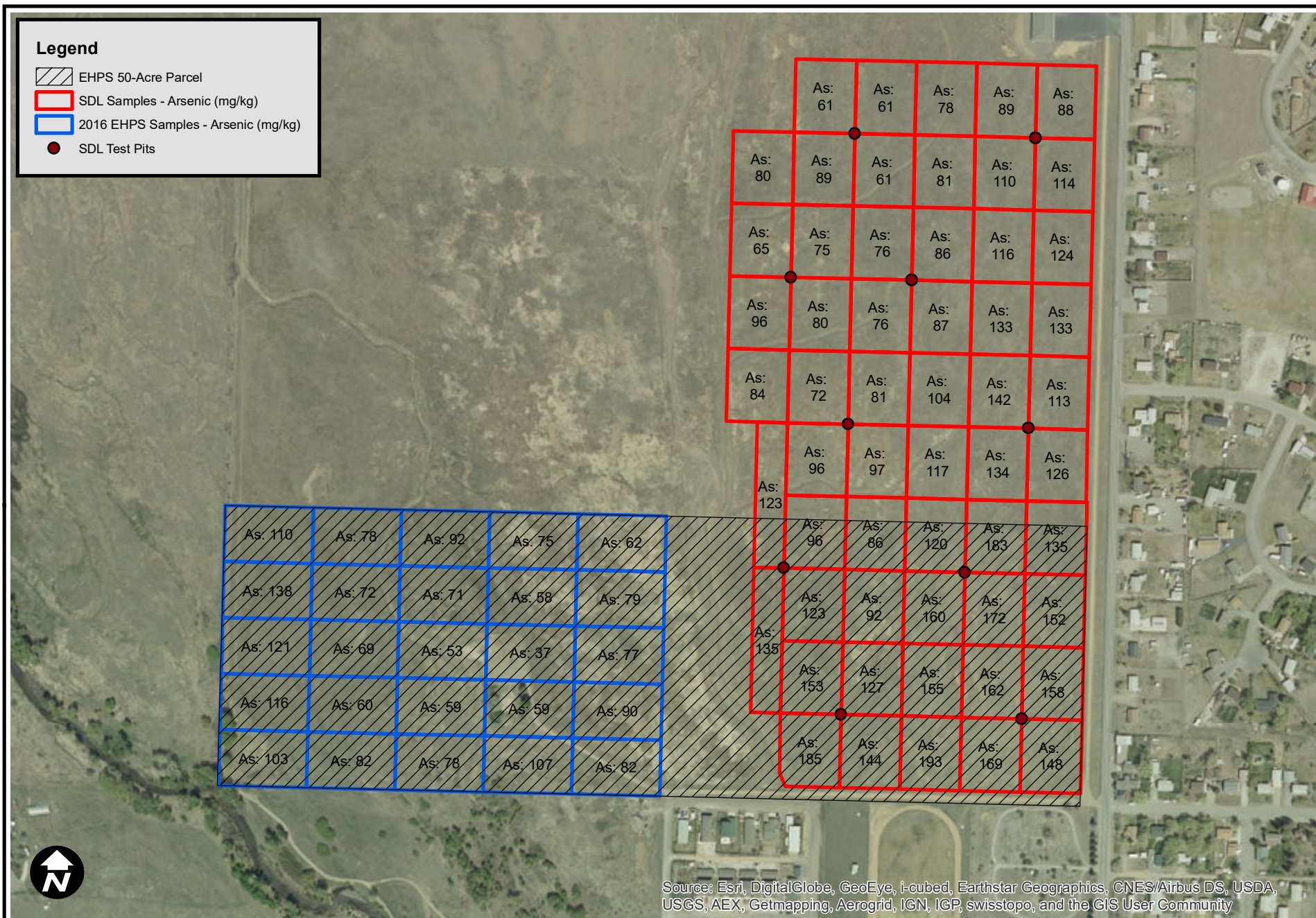
## **ATTACHMENT I**

### **LETTER FROM CUSTODIAL TRUST COUNSEL REGARDING PAST, CURRENT, AND FUTURE POTENTIAL RESPONSIBLE PARTIES**

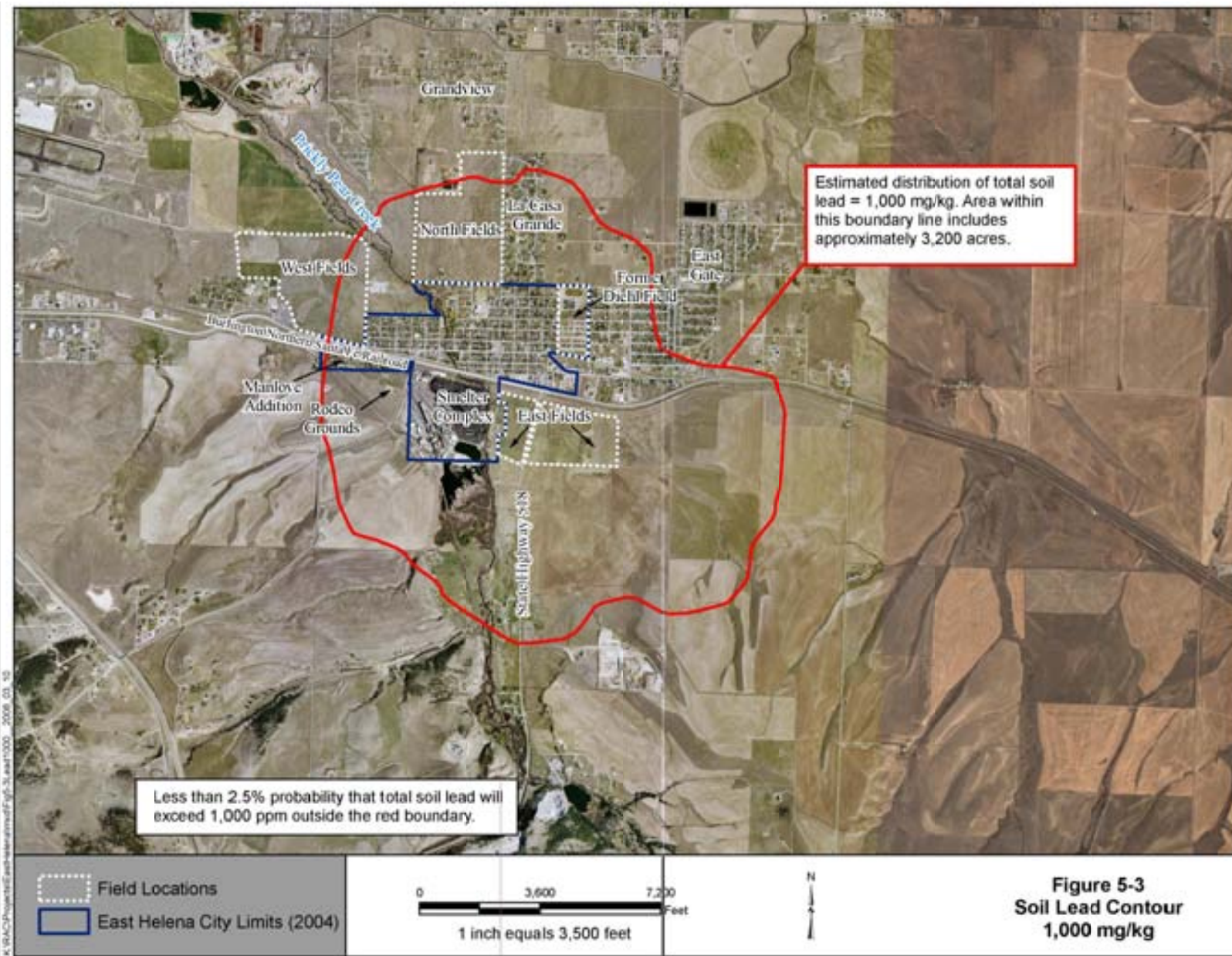
**ATTACHMENT A**  
**FIGURES AND PHOTOS**

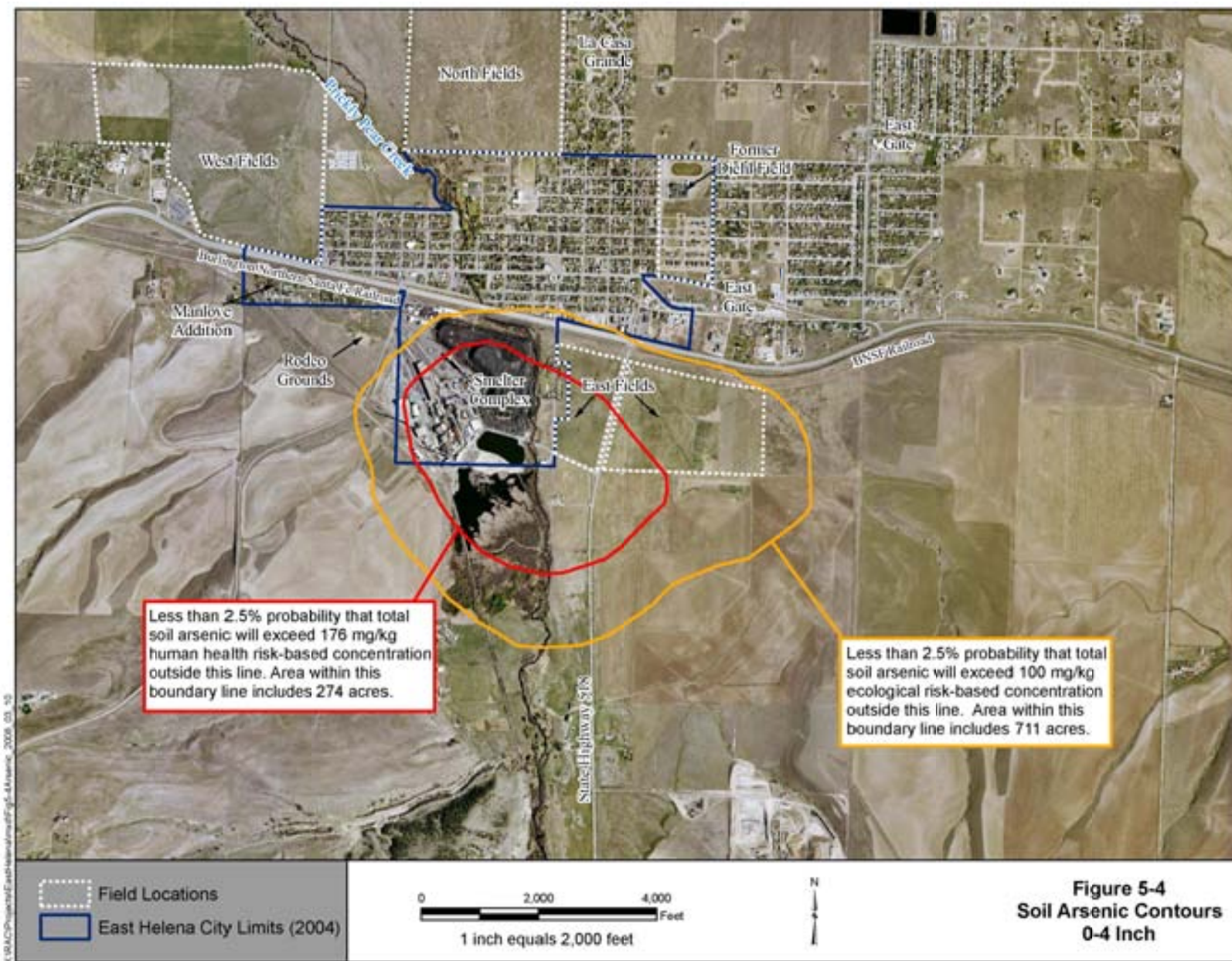


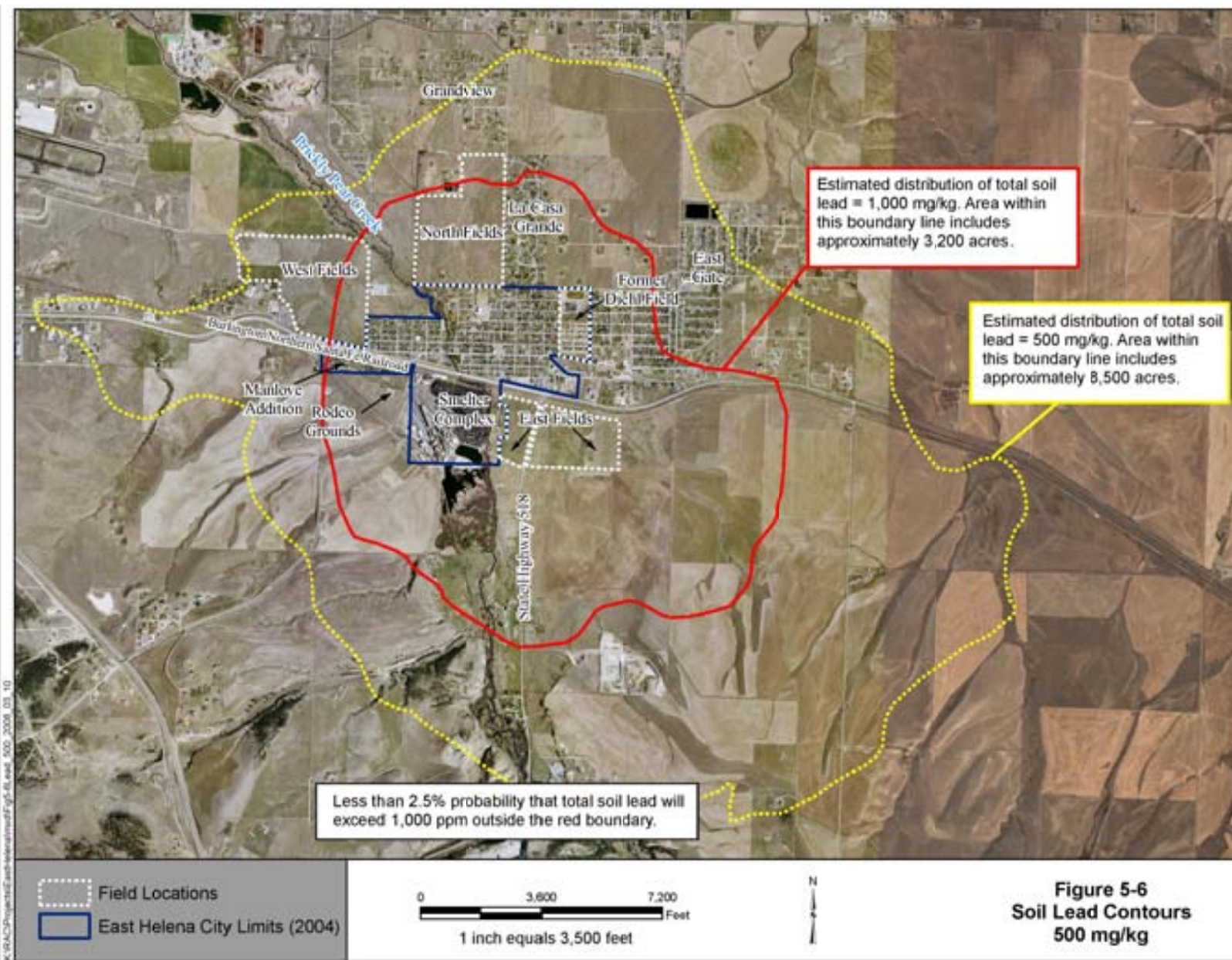


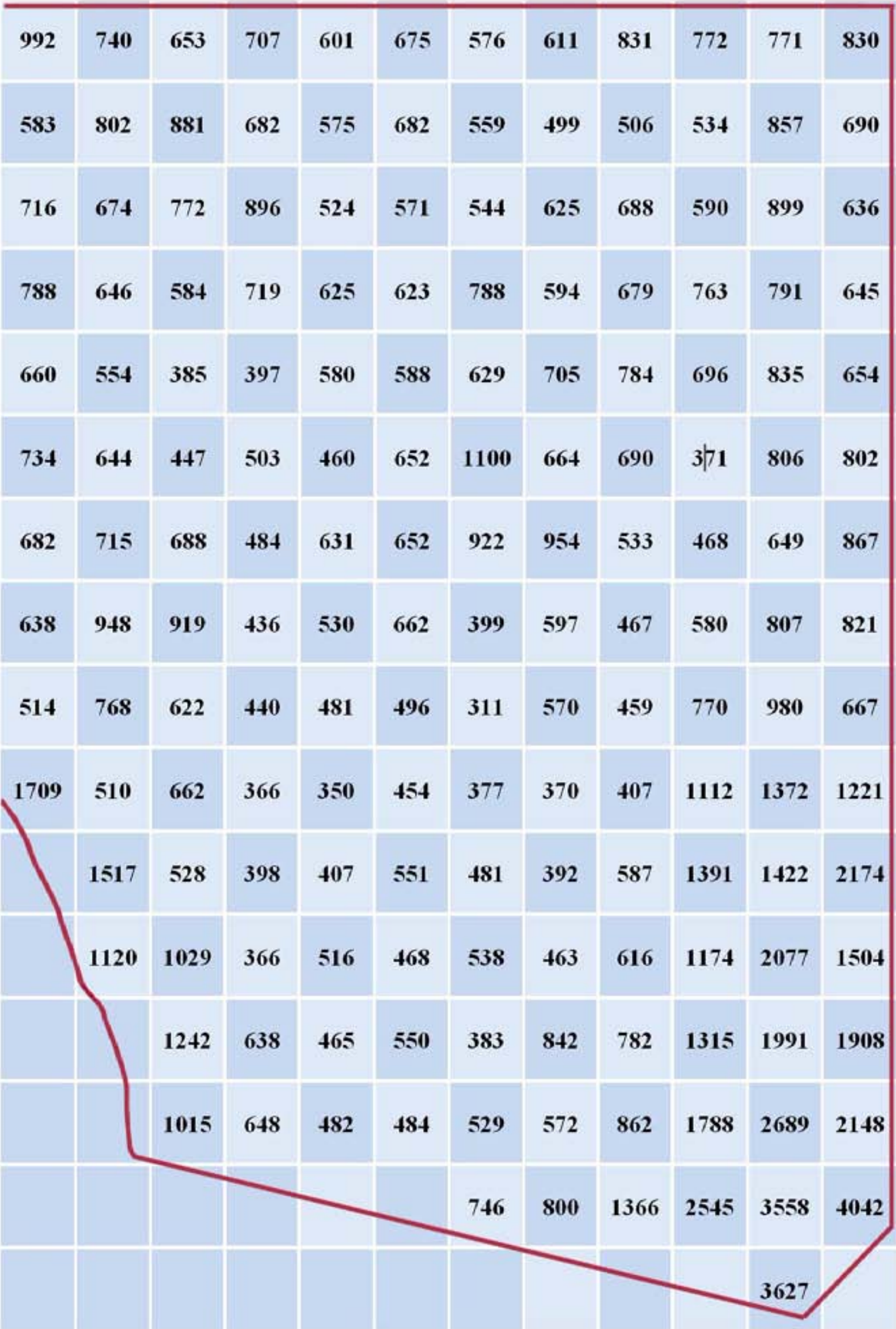












Adapted from Hydrometrics, Inc.  
Samples November 2001

715 Lead 95% UCL (mg/kg)

Figure 5-7  
Example of Soil Lead Concentrations  
In Undeveloped Lands  
(ASARCO Lamping Property)



Photo 1. Photo looking west across the center of Dartman Field.



Photo 2. Photo looking east across the center of Dartman Field.



Photo 3. Barren area in the southeast portion of the Dartman Field.



Photo 4. Barren area in the eastern portion of the Dartman Field.



Photo 5. Barren area in the central portion of the Dartman Field looking north.



Photo 6. Barren area in the central portion of the Dartman Field looking southeast.



Photo 7. Photo of the former Dartman residence area looking south (the residence was demolished in 2010).



Photo 8. Photo of a dry flood channel in Dartman Field looking north (EPA remediated soil in several flood channels in 2002).

**ATTACHMENT B**

**EAST HELENA PUBLIC SCHOOLS  
DARTMAN FIELD PROPOSAL MAP**

# East Helena Public Schools Dartman Field Proposal

**Custodial Trust  
Recommendation  
For 50-Acre Parcel**

**50-Acre Parcel  
Proposed for  
Acquisition  
By EHPS**

25

DARTMAN

DARTMAN RD

BIKE PATH

EWFD

CEMETARY

TH  
FIELD

**Radley  
Elementary  
School**

EAST HELENA  
CITY LIMITS

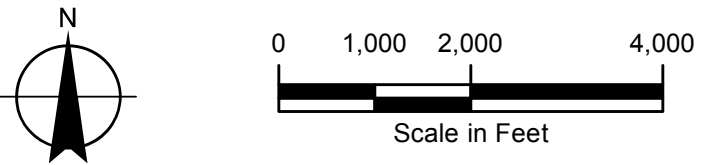
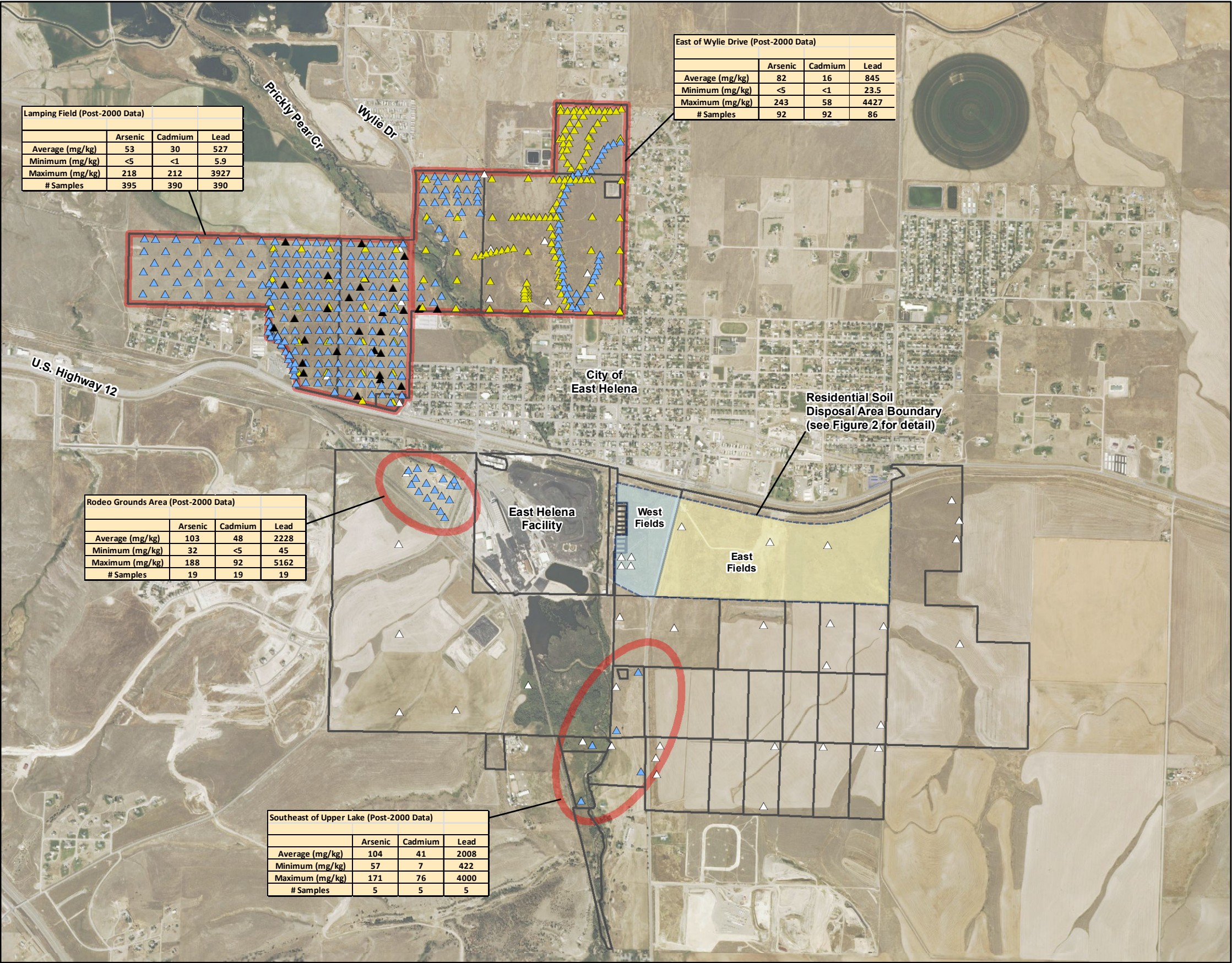
WYLE DR.

ACCESS ROAD

ER

**ATTACHMENT C**

**RESULTS OF EPA DATA QUERY  
FOR DARTMAN FIELD PROPERTY**



**LEGEND**

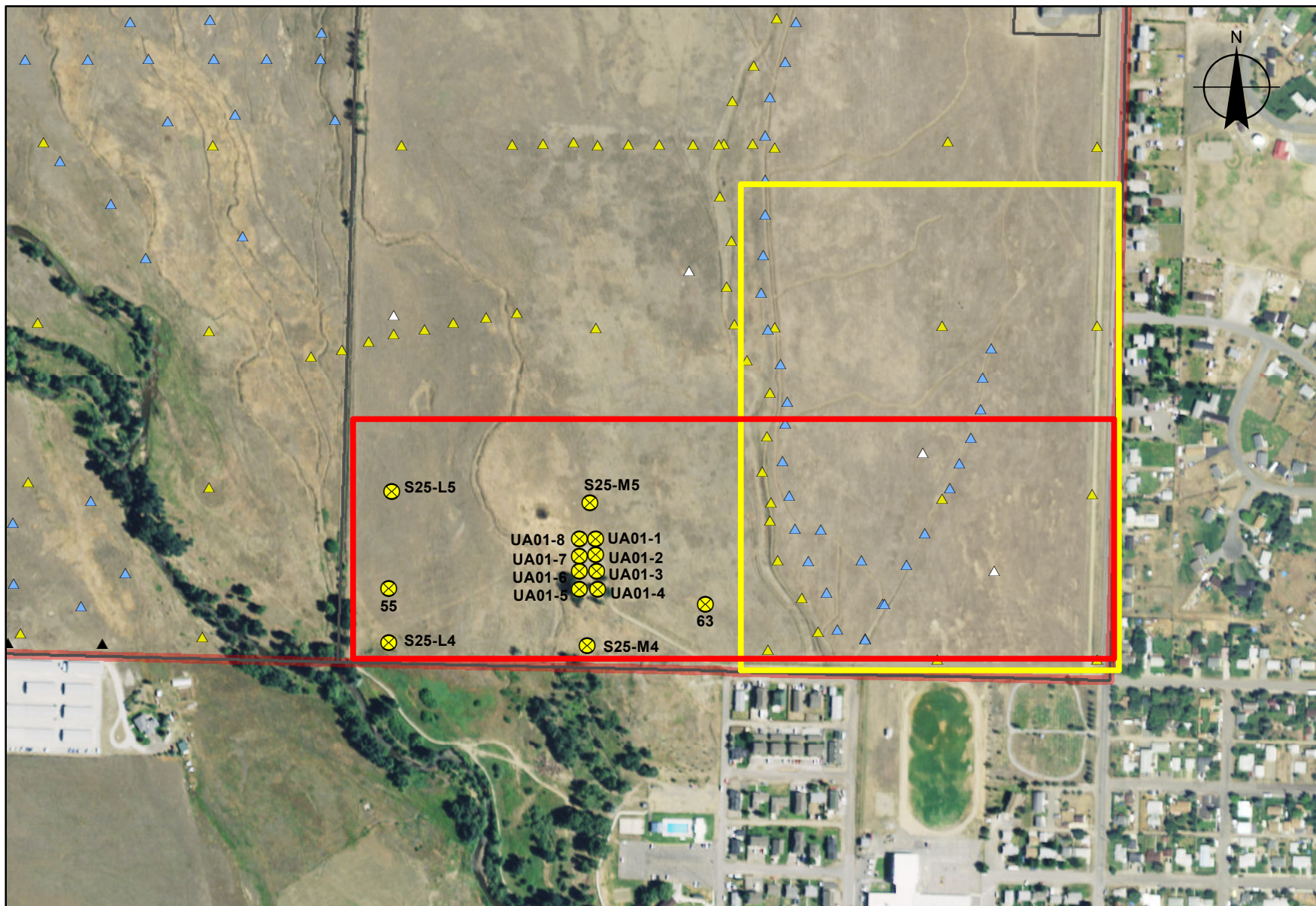
**Off-Site Soils -- Year Sampled**

- △ 1984 - 1990
- ▲ 1991 - 1999
- ▲ 2000 - 2004
- ▲ 2005 - Present

METG-Owned Parcels

Summary Statistics Area (Post-2000 Data)

**FIGURE 1**  
**OFF-SITE SOILS SAMPLING LOCATIONS**  
**WITHIN METG-OWNED PROPERTIES**  
**EAST HELENA FACILITY**



0 250 500 1,000 Feet

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Sample Date	Matrix	Top Depth	Bottom Depth	Depth Units	Laboratory ID	AI (Tot)	AI (Tot) _Q	Sb (Tot) _ND	Sb (Tot)
3	55	055	Jun-84	soil	0.00	0.33	ft		8700			0.27
3	63	063	Jun-84	soil	0.00	0.33	ft		11900			0.7
3	63	063	Jun-84	soil	0.33	0.67	ft		13900			0.27
3	63	063	Jun-84	soil	0.67	1.25	ft		17400			0.27
3	63	063	Jun-84	soil	1.25	2.50	ft		15400			0.27
3	63	063	Jun-84	soil	0.00	0.33	ft					
3	63	063	Jun-84	soil	0.33	0.67	ft					
3	63	063	Jun-84	soil	0.67	1.25	ft					
3	63	063	Jun-84	soil	1.25	2.50	ft					
5	S25-L4	PRE-S25-L4	11/15/1991	soil	0.00	0.08	ft	91Z-00040				
5	S25-L5	PRE-S25-L5	11/15/1991	soil	0.00	0.08	ft	91Z-00041				
5	S25-M4	PRE-S25-M4	11/18/1991	soil	0.00	0.08	ft	91Z-00046				
5	S25-M5	PRE-S25-M5	11/18/1991	soil	0.00	0.08	ft	91Z-00047				
5	UA01-1	PST2-UA01-1	7/6/1998	soil	1.00	1.08	ft	98X-01460				
5	UA01-1	PST-UA01-1	7/6/1998	soil	0.75	0.83	ft	98X-01456				
5	UA01-1	PST-UA01-10	7/6/1998	soil	0.75	0.83	ft	98X-01457				
5	UA01-2	PST-UA01-2	7/8/1998	soil	1.08	1.17	ft	98X-01471				
5	UA01-2	PST-UA01-20	7/8/1998	soil	1.08	1.17	ft	98X-01472				
5	UA01-3	PST-UA01-3	7/16/1998	soil	1.17	1.25	ft	98X-01495				
5	UA01-4	PST-UA01-4	7/16/1998	soil	1.08	1.17	ft	98X-01497				
5	UA01-4	PST-UA01-50	7/16/1998	soil	1.08	1.17	ft	98X-01496				
5	UA01-5	PST-UA01-5	7/30/1998	soil	1.08	1.17	ft	98X-01473				
5	UA01-6	PST-UA01-40	7/10/1998	soil	1.08	1.17	ft	98X-01475				
5	UA01-6	PST-UA01-6	7/10/1998	soil	1.08	1.17	ft	98X-01474				
5	UA01-7	PST-UA01-7	7/6/1998	soil	1.08	1.17	ft	98X-01461				
5	UA01-8	PST-UA01-30	7/9/1998	soil	1.17	1.25	ft	98X-01470				
5	UA01-8	PST-UA01-8	7/9/1998	soil	1.17	1.25	ft	98X-01469				

**NOTES**

All units in mg/kg unless otherwise noted.

Tot = Total

Ext = Extractable (concentrated HCl for As, DTPA for all other constituents)

Rep = Replicate sample

\_Q = data validation qualifier

\_ND = concentration below reporting limit (&lt;)

PbU95 = Upper 95% Confidence Limit for lead (calculated value)

**Qualifiers:**

D - RL increased due to sample matrix

H - Analysis performed past recommended holding time.

**Data Sources:**

- 1 East Helena Facility Envirodata Soils Database (EastHelena\_RISoils\_2008.mdb)
- 2 Phase II RCRA Facility Investigation, East Helena Facility, METG, 2011.
- 3 Remedial Investigation of Soils, Vegetation and Livestock for East Helena Site (Asarco), CH2MHill, May 1987.
- 4 Comprehensive Remedial Investigation/Feasibility Study - Asarco, Inc. East Helena, Montana, Hydrometrics, Inc., March 30, 1990.
- 5 East Helena CERCLA Remediation Envirodata Database (EastHelenaRemedTest\_2011.mdb), supplemented by annual Residential Remediation Reports (1992-2011) and field notes

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Sb (Tot) _Q	As (Tot) _ND	As (Tot)	As (Tot) _Q	Ba (Tot)	Ba (Tot) _Q	Be (Tot) _ND	Be (Tot)	Be (Tot) _Q	Cd (Tot) _ND	Cd (Tot)	Cd (Tot) _Q
3	55	055			50		125			1.9			14	
3	63	063			60		107			2			18.75	
3	63	063			30		133			2.2			16	
3	63	063			25		150			2.6			2.9	
3	63	063			17		128			2.6			0.32	
3	63	063												
3	63	063												
3	63	063												
3	63	063												
5	S25-L4	PRE-S25-L4			184								23	
5	S25-L5	PRE-S25-L5			349								31	
5	S25-M4	PRE-S25-M4			49								17	
5	S25-M5	PRE-S25-M5			58								15	
5	UA01-1	PST2-UA01-1			53								7	
5	UA01-1	PST-UA01-1			77								10	
5	UA01-1	PST-UA01-10			74								12	
5	UA01-2	PST-UA01-2			32							<	5	
5	UA01-2	PST-UA01-20			40							<	5	
5	UA01-3	PST-UA01-3			55								10	
5	UA01-4	PST-UA01-4			54							<	5	
5	UA01-4	PST-UA01-50			46							<	5	
5	UA01-5	PST-UA01-5			51							<	5	
5	UA01-6	PST-UA01-40			53							<	5	
5	UA01-6	PST-UA01-6			45							<	5	
5	UA01-7	PST-UA01-7			25							<	5	
5	UA01-8	PST-UA01-30			66							<	5	
5	UA01-8	PST-UA01-8			58							<	5	

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Cr (Tot)	Cr (Tot) _Q	Co (Tot) _ND	Co (Tot)	Co (Tot) _Q	Cu (Tot)	Cu (Tot) _Q	Fe (Tot)	Fe (Tot) _Q	Pb (Tot) _ND	Pb (Tot)	Pb (Tot) _Q	PbU95
3	55	055	9			12		204		16400			670		
3	63	063	13			9.5		158		15700			742		
3	63	063	14			12		71		19700			479		
3	63	063	17			14		50		22100			113		
3	63	063	16			12		37		20300			18		
3	63	063													
3	63	063													
3	63	063													
3	63	063													
5	S25-L4	PRE-S25-L4											1772		1967
5	S25-L5	PRE-S25-L5											3687		4041
5	S25-M4	PRE-S25-M4											754		876
5	S25-M5	PRE-S25-M5											800		925
5	UA01-1	PST2-UA01-1											298		365
5	UA01-1	PST-UA01-1											571		638
5	UA01-1	PST-UA01-10											505		572
5	UA01-2	PST-UA01-2											153		221
5	UA01-2	PST-UA01-20											129		197
5	UA01-3	PST-UA01-3											335		402
5	UA01-4	PST-UA01-4											102		170
5	UA01-4	PST-UA01-50											106		174
5	UA01-5	PST-UA01-5											241		308
5	UA01-6	PST-UA01-40											200		267
5	UA01-6	PST-UA01-6											193		260
5	UA01-7	PST-UA01-7											215		282
5	UA01-8	PST-UA01-30											264		331
5	UA01-8	PST-UA01-8											239		306

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Mn (Tot)	Mn (Tot) _Q	Hg (Tot) _ND	Hg (Tot)	Hg (Tot) _Q	Hg (CVAA) _ND	Hg (CVAA)	Ni (Tot) _ND	Ni (Tot)	Ni (Tot) _Q	Se (Tot) _ND	Se (Tot)
3	55	055	970			1.11					9			0.07
3	63	063	321			1.9					10			0.7
3	63	063	341			1.6					14			0.43
3	63	063	370			0.4					11			0.07
3	63	063	270			0.06					10			0.07
3	63	063												
3	63	063												
3	63	063												
3	63	063												
5	S25-L4	PRE-S25-L4												
5	S25-L5	PRE-S25-L5												
5	S25-M4	PRE-S25-M4												
5	S25-M5	PRE-S25-M5												
5	UA01-1	PST-UA01-1												
5	UA01-1	PST-UA01-1												
5	UA01-1	PST-UA01-10												
5	UA01-2	PST-UA01-2												
5	UA01-2	PST-UA01-20												
5	UA01-3	PST-UA01-3												
5	UA01-4	PST-UA01-4												
5	UA01-4	PST-UA01-50												
5	UA01-5	PST-UA01-5												
5	UA01-6	PST-UA01-40												
5	UA01-6	PST-UA01-6												
5	UA01-7	PST-UA01-7												
5	UA01-8	PST-UA01-30												
5	UA01-8	PST-UA01-8												

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Se (Tot) _Q	Ag (Tot) _ND	Ag (Tot)	Ag (Tot) _Q	TI (Tot) _ND	TI (Tot)	TI (Tot) _Q	Sn (Tot)	Sn (Tot) _Q	V (Tot)	V (Tot) _Q	Zn (Tot)	Zn (Tot) _Q
3	55	055			4			0.09		1.4		35		1078.91	
3	63	063			2.7			0.55		13.5		41		378.88	
3	63	063			1.25			0.42		0.66		49		287.88	
3	63	063			0.7			0.14		0.66		59		148.88	
3	63	063			0.75			0.09		0.66		58		88.88	
3	63	063													
3	63	063													
3	63	063													
3	63	063													
5	S25-L4	PRE-S25-L4													
5	S25-L5	PRE-S25-L5													
5	S25-M4	PRE-S25-M4													
5	S25-M5	PRE-S25-M5													
5	UA01-1	PST2-UA01-1													
5	UA01-1	PST-UA01-1													
5	UA01-1	PST-UA01-10													
5	UA01-2	PST-UA01-2													
5	UA01-2	PST-UA01-20													
5	UA01-3	PST-UA01-3													
5	UA01-4	PST-UA01-4													
5	UA01-4	PST-UA01-50													
5	UA01-5	PST-UA01-5													
5	UA01-6	PST-UA01-40													
5	UA01-6	PST-UA01-6													
5	UA01-7	PST-UA01-7													
5	UA01-8	PST-UA01-30													
5	UA01-8	PST-UA01-8													

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Au (Tot) _ND	Au (Tot)	Au (Tot) _Q	Te (Tot) _ND	Te (Tot)	Te (Tot) _Q	Clay (%)	Sand (%)	Silt (%)	Very Fine Sand (%)	Moisture (%)	Na	pH (s.u.)
3	55	055							6.2	74.03	19.77				
3	63	063							13.4	59.86	26.74		2.1	195	6.8
3	63	063													
3	63	063													
3	63	063													
3	63	063													
3	63	063													6.5
3	63	063													6.8
3	63	063													6.7
5	S25-L4	PRE-S25-L4													
5	S25-L5	PRE-S25-L5													
5	S25-M4	PRE-S25-M4													
5	S25-M5	PRE-S25-M5													
5	UA01-1	PST2-UA01-1													
5	UA01-1	PST-UA01-1													
5	UA01-1	PST-UA01-10													
5	UA01-2	PST-UA01-2													
5	UA01-2	PST-UA01-20													
5	UA01-3	PST-UA01-3													
5	UA01-4	PST-UA01-4													
5	UA01-4	PST-UA01-50													
5	UA01-5	PST-UA01-5													
5	UA01-6	PST-UA01-40													
5	UA01-6	PST-UA01-6													
5	UA01-7	PST-UA01-7													
5	UA01-8	PST-UA01-30													
5	UA01-8	PST-UA01-8													

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	CO3 (% CaCO3 equiv.)	Organic Matter (%)	Sulfur (%)	CEC (meq/100 grams)	P	NO3	Ba (Ext)	Ba (Ext) _Q	Cd (Ext)	Cd (Ext) _Q	Cr (Ext)	Cr (Ext) _Q	Co (Ext)
3	55	055													
3	63	063	0.37			21									
3	63	063													
3	63	063													
3	63	063													
3	63	063		0.95	0.06		16	40	1.14		14.1		0.01		0.07
3	63	063	0.14	0.88	0.075	23	5.2	20	0.28		7.98		0.01		0.12
3	63	063	0.38	0.84	0.06	29	3	8.8	0.18		1.92		0.01		0.18
3	63	063	0.09	0.48	0.043	20	4.9	2.5	0.32		0.26		0.01		0.22
5	S25-L4	PRE-S25-L4													
5	S25-L5	PRE-S25-L5													
5	S25-M4	PRE-S25-M4													
5	S25-M5	PRE-S25-M5													
5	UA01-1	PST2-UA01-1													
5	UA01-1	PST-UA01-1													
5	UA01-1	PST-UA01-10													
5	UA01-2	PST-UA01-2													
5	UA01-2	PST-UA01-20													
5	UA01-3	PST-UA01-3													
5	UA01-4	PST-UA01-4													
5	UA01-4	PST-UA01-50													
5	UA01-5	PST-UA01-5													
5	UA01-6	PST-UA01-40													
5	UA01-6	PST-UA01-6													
5	UA01-7	PST-UA01-7													
5	UA01-8	PST-UA01-30													
5	UA01-8	PST-UA01-8													

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Co (Ext) _Q	Cu (Ext)	Cu (Ext) _Q	Fe (Ext)	Fe (Ext) _Q	Pb (Ext)	Pb (Ext) _Q	Mn (Ext)	Mn (Ext) _Q	Ag (Ext)	Ag (Ext) _Q	V (Ext)	V (Ext) _Q
3	55	055													
3	63	063													
3	63	063													
3	63	063													
3	63	063													
3	63	063		50.4		37.8		355.85		11.26		0.01		0.28	
3	63	063		17.12		39		221.85		15.16		0.01		0.28	
3	63	063		8.9		71.8		28.05		19.08		0.01		0.28	
3	63	063		6.86		64.2		7.93		14.06		0.01		0.28	
5	S25-L4	PRE-S25-L4													
5	S25-L5	PRE-S25-L5													
5	S25-M4	PRE-S25-M4													
5	S25-M5	PRE-S25-M5													
5	UA01-1	PST2-UA01-1													
5	UA01-1	PST-UA01-1													
5	UA01-1	PST-UA01-10													
5	UA01-2	PST-UA01-2													
5	UA01-2	PST-UA01-20													
5	UA01-3	PST-UA01-3													
5	UA01-4	PST-UA01-4													
5	UA01-4	PST-UA01-50													
5	UA01-5	PST-UA01-5													
5	UA01-6	PST-UA01-40													
5	UA01-6	PST-UA01-6													
5	UA01-7	PST-UA01-7													
5	UA01-8	PST-UA01-30													
5	UA01-8	PST-UA01-8													

## EPA Data Query Results for Dartman Field Property

Source	Site Code	Sample ID	Zn (Ext)	Zn (Ext) _Q	As (Ext)	As (Ext) _Q	QC	SAP/FSAP	QAPP	Validation	Program
3	55	055						Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063						Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063						Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063						Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063						Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063	123.48		66			Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063	77.08		40			Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063	15.98		30			Yes	Yes	Yes	RI (Soils/Veg/Livestock)
3	63	063	1.28		9.9			Yes	Yes	Yes	RI (Soils/Veg/Livestock)
5	S25-L4	PRE-S25-L4						Yes	Yes	Yes	CERCLA Residential
5	S25-L5	PRE-S25-L5						Yes	Yes	Yes	CERCLA Residential
5	S25-M4	PRE-S25-M4						Yes	Yes	Yes	CERCLA Residential
5	S25-M5	PRE-S25-M5						Yes	Yes	Yes	CERCLA Residential
5	UA01-1	PST-UA01-1						Yes	Yes	Yes	CERCLA Residential
5	UA01-1	PST-UA01-1						Yes	Yes	Yes	CERCLA Residential
5	UA01-1	PST-UA01-10					Rep	Yes	Yes	Yes	CERCLA Residential
5	UA01-2	PST-UA01-2						Yes	Yes	Yes	CERCLA Residential
5	UA01-2	PST-UA01-20					Rep	Yes	Yes	Yes	CERCLA Residential
5	UA01-3	PST-UA01-3						Yes	Yes	Yes	CERCLA Residential
5	UA01-4	PST-UA01-4						Yes	Yes	Yes	CERCLA Residential
5	UA01-4	PST-UA01-50					Rep	Yes	Yes	Yes	CERCLA Residential
5	UA01-5	PST-UA01-5						Yes	Yes	Yes	CERCLA Residential
5	UA01-6	PST-UA01-40					Rep	Yes	Yes	Yes	CERCLA Residential
5	UA01-6	PST-UA01-6						Yes	Yes	Yes	CERCLA Residential
5	UA01-7	PST-UA01-7						Yes	Yes	Yes	CERCLA Residential
5	UA01-8	PST-UA01-30					Rep	Yes	Yes	Yes	CERCLA Residential
5	UA01-8	PST-UA01-8						Yes	Yes	Yes	CERCLA Residential

# ASARCO EAST HELENA

## Residential Soils

### Pre and Post Removal Report

**Site Code - UA01**

*2510 Valley Dr*

*Remediated - Yes*

<i>SECTOR</i>	<i>SAMPLE DEPTH</i>	<i>SAMPLE DATE</i>	<i>SAMPLE NUMBER</i>	<i>LAB NUMBER</i>	<i>Lead (mg/kg)</i>	<i>Arsenic (mg/kg)</i>	<i>Cadmium (mg/kg)</i>	<i>Lead U95 (mg/kg)</i>
<b>Pre-Removal Samples</b>								
01	0-1	4/8/1998	PRE-UA01-1	98X-00849	500	56	11	567
02	0-1	4/8/1998	PRE-UA01-2	98X-00850	876	67	24	943
03	0-1	4/8/1998	PRE-UA01-3	98X-00851	1684	95	38	1756
04	0-1	4/8/1998	PRE-UA01-4	98X-00852	1720	82	34	1792
05	0-1	4/8/1998	PRE-UA01-5	98X-00853	582	50	11	649
05 R	0-1	4/8/1998	PRE-UA01-20	98X-00857	590	61	12	657
06	0-1	4/8/1998	PRE-UA01-6	98X-00854	790	55	19	857
07	0-1	4/8/1998	PRE-UA01-7	98X-00855	874	54	26	941
08	0-1	4/8/1998	PRE-UA01-8	98X-00856	1085	48	20	1153
<b>Post-Removal Samples</b>								
01	*12-13	7/6/1998	PST2-UA01-1	98X-01460	298	53	7	365
01	*9-10	7/6/1998	PST-UA01-1	98X-01456	571	77	10	638
01 R	*9-10	7/6/1998	PST-UA01-10	98X-01457	505	74	12	572
02	*13-14	7/8/1998	PST-UA01-2	98X-01471	153	32	<5	221

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**Site Code - UA01****2510 Valley Dr****Remediated - Yes**

<b>SECTOR</b>	<b>SAMPLE DEPTH</b>	<b>SAMPLE DATE</b>	<b>SAMPLE NUMBER</b>	<b>LAB NUMBER</b>	<b>Lead (mg/kg)</b>	<b>Arsenic (mg/kg)</b>	<b>Cadmium (mg/kg)</b>	<b>Lead U95 (mg/kg)</b>
02 R	*13-14	7/8/1998	PST-UA01-20	98X-01472	129	40	<5	197
03	*14-15	7/16/1998	PST-UA01-3	98X-01495	335	55	10	402
04	*13-14	7/16/1998	PST-UA01-4	98X-01497	102	54	<5	170
04 R	*13-14	7/16/1998	PST-UA01-50	98X-01496	106	46	<5	174
05	*13-14	7/30/1998	PST-UA01-5	98X-01473	241	51	<5	308
06	*13-14	7/10/1998	PST-UA01-6	98X-01474	193	45	<5	260
06 R	*13-14	7/10/1998	PST-UA01-40	98X-01475	200	53	<5	267
07	*13-14	7/6/1998	PST-UA01-7	98X-01461	215	25	<5	282
08	*14-15	7/9/1998	PST-UA01-8	98X-01469	239	58	<5	306
08 R	*14-15	7/9/1998	PST-UA01-30	98X-01470	264	66	<5	331



**2002 EAST HELENA SOIL REMEDIATION SITES**

<b>Site Code</b>	<b>Street Address</b>	<b>Started</b>	<b>Finished</b>
<i>Residential</i>			
GC01	301 Clinton	06/04/02	06/22/02
TE11	2625 Valley	06/17/02	06/29/02
CH07	314 Clinton	06/24/02	07/20/02
S4GV17	3366 Grandview	07/15/02	07/27/02
S4LAN19	3250 Lanning	07/22/02	08/10/02
HB05	606 Groschell	08/05/02	08/17/02
TA09.1	2699 Cobre	08/19/02	09/07/02
LC03	702 Clark	08/29/02	09/14/02
S4FIS01	2850 Fisher	09/16/02	09/28/02
<i>Residential Flood Channels</i>			
S4GV17-FP1	3366 Grandview	07/15/02	07/27/02
S4LAN19-FP1	N side of CC block, Lewis St.	07/22/02	08/10/02
<i>Flood Ditches</i>			
S4FD1- (1-12)	Old Dartman property	10/15/02	11/23/02
S4FD2- (1-35)	Old Dartman property	10/15/02	11/23/02
S4FD3- (1-31)	Old Dartman property	10/15/02	11/23/02

## 2002 EAST HELENA XRF SOILS ANALYSES

SECTOR	SAMPLE NUMBER (1)	LAB NUMBER	SAMPLE DATE	SAMPLE TIME	SAMPLE		ANALYSIS DATE	Pb (ppm)	As (ppm)	Cd (ppm)	U95 Pb VALUE (4) (ppm)	COMMENTS	Pb FIELD REPLICATE (RPD) (5)
					DEPTH	TYPE							
					in. (2)	(3)							
SITE CODE: S4FD1													
PST SOIL CONCENTRATIONS													
01	PST-S4FD1-01	02R-01444	10/21/20	1340	8-9	PST	10/28/20	678	93	9	751		
02	PST-S4FD1-02	02R-01445	10/21/20	1350	8-9	PST	10/28/20	594	99	15	667		
03	PST-S4FD1-03	02R-01446	10/21/20	1400	10-11	PST	10/28/20	256	64	< 5	329		12.9%
03	PST-S4FD1-03D	02R-01447	10/21/20	1405	10-11	PST	10/28/20	225	62	7	298		
04	PST-S4FD1-04	02R-01448	10/21/20	1410	10-11	PST	10/28/20	125	60	7	198		
05	PST-S4FD1-05	02R-01449	10/21/20	1420	9-10	PST	10/28/20	54	41	< 5	127		
06	PST-S4FD1-06	02R-01450	10/21/20	1430	9-10	PST	10/28/20	46	41	< 5	119		
07	PST-S4FD1-07	02R-01451	10/21/20	1440	8-9	PST	10/28/20	65	44	< 5	138		
08	PST-S4FD1-08	02R-01452	10/21/20	1450	8-9	PST	10/28/20	41	49	< 5	114		
09	PST-S4FD1-09	02R-01453	10/21/20	1500	9-10	PST	10/28/20	46	43	< 5	119		
10	PST-S4FD1-10	02R-01454	10/21/20	1510	9-10	PST	10/28/20	52	41	< 5	125		
11	PST-S4FD1-11	02R-01455	10/21/20	1520	10-11	PST	10/28/20	93	43	< 5	166		
12	PST-S4FD1-12	02R-01456	10/21/20	1530	11-12	PST	10/28/20	76	43	< 5	149		

Notes: (1) P = Pit Sample; GS = Garden Sample; R = Replicate; GA = Garage Sample; TR = Tree Roots.

(2) Depth at which samples were taken. For PST samples the excavation depth was used; \* = Final Excavation Depth.

(3) PRE = Pre Removal Sample; PST = Post Removal Sample; DH = Direct Haul Sample; CM = Continuous Monitoring Sample; NON = Nondisturbed sampling area; DIS=urbed sampling area; (4) Upper 95% Confidence Value for lead

(5) Relative Percent Difference; E.P.A. Quality Control Standard - less than 28%.

2002 EAST HELENA XRF SOILS ANALYSES

SECTOR	SAMPLE NUMBER (1)	LAB NUMBER	SAMPLE DATE	SAMPLE TIME	SAMPLE DEPTH in. (2)	SAMPLE TYPE (3)	ANALYSIS DATE	Pb (ppm)	As (ppm)	Cd (ppm)	U95 Pb	Pb FIELD	
											VALUE (4) (ppm)	REPLICATE (RPD) (5)	
SITE CODE: S4FD2													
PST SOIL CONCENTRATIONS													
2	PST-S4FD2-2	02R-01457	10/21/20	1540	12-13	PST	10/28/20	141	38	< 5	214		
3	PST-S4FD2-3	02R-01458	10/21/20	1550	12-13	PST	10/28/20	78	53	< 5	151		
4	PST-S4FD2-4	02R-01459	10/21/20	1600	11-12	PST	10/28/20	57	41	< 5	130		
5	PST-S4FD2-5	02R-01460	10/21/20	1610	12-13	PST	10/28/20	127	50	< 5	200		
6	PST-S4FD2-6	02R-01461	10/21/20	1620	11-12	PST	10/28/20	49	53	< 5	122	2.0%	
6	PST-S4FD2-6D	02R-01462	10/21/20	1625	11-12	PST	10/28/20	50	39	10	123		

Notes: (1) P = Pit Sample; GS = Garden Sample; R = Replicate; GA = Garage Sample; TR = Tree Roots.

(2) Depth at which samples were taken. For PST samples the excavation depth was used; \* = Final Excavation Depth.

(3) PRE = Pre Removal Sample; PST = Post Removal Sample; DH = Direct Haul Sample; CM = Continuous Monitoring Sample; NON = Nondisturbed sampling area; DIS =  
urbed sampling area; (4) Upper 95% Confidence Value for lead

(5) Relative Percent Difference; E.P.A. Quality Control Standard - less than 28%.

## 2002 EAST HELENA XRF SOILS ANALYSES

SECTOR	SAMPLE NUMBER (1)	LAB NUMBER	SAMPLE DATE	SAMPLE TIME	SAMPLE DEPTH in. (2)	SAMPLE TYPE (3)	SAMPLE ANALYSIS DATE	Pb (ppm)	As (ppm)	Cd (ppm)	U95 Pb VALUE (4) (ppm)	COMMENTS	Pb FIELD REPLICATE (RPD) (5)
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SITE CODE: S4FD2

## PST SOIL CONCENTRATIONS

01	PST-S4FD2-01	02R-01583	11/13/20	1300	9-10	PST	11/15/20	52	37	< 5	125		
02	PST-S4FD2-02	02R-01457	10/21/20	1540	12-13	PST	10/28/20	141	38	< 5	214		
03	PST-S4FD2-03	02R-01458	10/21/20	1550	12-13	PST	10/28/20	78	53	< 5	151		
04	PST-S4FD2-04	02R-01459	10/21/20	1600	11-12	PST	10/28/20	57	41	< 5	130		
05	PST-S4FD2-05	02R-01460	10/21/20	1610	12-13	PST	10/28/20	127	50	< 5	200		
06	PST-S4FD2-06	02R-01461	10/21/20	1620	11-12	PST	10/28/20	49	53	< 5	122		
06	PST-S4FD2-06D	02R-01462	10/21/20	1625	11-12	PST	10/28/20	50	39	10	123		
07	PST-S4FD2-07	02R-01566	11/01/20	1300	12-13	PST	11/13/20	46	41	5	119		
08	PST-S4FD2-08	02R-01567	11/01/20	1310	13-14	PST	11/13/20	51	33	< 5	124		
09	PST-S4FD2-09	02R-01568	11/01/20	1320	13-14	PST	11/13/20	82	46	< 5	155		
10	PST-S4FD2-10	02R-01569	11/01/20	1330	12-13	PST	11/13/20	45	53	< 5	118		
11	PST-S4FD2-11	02R-01570	11/01/20	1340	13-14	PST	11/13/20	41	41	< 5	114		
12	PST-S4FD2-12	02R-01571	11/01/20	1350	11-12	PST	11/13/20	61	35	< 5	134		
13	PST-S4FD2-13	02R-01572	11/01/20	1400	12-13	PST	11/14/20	29	37	< 5	102		
14	PST-S4FD2-14	02R-01573	11/01/20	1410	12-13	PST	11/14/20	61	45	< 5	134		
15	PST-S4FD2-15	02R-01574	11/01/20	1420	13-14	PST	11/14/20	61	42	< 5	134		
16	PST-S4FD2-16	02R-01575	11/01/20	1430	12-13	PST	11/14/20	49	46	< 5	122		
17	PST-S4FD2-17	02R-01576	11/01/20	1440	13-14	PST	11/14/20	43	42	< 5	116		
18	PST-S4FD2-18	02R-01577	11/01/20	1450	12-13	PST	11/14/20	56	41	< 5	129		

Notes: (1) P = Pit Sample; GS = Garden Sample; R = Replicate; GA = Garage Sample; TR = Tree Roots.

(2) Depth at which samples were taken. For PST samples the excavation depth was used; \* = Final Excavation Depth.

(3) PRE = Pre Removal Sample; PST = Post Removal Sample; DH = Direct Haul Sample; CM = Continuous Monitoring Sample; NON = Nondisturbed sampling area; DIS=urbed sampling area; (4) Upper 95% Confidence Value for lead

(5) Relative Percent Difference; E.P.A. Quality Control Standard - less than 28%.

## 2002 EAST HELENA XRF SOILS ANALYSES

SECTOR	SAMPLE NUMBER (1)	LAB NUMBER	SAMPLE DATE	SAMPLE TIME	SAMPLE	SAMPLE	ANALYSIS DATE	Pb (ppm)	As (ppm)	Cd (ppm)	U95 Pb	COMMENTS	Pb FIELD
					DEPTH	TYPE					VALUE (4)		REPLICATE
					in. (2)	(3)					(ppm)		(RPD) (5)
SITE CODE: S4FD2													
PST SOIL CONCENTRATIONS													
19	PST-S4FD2-19	02R-01578	11/01/20	1500	13-14	PST	11/14/20	39	44	< 5	112		
20	PST-S4FD2-20	02R-01579	11/01/20	1510	12-13	PST	11/14/20	39	34	< 5	112		
21	PST-S4FD2-21	02R-01580	11/01/20	1520	11-12	PST	11/14/20	28	40	< 5	101		
22	PST-S4FD2-22	02R-01581	11/01/20	1530	11-12	PST	11/14/20	37	36	< 5	110		
23	PST-S4FD2-23	02R-01582	11/01/20	1540	11-12	PST	11/14/20	50	31	< 5	123		
24	PST-S4FD2-24	02R-01584	11/13/20	1310	10-11	PST	11/15/20	47	35	< 5	120		+/-1
24	PST-S4FD2-24D	02R-01585	11/13/20	1320	10-11	PST	11/15/20	30	46	< 5	103		
25	PST-S4FD2-25	02R-01586	11/13/20	1330	9-10	PST	11/15/20	54	42	< 5	127		
26	PST-S4FD2-26	02R-01587	11/13/20	1340	8-9	PST	11/15/20	39	38	< 5	112		
27	PST-S4FD2-27	02R-01588	11/13/20	1350	8-9	PST	11/15/20	33	38	7	106		
28	PST-S4FD2-28	02R-01589	11/13/20	1400	9-10	PST	11/15/20	39	35	< 5	112		
29	PST-S4FD2-29	02R-01590	11/13/20	1410	8-9	PST	11/15/20	34	36	< 5	107		
30	PST-S4FD2-30	02R-01591	11/13/20	1420	10-11	PST	11/15/20	42	50	< 5	115		
31	PST-S4FD2-31	02R-01592	11/13/20	1430	9-10	PST	11/15/20	43	36	< 5	116		+/-1
31	PST-S4FD2-31D	02R-01593	11/13/20	1440	9-10	PST	11/15/20	31	47	< 5	104		
32	PST-S4FD2-32	02R-01594	11/13/20	1450	9-10	PST	11/15/20	60	< 16	< 5	133		
33	PST-S4FD2-33	02R-01595	11/13/20	1500	10-11	PST	11/15/20	44	38	< 5	117		
34	PST-S4FD2-34	02R-01596	11/13/20	1510	11-12	PST	11/15/20	99	44	< 5	172		
35	PST-S4FD2-35	02R-01597	11/13/20	1520	9-10	PST	11/15/20	38	39	< 5	111		

Notes: (1) P = Pit Sample; GS = Garden Sample; R = Replicate; GA = Garage Sample; TR = Tree Roots.

(2) Depth at which samples were taken. For PST samples the excavation depth was used; \* = Final Excavation Depth.

(3) PRE = Pre Removal Sample; PST = Post Removal Sample; DH = Direct Haul Sample; CM = Continuous Monitoring Sample; NON = Nondisturbed sampling area; DIS = Disturbed sampling area; (4) Upper 95% Confidence Value for lead

## 2002 EAST HELENA XRF SOILS ANALYSES

SECTOR	SAMPLE NUMBER (1)	LAB NUMBER	SAMPLE DATE	SAMPLE TIME	SAMPLE		ANALYSIS DATE	Pb (ppm)	As (ppm)	Cd (ppm)	U95 Pb VALUE (4) (ppm)	COMMENTS	Pb FIELD REPLICATE (RPD) (5)
					DEPTH	TYPE							
					in. (2)	(3)							
SITE CODE: S4FD3													
PST SOIL CONCENTRATIONS													
1	PST-S4FD3-1	02R-01463	10/21/20	1630	14-15	PST	10/28/20	61	65	< 5	134		
2	PST-S4FD3-2	02R-01464	10/21/20	1640	12-13	PST	10/28/20	86	64	< 5	159		
3	PST-S4FD3-3	02R-01465	10/21/20	1650	14-15	PST	10/28/20	181	85	8	254		
4	PST-S4FD3-4	02R-01466	10/21/20	1700	14-15	PST	10/28/20	183	58	< 5	256		
5	PST-S4FD3-5	02R-01467	10/21/20	1710	13-14	PST	10/28/20	119	53	5	192		

Notes: (1) P = Pit Sample; GS = Garden Sample; R = Replicate; GA = Garage Sample; TR = Tree Roots.

(2) Depth at which samples were taken. For PST samples the excavation depth was used; \* = Final Excavation Depth.

(3) PRE = Pre Removal Sample; PST = Post Removal Sample; DH = Direct Haul Sample; CM = Continuous Monitoring Sample; NON = Nondisturbed sampling area; DIS = urbed sampling area; (4) Upper 95% Confidence Value for lead

(5) Relative Percent Difference; E.P.A. Quality Control Standard - less than 28%.

## 2002 EAST HELENA XRF SOILS ANALYSES

SECTOR	SAMPLE	LAB	SAMPLE	SAMPLE	SAMPLE	SAMPLE	ANALYSIS	Pb	As	Cd	U95 Pb	Pb FIELD
	NUMBER (1)	NUMBER	DATE	TIME	DEPTH	TYPE	DATE	(ppm)	(ppm)	(ppm)	VALUE (4)	REPLICATE
					in. (2)	(3)					(ppm)	(RPD) (5)
SITE CODE: S4FD3												
PST SOIL CONCENTRATIONS												
01	PST-S4FD3-01	02R-01463	10/21/20	1630	14-15	PST	10/28/20	61	65	< 5	134	
02	PST-S4FD3-02	02R-01464	10/21/20	1640	12-13	PST	10/28/20	86	64	< 5	159	
03	PST-S4FD3-03	02R-01465	10/21/20	1650	14-15	PST	10/28/20	181	85	8	254	
04	PST-S4FD3-04	02R-01466	10/21/20	1700	14-15	PST	10/28/20	183	58	< 5	256	
05	PST-S4FD3-05	02R-01467	10/21/20	1710	13-14	PST	10/28/20	119	53	5	192	
06	PST-S4FD3-06	02R-01540	11/01/20	1200	13-14	PST	11/13/20	63	41	< 5	136	
07	PST-S4FD3-07	02R-01541	11/01/20	1210	14-15	PST	11/13/20	80	39	10	153	
08	PST-S4FD3-08	02R-01542	11/01/20	1220	14-15	PST	11/13/20	80	47	8	153	
09	PST-S4FD3-09	02R-01543	11/01/20	1230	12-13	PST	11/13/20	82	45	< 5	155	
10	PST-S4FD3-10	02R-01544	11/01/20	1240	13-14	PST	11/13/20	114	45	5	187	
11	PST-S4FD3-11	02R-01545	11/01/20	1250	13-14	PST	11/13/20	62	52	< 5	135	
12	PST-S4FD3-12	02R-01546	11/01/20	1300	14-15	PST	11/13/20	54	43	< 5	127	
13	PST-S4FD3-13	02R-01547	11/01/20	1310	14-15	PST	11/13/20	58	56	6	131	
14	PST-S4FD3-14	02R-01548	11/01/20	1320	14-15	PST	11/13/20	45	44	< 5	118	
15	PST-S4FD3-15	02R-01549	11/01/20	1340	12-13	PST	11/13/20	64	43	< 5	137	
16	PST-S4FD3-16	02R-01550	11/01/20	1550	12-13	PST	11/13/20	42	42	< 5	115	
17	PST-S4FD3-17	02R-01551	11/01/20	1400	13-14	PST	11/13/20	62	44	< 5	135	
18	PST-S4FD3-18	02R-01552	11/01/20	1410	14-15	PST	11/13/20	62	48	< 5	135	
19	PST-S4FD3-19	02R-01553	11/01/20	1420	12-13	PST	11/13/20	106	47	5	179	

Notes: (1) P = Pit Sample; GS = Garden Sample; R = Replicate; GA = Garage Sample; TR = Tree Roots.

(2) Depth at which samples were taken. For PST samples the excavation depth was used; \* = Final Excavation Depth.

(3) PRE = Pre Removal Sample; PST = Post Removal Sample; DH = Direct Haul Sample; CM = Continuous Monitoring Sample; NON = Nondisturbed sampling area; DIS =  
urbed sampling area; (4) Upper 95% Confidence Value for lead

(5) Relative Percent Difference; E.P.A. Quality Control Standard - less than 28%.

## 2002 EAST HELENA XRF SOILS ANALYSES

SECTOR	SAMPLE	LAB	SAMPLE	SAMPLE	SAMPLE	SAMPLE	ANALYSIS	Pb	As	Cd	U95 Pb	Pb FIELD
	NUMBER (1)	NUMBER	DATE	TIME	DEPTH	TYPE	DATE	(ppm)	(ppm)	(ppm)	VALUE (4)	REPLICATE
					in. (2)	(3)					(ppm)	(RPD) (5)
SITE CODE: S4FD3												
PST SOIL CONCENTRATIONS												
20	PST-S4FD3-20	02R-01554	11/01/20	1430	12-13	PST	11/13/20	58	43	9	131	
21	PST-S4FD3-21	02R-01555	11/01/20	1440	13-14	PST	11/13/20	123	74	< 5	196	
22	PST-S4FD3-22	02R-01556	11/01/20	1450	13-14	PST	11/13/20	151	58	< 5	224	
23	PST-S4FD3-23	02R-01557	11/01/20	1500	12-13	PST	11/13/20	55	46	< 5	128	
24	PST-S4FD3-24	02R-01558	11/01/20	1510	13-14	PST	11/13/20	109	62	< 5	182	
25	PST-S4FD3-25	02R-01559	11/01/20	1520	13-14	PST	11/13/20	63	52	12	136	
26	PST-S4FD3-26	02R-01560	11/01/20	1530	13-14	PST	11/13/20	50	51	< 5	123	
27	PST-S4FD3-27	02R-01561	11/01/20	1540	12-13	PST	11/13/20	68	57	14	141	
28	PST-S4FD3-28	02R-01562	11/01/20	1550	12-13	PST	11/13/20	67	48	6	140	
29	PST-S4FD3-29	02R-01563	11/01/20	1600	11-12	PST	11/13/20	67	45	< 5	140	
30	PST-S4FD3-30	02R-01564	11/01/20	1610	11-12	PST	11/13/20	52	46	8	125	
31	PST-S4FD3-31	02R-01565	11/01/20	1620	11-12	PST	11/13/20	70	58	9	143	

Notes: (1) P = Pit Sample; GS = Garden Sample; R = Replicate; GA = Garage Sample; TR = Tree Roots.

(2) Depth at which samples were taken. For PST samples the excavation depth was used; \* = Final Excavation Depth.

(3) PRE = Pre Removal Sample; PST = Post Removal Sample; DH = Direct Haul Sample; CM = Continuous Monitoring Sample; NON = Nondisturbed sampling area; DIS =  
urbed sampling area; (4) Upper 95% Confidence Value for lead

**ATTACHMENT D**

**REAL ESTATE PURCHASE AGREEMENT  
BETWEEN EHPS AND METG**

## REAL ESTATE PURCHASE AND SALE AGREEMENT

### Statutory Notice:

**Pursuant to Section 76-3-303, Montana Code Annotated, Seller provides the following statutory notice: “The real property that is the subject of this contract has not been finally platted, and until a final plat identifying the property has been filed with the county clerk and recorder, title to the property cannot be transferred in any manner.”**

This REAL ESTATE PURCHASE AND SALE AGREEMENT (“Agreement”), dated as of April, 11, 2016 (the “Effective Date”) by and between the Montana Environmental Trust Group, LLC, not individually but solely in its representative capacity as Trustee of the Montana Environmental Custodial Trust (“Seller”) and East Helena Public Schools, School District No. 9, a Montana school district (“Buyer”) (collectively, the “Parties”).

### RECITALS

A. Seller is the owner of certain real property located in the City of East Helena, Lewis & Clark County, Montana (the “East Helena Property”). Seller’s property is part of the EPA-designated East Helena Superfund Site pursuant to the Comprehensive Environmental Response, Compensation & Liability Act (“CERCLA”) and is subject to EPA-approved Corrective Action under the Resource Conservation and Recovery Act (“RCRA”).

B. Seller is the named Trustee for the Montana Environmental Custodial Trust as set forth in that certain Consent Decree and Settlement Agreement Regarding the Montana Sites (the “Consent Decree”) entered June 9, 2009, in Case No. 05-21207, United States Bankruptcy Court for the Southern District of Texas Corpus Christi Division with such duties, obligations, limitations and other responsibilities as described in the Consent Decree.

C. Pursuant to certain Environmental Custodial Trust Agreement dated December 9, 2009 (“Trust Agreement”) between ASARCO, LLC, ASARCO Master, Inc., Seller, the United States, and the State of Montana was made a part of the Consent Decree. Pursuant to the provisions of the Consent Decree and the Trust Agreement, Seller is responsible for ensuring that certain actions (“Environmental Actions”) are undertaken, as more specifically defined in the Trust Agreement. The term “Environmental Actions” is intended to have the meaning set forth in Section I.2 of the Consent Decree. This definition is reproduced in Section 1.d of Exhibit B to this Agreement.

D. Seller’s actions and responsibilities are performed for the benefit of the United States and the State of Montana, which are identified as beneficiaries under the Trust Agreement (collectively, “Beneficiaries”).

E. Buyer and Seller have agreed to certain terms and conditions under which Buyer has agreed to purchase and Seller has agreed to sell a portion of Seller's East Helena property, as more fully described hereafter. In connection with the purchase and sale, the parties have agreed to certain additional terms, conditions, covenants and other agreements (collectively, the "Transaction") that they desire to memorialize in this Agreement.

F. Buyer has agreed that after Closing it will assume responsibility to comply with the terms, conditions and standards set forth in the East Helena Superfund Site, Operable Unit No. 2, Residential Soils and Undeveloped Lands, Final Record of Decision, dated September 17, 2009 (the "OU-2 ROD") as they apply to the Property. Seller will provide a copy of the OU-2 ROD to Buyer at or prior to Closing.

The Buyer and Seller agree as follows:

## **ARTICLE 1. TRANSACTION**

1.1 Purchase and Sale of Property. Seller agrees to sell and the Buyer agrees to buy, on the terms and conditions set forth in this Agreement, all of the Seller's right, title and interest in the real property located in Lewis & Clark County, Montana, described as follows (the "Property");

A parcel of property, as generally depicted on **Exhibit A**, to be further defined, consisting of approximately 50 acres, more or less, located in the S2NE, Section 25, Township 10N, Range 3 West in East Helena, Montana, together with all fixtures and appurtenances upon and pertaining to such parcel, except as may be otherwise provided herein.

The precise boundaries of the Property shall be agreed upon by the Parties and the Beneficiaries prior to Closing pursuant to a survey and corresponding legal description to be prepared by the Buyer. The Property does not include, and Seller expressly reserves, any and all sand, gravel, oil, gas, coal, and hardrock minerals and mineral rights, water rights, ditch rights or ditch easements of any nature whatsoever.

1.2 Purchase Price. Buyer agrees to pay Seller an aggregate cash amount of Ninety Thousand and zero cents (\$90,000.00) (the "Purchase Price") as consideration for the purchase of the Property. The Purchase Price shall be paid as follows:

- a. Upon execution of this Agreement, ten percent (10%) of the Purchase Price or the sum of \$9,000.00 as an initial deposit (the "Deposit") toward the Purchase Price.
- b. The remaining balance of \$81,000 in cash at Closing.

In the event that the Transaction is not consummated due to a default or breach of the Buyer, the Deposit shall be retained by the Seller.

1.3 Allocation of Purchase Price. The parties agree that the form of the Transaction, and the consideration provided for in this Agreement were arrived at on the basis of an arms-length negotiation between the parties and, to the extent permitted by applicable law, that they will report the federal, state, local and other tax consequences of the Transaction in a manner consistent with such allocation and that they will not take any position inconsistent therewith in connection with any tax return, refund claim, litigation or otherwise.

1.4 Deed. At Closing, Seller will execute and deliver to Buyer a quitclaim deed, conveying to Buyer all of Seller's right, title and interest in and to the Property without warranties of title or any other warranties, and subject to the post-closing covenants set forth in this Agreement.

1.5 Subdivision. Buyer shall undertake all actions necessary to obtain approval from the City of East Helena, Lewis & Clark County and the State of Montana pursuant to the Montana Subdivision and Platting Act and the Montana Sanitation in Subdivisions Act to create a legally defined parcel of property that can be conveyed. The parties agree to cooperate to establish the boundaries by using relocation of existing boundary lines to the extent possible. Buyer will pay all necessary costs associated with the subdivision approval process. Buyer also assumes responsibility for any improvements or other conditions required by any Governmental Authority (defined below) involved in approval of the boundaries of the Property. Buyer shall not accept any conditions to establishment of boundaries of the Property or the East Helena Property without Seller's prior consent.

1.6 Closing. On the terms and subject to the conditions of this Agreement, the closing of the Transaction (the "Closing") shall take place on or before a date (the "Closing Date") that is thirty (30) days following the receipt of approval of the parcel that comprises the Property. The Closing shall occur pursuant to the procedures set forth in Article 7 of this Agreement.

## **ARTICLE 2.**

### **BUYER'S REPRESENTATIONS AND WARRANTIES**

Buyer represents and warrants as follows:

2.1 Organization. Buyer is school district organized under the laws of the State of Montana. Buyer has all requisite power and authority, to enter into and to perform its obligations under this Agreement, and to carry out the terms hereof and thereof and the transactions contemplated hereby and thereby.

2.2 Authorization. The execution, delivery and performance by the Buyer of this Agreement have been duly authorized by all necessary action on the part of the Buyer and do not

require any approval, consent or authorization of any other person, except approvals or consents that have previously been obtained and that are in full force and effect.

2.3 Binding Agreement. This Agreement constitutes the legal, valid and binding obligation of the Buyer, enforceable against the Buyer in accordance with its terms, except as the enforceability thereof may be limited by (i) bankruptcy, insolvency, reorganization or other similar laws affecting the enforcement of creditors' rights generally and (ii) general equitable principles (whether considered in a proceeding in equity or at law) and is admissible in evidence without the need of any filing, registration, notarization or other action.

2.4 Litigation. There are no actions, suits, proceedings or, to the Buyer's knowledge, claims or investigations at law or in equity (if applicable) pending or threatened before any federal, state or local governmental authority, arbitral tribunal or other body ("Governmental Authority") that could reasonably be expected to succeed on the merits and that (a) could adversely affect the performance by the Buyer of its obligations hereunder, (b) could modify or otherwise adversely affect the governmental approvals referred to in this Agreement, (c) could have a material adverse effect on the condition (financial or otherwise), business or operations of the Buyer, or (d) questions the validity, binding effect or enforceability hereof, or any action taken or to be taken pursuant hereto or thereto or any of the transactions contemplated hereby or thereby.

2.5 Compliance with Other Instruments. The execution, delivery and performance by Buyer of this Agreement and the consummation of the Transaction will not result in any violation of, breach of or default under any term of any contract or agreement to which Buyer is a party or by which it or its property is bound, or of any license, permit, franchise, judgment, writ, injunction, decree, order, charter, law, ordinance, rule or regulation applicable to it.

2.6 Brokers. Buyer has not discussed this transaction with any real estate broker or agent so as to create any legal right in any such broker to claim a commission or fee with respect to this Transaction. Buyer hereby indemnifies Seller against and agrees to defend and hold Seller harmless from any and all claims for real estate commissions and fees arising out of or in any way connected with any claimed agency relationship with the indemnitor and relating to this Transaction.

2.7 Title and Title Insurance. Buyer acknowledges and agrees that Seller is providing no warranties of title. Buyer accepts all responsibility to obtain a title report for the Property and to procure any title insurance that Buyer deems appropriate.

2.8 Utilities. Buyer acknowledges and agrees that Seller has no obligation to provide utilities, equipment, or any other services whatsoever to or for the benefit of the Property, including, without limitation, heat, water, electricity and snow or ice removal for Buyer's access to, or use of the Property or otherwise. In the event Buyer requires utilities, equipment or services, the installation, maintenance and cost thereof shall be Buyer's sole obligation and at Buyer's sole cost.

2.9 Environmental. Buyer acknowledges that the Property is part of a federal Superfund site and RCRA Corrective Action facility and may be subject to various response actions or remedial actions pursuant to orders or plans issued by the United States Environmental Protection Agency (“USEPA”), the State of Montana Department of Environmental Quality (“MDEQ”) or the Montana Department of Justice (“MDOJ”) pursuant to the CERCLA, 42 U.S.C. § 9601, RCRA, 42 U.S.C. § 6901, and other applicable federal or state laws (“Laws”). Buyer further acknowledges that actions taken under the Consent Decree, the Trust Agreement, or as a result of the historic use of the property may cause interference with Buyer’s intended use of the Property, and that such interference cannot be predicted with certainty as of the Effective Date of this Agreement.

2.10 Condition of the Property. Buyer acknowledges and agrees that Buyer has examined and inspected the Property, is fully familiar with it, is entering into this Agreement solely on the basis of that examination and inspection and Buyer’s independent investigation and judgment, and accepts the Property AS IS, WHERE IS, WITH ALL FAULTS and in its present condition. Buyer specifically acknowledges that it has reviewed and considered the provisions of the OU-2 ROD before making its decision to purchase the Property. Buyer further acknowledges and confirms that no representations of any kind have been made by Seller or any representative of Seller with respect to the condition of the Property or the suitability of the Property for any purpose for which the Buyer may desire to use it, except those expressly set forth in this agreement; and that Seller has not made, and expressly disclaims, any warranties, express or implied, as to the physical condition of the Property or the suitability of the Property for any purpose for which the Buyer may desire to use it. Buyer hereby waives any claim of breach of warranty against Seller as to any condition whatsoever with respect to the Property.

2.11 Use of the Property. After Closing, Buyer intends to use the Property for the conduct of school or related activities. In the event that the Buyer does not use the Property for such activities, Seller may repossess the Property as provided in Montana Code Annotated § 20-6-605. For purposes of this paragraph, the term “related activities” include any service, program or curricula delivered by Buyer’s staff, completed by Buyer’s students or approved by Buyer’s board of trustees. Buyer’s continued ownership of the property constitutes a school activity under this section. This section does not require Buyer to engage in remediation activities by a specific date. This Section will expire five years after Closing.

2.12 Disclosures. Buyer acknowledges the disclosures of Seller contained on **Exhibit B**.

### **ARTICLE 3. SELLER’S REPRESENTATIONS AND WARRANTIES**

3.1 Power and Authorization. Seller has all legal authority, power, right, and authority to enter into this Agreement and the instruments necessary for the Closing of the Transaction subject to and consistent with the Consent Decree and the Trust Agreement.

3.2 Litigation. To the best of Seller's knowledge, there are no pending or threatened claims, actions, suits, or litigation involving the Property, which might impede the Closing of the Transaction.

3.3 Brokers. Seller has not discussed this transaction with any real estate broker or agent so as to create any legal right in any such broker to claim a commission or fee with respect to this Transaction. Seller hereby indemnifies Buyer against and agrees to defend and hold Buyer harmless from any and all claims for real estate commissions and fees arising out of or in any way connected with any claimed agency relationship with the indemnitor and relating to this Transaction.

3.4 Taxes. All real property and personal property taxes assessed against the Subject Properties have been paid, except for real property and personal property taxes which are not yet due.

#### **ARTICLE 4. PRE-CLOSING COVENANTS**

4.1 Implementing Agreement. Each party agrees to take all action required of it to prepare Closing documents and otherwise fulfill its obligations under the terms of this Agreement, and to facilitate the consummation of the Transaction. Each party hereto agrees that it shall not, directly or indirectly, take any action (or refrain from taking any action) that would have the effect of preventing or disabling such party's performance of its obligations under this Agreement. The parties further understand that time is of the essence in connection with the Transaction and they will take such steps as necessary to ensure consummation of the Transaction on or before the Closing Date.

4.2 Consents and Approvals. Each party shall obtain all consents, approvals, certificates and other documents required in connection with the performance by it of this Agreement and the consummation of the Transaction.

4.3 Remediation Obligation. At Closing, Buyer agrees that it will assume sole and complete responsibility for remediating the Property to the cleanup standards for residential use of undeveloped lands as set forth in the OU-2 ROD and consistent with the conceptual plan outline attached as Exhibit C.

#### **ARTICLE 5. CONDITIONS PRECEDENT TO BUYER'S PURCHASE OBLIGATIONS**

Buyer's obligation to close the Transaction is conditioned upon the satisfaction or waiver of the following conditions:

5.1 Warranties True as of both Present Date and Closing Date. Each of the representations and warranties of the Sellers contained herein shall have been true, accurate and

complete in all material respects on and as of the date hereof, and shall also be true, accurate and complete in all material respects on and as of the Closing Date, except for representations and warranties that are made as of a specific date, which shall be true, accurate and complete in all material respects as of such date.

5.2 Compliance with Agreements and Covenants. Seller shall have performed and complied in all material respects with all of its respective covenants, obligations and agreements contained in this Agreement to be performed and complied with by it on or prior to the Closing Date.

5.3 Illegality. There shall not be any Law that makes consummation of the Closing illegal or otherwise restrained or prohibited or any judgment, injunction, order or decree of any Governmental Authority having competent jurisdiction enjoining either Seller or Buyer from consummating the Closing.

5.4 Property Boundaries. The Parties have agreed upon the precise boundaries of the Property, which are acceptable to the Beneficiaries.

## **ARTICLE 6.**

### **CONDITIONS PRECEDENT TO SELLER'S SALE OBLIGATIONS**

Seller's obligation to close the Transaction is conditioned upon the satisfaction or waiver of the following conditions:

6.1 Warranties True as of Closing Date. The representations and warranties of Buyer contained herein shall have been true, accurate and complete in all material respects on and as of the date hereof, and shall also be true, accurate and complete in all material respects as of the Closing Date, except for representations and warranties that are made as of a specific date, which shall be true, accurate and complete in all material respects as of such date.

6.2 Compliance with Agreements and Covenants. Buyer shall have performed and complied in all material respects with all of its covenants, obligations and agreements contained in this Agreement to be performed and complied with by it on or prior to the Closing Date.

6.3 Documents. Sellers shall have received all of the agreements, documents and items specified in this Agreement.

6.4 Illegality. There shall not be any law that makes consummation of the Closing illegal or otherwise restrained or prohibited or any judgment, injunction, order or decree of any Governmental Authority having competent jurisdiction enjoining any Seller or Buyer from consummating the Closing.

6.5 Beneficiary Approval. Seller has received written approval from the Beneficiaries as to the terms of the Transaction and consent to close the Transaction prior to the Closing.

6.6 Property Boundaries. The Parties have agreed upon the precise boundaries of the Property, which are also acceptable to the Beneficiaries.

## **ARTICLE 7. CLOSING**

7.1 Procedure. All matters at the Closing shall be considered to take place simultaneously, and no delivery of any document or instrument shall be deemed complete until all transactions and deliveries of documents and instruments and payments contemplated by this Agreement are completed or have been waived by the party to whom delivery or payment was due hereunder. At the Closing, Seller will deliver to Buyer, and Buyer shall deliver to Seller, the respective documents, certificates, assignments, Beneficiary approvals, deeds and other materials referenced in this Agreement. Seller further agrees that following the Closing, it will promptly execute and deliver or cause to be promptly executed and delivered any further documents, instruments or agreements reasonably requested by Buyer to vest fully in Buyer all of Seller's right, title and interest in and to the Property, subject to the Post-Closing Covenants specified in Article 8. Buyer agrees to execute all documents necessary to complete the Closing.

7.2 Closing Costs and Prorations. Buyer will pay all costs of Closing, including but not limited to the costs of any closing agent, the cost of recording any documents necessary to create the parcels that comprise the Property, the cost of recording the deeds, and any other fees and costs associated with Closing. Taxes will be prorated between the parties according to the customary procedure for proration of taxes.

## **ARTICLE 8. POST-CLOSING COVENANTS**

In addition to any other right or obligation specified in this Agreement, the following rights and obligations shall apply effective as of and continuing after Closing:

8.1 Access to Property. Seller reserves all rights to enter upon and use such portions of the Property in order for Seller to comply with the Laws, including through the installation and monitoring of wells and other actions in furtherance of the corrective and remedial actions. Buyer grants to Seller and its contractors, certified professionals, the Beneficiaries, and to USEPA and MDEQ an irrevocable license to enter onto and to occupy the Property for the purpose of undertaking any Environmental Actions or environmental remediation work, including the right to make such inspections as may be necessary or appropriate in connection with the work. This right of inspection shall include the right to inspect and sample any water well installed or controlled by Buyer on the Property or on any property owned by Buyer, and the right of Seller to install and monitor wells on the Property at Seller's sole expense. Seller may collect physical samples and use any data during such tests that Seller deems appropriate. Seller shall use reasonable efforts to coordinate any such tests in a manner that does not interfere with Buyer's use of the Property. Reasonable efforts include full compliance with Buyer's applicable policies and procedures governing visitation to school property, access to students and

student information and criminal background checks. All visits will occur with 72 hours prior notice to Buyer's chief administrator unless emergency conditions requiring immediate access exist. Seller agrees that it will affirmatively cooperate with Buyer to resolve conflicts between this Section and Buyer's use of the property as outlined in Section 2.11.

8.2 Buyer's Use of the Property. Notwithstanding the foregoing or anything in this Agreement to the contrary, the Buyer shall not perform or engage in any activity on the Property which affects or interferes in any way with Seller's use of its remaining East Helena Property or otherwise impacts or affects Seller's obligations under the Consent Decree, the Trust Agreement, the OU-2 ROD, the Laws, or any other administrative order, corrective action requirement, or any law, rule, regulation, code, by-law, statute or decision, including, without limitation, all laws relating to protection of human health and the environment, including but not limited to CERCLA and RCRA. Buyer agrees that it will affirmatively cooperate with the Seller (or any successor to the Seller) to secure permits and approvals related to future use and/or development of the remaining East Helena Property (including the remaining Dartman Field property). Seller agrees that it will affirmatively cooperate with Buyer to resolve conflicts between this Section and Buyer's use of the property as outlined in Section 2.11.

8.3 Environmental Remediation and Institutional Controls. Buyer acknowledges that Seller is conducting certain Environmental Actions. Buyer will cooperate with the Seller in connection with the Environmental Actions to the extent they affect the Property. Buyer also shall execute all documents necessary to record in the appropriate real property records a restriction on future use or other institutional controls on those areas of the Property where such restrictions are required by any Governmental Authority in accordance with applicable law.

8.4 Groundwater Protection. Buyer covenants to comply with the Rules adopted by the State of Montana, through the Department of Natural Resources and Conservation, for the East Valley Controlled Groundwater Area, as may be amended from time to time, and/or any other controls deemed appropriate by USEPA for purposes of the protection of human health and the environment. Buyer further covenants and agrees that no groundwater production well or groundwater injection well shall be installed or operated on the Property without the consent of Seller and USEPA for so long as Environmental Actions related to the Property are not complete, and that all permits and authorizations otherwise required by law for such wells are obtained prior to installation and operation.

8.5 Property Maintenance. Buyer shall provide all utilities and maintenance for the Property at its sole expense, including removal of garbage, rubbish and trash, drainage of water and all other maintenance necessary to prevent nuisance and unattractive conditions on or emanating from the Property. Activities permitted or conducted on the Property prior to Closing date are appropriate under this section.

8.6 Compliance with Laws. Buyer shall not undertake any trade or occupation in or on the Property, which will be unlawful, improper, noisy, noxious (including without limitation the release of noxious fumes, vapors, or odors) or offensive, or contrary to any applicable laws or

any municipal by-law or ordinance. Without otherwise limiting the foregoing, the parties agree and acknowledge that activities authorized under Section 2.11 are not prohibited by this section so long as they are conducted in material compliance with all applicable laws.

8.7 Hazardous Materials. Buyer shall not generate, store or spill upon, dispose of or transfer to or from the Property, or the building located on the Property, any Hazardous Materials (as defined hereafter), and any such actions shall be a default hereunder. Notwithstanding the foregoing and subject to the other provisions of this Agreement, Buyer may transfer to and store chemicals customarily used in connection with its authorized use of the Property, provided that (i) all such chemicals are stored and used in compliance with all Laws and (ii) such chemicals are stored without creating offensive, noxious, or harmful odors, vapors or fumes for Buyer or Seller or its agents, employees, consultants and invitees. For the purpose of this Agreement, the term "Hazardous Materials" shall mean any oil, hazardous material, hazardous wastes or hazardous or toxic substances under any federal, state or local law, and the rules and regulations adopted pursuant thereto (including, without limitation CERCLA, RCRA and any similar Laws, and shall include, without limitation (whether or not included in the definition contained in said statutes) any other chemicals which could be materially dangerous to the environment or to human beings.

8.8 Taxes, Assessments and Insurance. Buyer shall timely pay all taxes and assessments imposed on the Property during the time that Buyer is the owner of the Property. Buyer shall purchase by the Closing Date, and thereafter maintain at all times, all appropriate insurance, including a policy of liability insurance on the on the Property at Buyer's expense, covering both bodily injury and property damage claims, with coverage of at least One Million Dollars (\$1,000,000.00) per occurrence and Two Million Dollars (\$2,000,000.00) aggregate.

## **ARTICLE 9. TERMINATION AND REMEDIES**

9.1 Termination. This Agreement may be terminated at any time, on or prior to the Closing Date:

- a. by mutual written consent of Seller, on the one hand, and Buyer, on the other hand;
- b. by the Seller, if any of the conditions in Article 6 has not been satisfied in all material respects as of the Closing or if satisfaction of any such condition is or becomes impossible (other than through the failure of the Seller to comply with their obligations under this Agreement) and the Seller have not waived such condition at or before the Closing;
- c. by the Buyer, if any of the conditions in Article 5 has not been satisfied in all material respects as of the Closing or if satisfaction of any such condition is or becomes impossible (other than through the failure of the

Buyer to comply with their obligations under this Agreement) and the Buyer have not waived such condition at or before the Closing;

- d. by either Buyer, on the one hand, or the Seller, on the other hand, if the Closing has not occurred (other than through the breach of any party seeking to terminate this Agreement to comply fully with its obligations under this Agreement) by May 1, 2016.
- e. by Buyer, if the Closing does not occur due to a material breach of any covenant, representation or warranty of any Seller hereunder; or
- f. by Seller, if the Closing does not occur due to a material breach of any covenant, representation or warranty of Buyer hereunder.

9.2 Effect of Termination. If this Agreement is terminated all obligations of the parties hereunder shall terminate and, except as set forth below, the Seller will cause the Deposit to be returned immediately to the Buyer.

9.3 Buyer's Default. If this Transaction is not consummated due to default or breach of Buyer, Seller's sole and exclusive remedy is to retain the earnest money deposited or paid by Buyer as liquidated damages and not as a penalty for breach of this agreement, and to rescind and terminate this Agreement, whereupon all rights and obligations under this Agreement will cease.

9.4 Seller's Default. If Seller fails, refuses, or is unable to furnish title to the Property as required by this Agreement or to perform Seller's other obligations under this Agreement on or before the date of closing, Buyer's sole and exclusive remedy is to rescind this Agreement and recover the earnest money deposited or paid by Buyer under this Agreement, whereupon all rights and obligations under this Agreement will cease.

9.5 Violation of Post-Closing Covenants. In the event Buyer breaches any of the post-closing covenants set forth in Article 8, Seller may pursue any remedy at law or equity, including but not limited to the remedy of specific performance.

## **ARTICLE 10. INDEMNIFICATION**

Buyer shall indemnify, defend and hold harmless Seller, the Montana Environmental Trust Group, LLC (individually, and not in its capacity as Trustee), Greenfield Environmental Trust Group, Inc., the United States, the State of Montana, and their respective officers, agents, members, directors, shareholders, representatives, servants, and employees ("Releasees") from all losses, damages, claims, costs, expenses, and fees (including reasonable attorneys' fees) wherever occurring, occasioned by the breach of any term, condition or covenant set forth in this Agreement, or any omission, fault, neglect or other misconduct of Buyer arising out of or relating to Buyer's ownership or use of the Property. Buyer hereby RELEASES, WAIVES,

DISCHARGES, FOREVER REMISES AND COVENANTS NOT TO SUE the Releasees from and against any and all liabilities, claims, demands, actions and causes of action whatsoever arising out of or related to any loss, damage, injury, including death, that may be sustained by Buyer arising out of or related to the condition of the Property as it exists as of the date of this Agreement, or any Environmental Action required or performed on or about the Property.

## **ARTICLE 11. MISCELLANEOUS.**

11.1 Headings Descriptive. Section and subsection headings in this Agreement are included herein for convenience of reference only and shall not affect the construction of or interpretation of and shall not constitute a part of this Agreement for any other purpose or be given any substantive effect.

11.2 Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall not invalidate the remaining provisions hereof and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

11.3 Amendments, Waivers. No amendment, modification or waiver of any of the provisions of this Agreement will be effective unless in writing (including a writing evidenced by a facsimile transmission, electronic transmission or portable document format), and signed by both Parties. Any such waiver shall be a waiver only with respect to the specific instance or issue described with specificity in such writing. Any waiver shall in no way impair the rights of the parties making such waiver or the obligations of the other parties to such party in any other respect or at any other time.

11.4 Remedies Cumulative. The rights and remedies of the parties expressly identified under this Agreement are cumulative, not alternative, and are not exclusive of any other rights or remedies provided by law.

11.5 Disputes. Any dispute arising out of or related to the Agreement, or services provided under the Agreement, shall be subject to mediation at the request of either party. Buyer and Seller expressly agree that mediation shall be a condition precedent to the initiation of any litigation arising out of such dispute. Claims for injunctive relief shall not be subject to this subsection. Any dispute not resolved in mediation shall be subject to litigation in accordance with the laws of the State of Montana. Any litigation shall be conducted in Montana district court. Notwithstanding anything to the contrary in the Agreement or in any document forming a part hereof, there shall be no mandatory arbitration for any dispute arising hereunder. The Parties may mutually agree in writing to submit a dispute to arbitration but the default dispute resolution shall be litigation. Seller stipulates Buyer is a political subdivision of the State of Montana, and, as such, enjoys immunities from suit and liability provided by the Constitution and laws of the State of Montana. By entering into this Agreement, Buyer does not waive any of its immunities from suit and/or liability, except as otherwise specifically provided herein and as specifically authorized by law.

11.6 Assigns. This Agreement may not be assigned by Seller or Buyer without the prior written consent of the other party.

11.7 Further Assurances. The Parties shall fully cooperate and perform all additional acts reasonably necessary to affect the purposes of this Agreement. The parties hereto agree that each of them shall take such further action and shall execute and deliver such additional documents and instruments (in recordable form, if requested) as may be reasonably necessary to effectuate the terms of this Agreement.

11.8 Entire Agreement. This Agreement constitutes the entire agreement and understanding of the parties with respect to its subject matter and supersedes all oral communication and prior writings with respect thereto.

11.9 Survival. Sections 1.6 and 9.5, and the entirety of Articles 2, 3, 8 and 10 shall survive and shall continue in full force and effect after the Termination Date.


11.10 Relationship of Parties. This Agreement is not intended to and does not create or establish between the parties any relationship other than as Buyer and Seller, including, but not limited to, as partners, joint venturers, employer and employee, master and servant, or of principal and agent.

**SELLER:**

Montana Environmental Trust Group, LLC,  
Trustee of the Montana Environmental Custodial

Trust, and not individually

By: Greenfield Environmental Trust  
Group, Inc., Member

By:   
Cynthia Brooks, President

Date: April 19, 2016

**BUYER:**

East Helena Public Schools, School District No. 9

By: Scott A. Walter

Printed: SCOTT A. WALTER

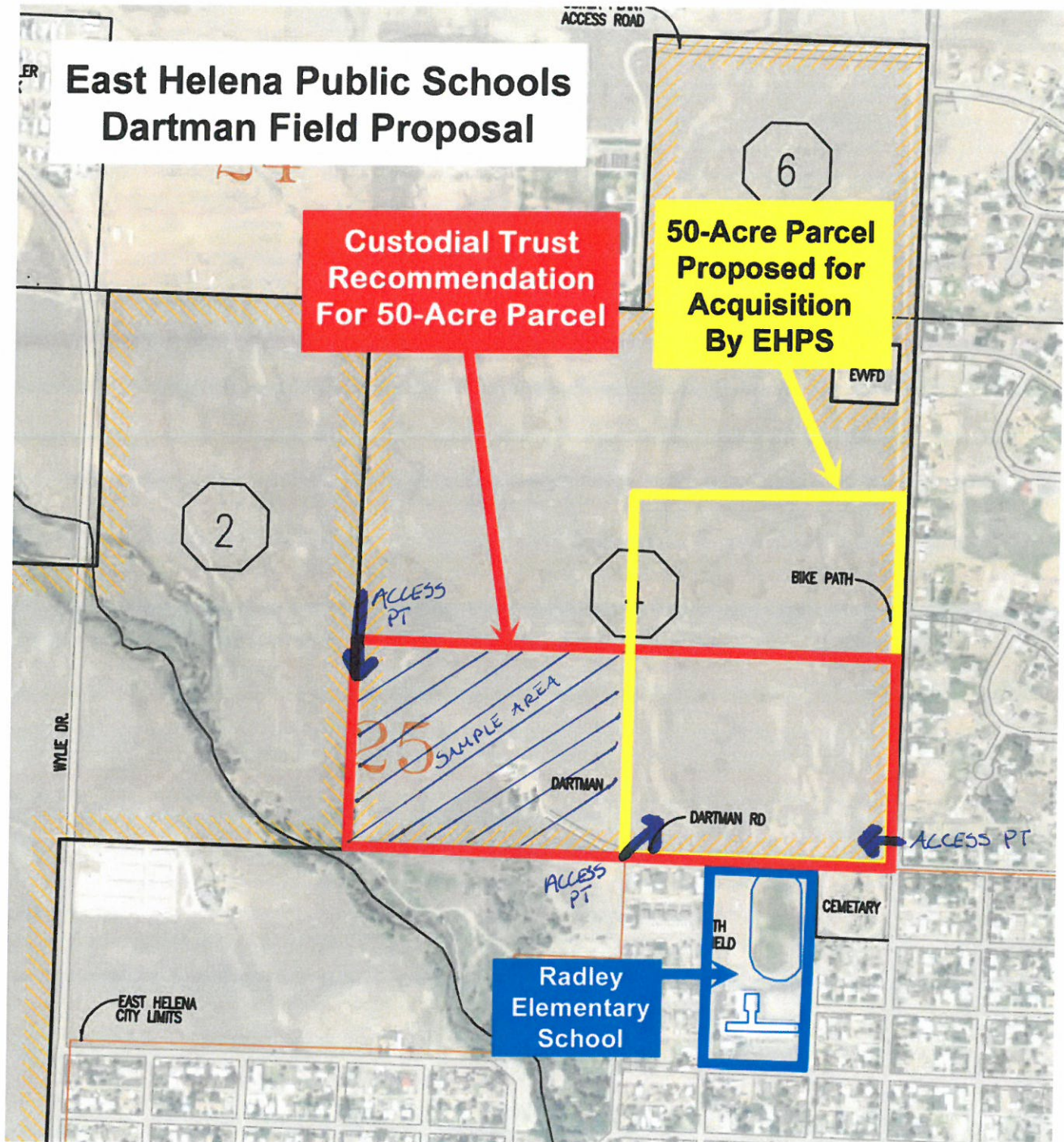
Title: EAST HELENA BOARD CHAIRMAN

Date: APRIL 11, 2016

## **EXHIBIT A**

[Property Description]

# EXHIBIT A



## EXHIBIT B

### RESERVATIONS, COVENANTS AND DISCLOSURES

Seller reserves the following rights, imposes the following restrictive covenants that shall be deemed to run with the land and binding on Buyer's successors and assigns, and makes the following disclosures:

1. Environmental Conditions.

- a. Soil Management. All soils disturbed by Buyer shall be managed consistent with the terms of the OU-2 ROD, the Lewis and Clark County Soil Ordinance and all other applicable federal, state, or local laws, statutes, ordinances, regulations, judgments, and orders and the common law, including the law of strict liability and the law of abnormally dangerous activities ("Laws"), including all Environmental Laws, as defined herein. Buyer shall refrain from use of the Property in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the remedy specified in the OU-2 ROD or any Laws, including Environmental Laws.
- b. Condition of the Property. Seller makes no representations, warranties or covenants of any kind, express or implied, with respect to the environmental condition of the Property or the Property's compliance with Environmental Laws (as defined hereafter). Buyer hereby assumes, and shall be solely responsible for, all environmental matters affecting or arising in connection with the Property, including, without limitation, the Property's compliance with all Environmental Laws and the presence of any Hazardous Substances (as defined hereafter), if any, on, in, under, or migrating from or otherwise attributable to the Property. "Environmental Laws" means any past, present, or future Laws relating to environmental matters, including, without limitation, provisions pertaining to or regulating air pollution, water pollution, noise control, wetlands, watercourses, wildlife, Hazardous Substances, or any other activities or conditions which impact or relate to the environment or nature. "Hazardous Substances" means any hazardous waste, hazardous substance or material, as defined under any Environmental Law or any pollutant, contaminant, radioactive or biological material or waste, or petroleum or petroleum related products or waste.
- c. Remediation and Institutional Controls. Buyer acknowledges that Seller is responsible for conducting certain Environmental Actions. Buyer will cooperate with the Seller in connection with the Environmental Actions to the

extent they affect the Property. Buyer also shall execute all documents necessary to record in the appropriate real property records a restriction on future use or other institutional controls on those areas of the Property where such restrictions are required by any Beneficiaries, or any governmental authority in accordance with applicable Laws.

d. Environmental Actions. The term “Environmental Actions” means any and all environmental activities related to the Montana Designated Properties, including but not limited to response or remedial actions, removal actions, corrective action, closure, or post-closure care, natural resource restoration, reclamation, investigations, studies, remediation, interim actions, final actions, emergency actions, water treatment, implementation of engineered structures and controls, obtaining and maintaining reasonable financial assurance, monitoring, repair and replacement of engineered structures, monitoring equipment and controls, operation and maintenance, and implementation, operation and maintenance of institutional controls, coordination and integration of reuse and remedial efforts and initiatives (including, without limitation, multi-stakeholder communications), and, if appropriate, long-term stewardship and perpetual custodial care activities. “Environmental Actions” also include activities related to releases of hazardous substances, hazardous waste, or hazardous constituents from any portion of the Montana Designated Properties, including all areas affected by natural migration of such hazardous substances, hazardous waste, or hazardous constituents from the Montana Designated Properties.

a. Groundwater Protection. Buyer covenants not to oppose the designation of all or any part of the property as a controlled groundwater area or any other such similar designation deemed appropriate by USEPA for purposes of the protection of human health and the environment. Buyer further covenants and agrees that, other than a single “exempt” well with a flow rate not greater than 35 gallons per minute, and a volume of not greater than 10 acre feet per year, no groundwater production well or groundwater injection well shall be installed or operated on the Property without the consent of Seller USEPA for so long as Environmental Actions at the RCRA facility or CERCLA site are not complete. Buyer shall be solely responsible for obtaining any and all applicable permits and authorizations otherwise required by law for such wells prior to installation and operation.

b. Insurance. Prior to conducting any work on the Property, Buyer shall procure and maintain occurrence-based insurance in amounts acceptable to Seller, naming Seller, the United States and the State of Montana as additional named insureds.

2. Conveyance Restriction. To the maximum extent allowed by law, Buyer may not sell

or otherwise convey any interest in the Property without the prior written consent of Buyer, the United States and the State of Montana.

3. Noxious Weeds. Buyer acknowledges the following noxious weeds disclosure: The laws of the State of Montana require sellers of property to notify buyers of property that noxious weeds exist or potentially exist on the property being offered for sale. The State of Montana and Lewis & Clark County have established certain requirements for the control of noxious weeds. For information concerning noxious weeds and a property owner's obligations, Buyer may contact either the local County extension agent or the County Weed Control Board. Prior to undertaking any eradication of noxious weeds on the property, Buyer also should notify Seller to ensure that control efforts are consistent with any covenants or rules that apply to the Property.

EXHIBIT C

Conceptual Plan for EHPS Soil Remediation of Dartman Field						
Land Usage	Square Feet	Acres	% of Total Land Use	Proposed Approach to Soil Remediation	Estimated \$/Acre for Soil Remedy	Total Costs for Soils Remedy
Buildings/Structures	195,000	4.48	8.9%	Soil remedy to include: (i) excavation for construction of slab--on---grade foundations; and (ii) removal and off---site disposal of any excess surface materials. <sup>1</sup>	\$7,500	\$33,574
Parking Areas/Roads	295,290	6.78	13.5%	Soil remedy to include: (i) leveling and grading parking areas; (ii) covering areas compacted road mix; (iii) finish with asphalt and/or concrete; (iv) removal and off---site disposal of any excess surface materials; <sup>2</sup> and (v) record ICs to ensure long---term maintenance of asphalt and concrete areas and potential future soil remediation if change in land use.	\$7,500	\$50,842
Playground Areas	180,000	4.13	8.3%	Soil remedy to include: (i) 12" scrape of surface soil and confirmatory sampling of 500 ppm Pb or less; (ii) loading trucks with excavated soils; (iii) hauling excavated soils to smelter property or East Fields Soil Repository; (iv) placement of 9" to 12 " of clean fill on excavated areas; and (v) vegetation/gravel/other surface material suitable for playground areas.	\$50,694	\$209,478
Track and Field Areas	714,000	16.39	32.7%	Soil remedy to include: (i) deep tilling and confirmatory sampling of 500 ppm Pb or less; (ii) grading and leveling; (iii) placement of 4" to 6" of clean fill; and (iv) seeding/vegetation or placement of appropriate cover for track and field use.	\$15,152	\$248,353
Perimeter Walking Paths	131,481	3.02	6.0%	Soil remedy to include: (i) deep tilling and confirmatory sampling of 500 ppm Pb or less; (ii) grading and leveling; (iii) placement of 4" to 6" of clean fill; and (iv) placement of gravel, asphalt, concrete or other suitable material for walking paths.	\$15,152	\$45,733
Landscaped/Lawn Areas	43,560	1.00	2.0%	Soil remedy to include: (i) 12" scrape of surface soil and confirmatory sampling of 500 ppm Pb or less; (ii) loading trucks with excavated soils; (iii) hauling excavated soils to smelter or East Fields Soil Repository; (iv) placement of clean fill on excavated areas; and (v) vegetation/gravel/other surface material suitable for landscaped areas.	\$50,694	\$50,694
Soccer Fields	238,000	5.46	10.9%	Soil remedy to include: (i) deep tilling and confirmatory sampling of 500 ppm Pb or less; (ii) grading and leveling; (iii) placement of 4" to 6" of clean fill; and (iv) seeding/vegetation or placement of appropriate cover for soccer field use.	\$15,152	\$82,784
Floodplain Areas (Athletic Fields)	304,920	7.00	14.0%	Soil remedy to include: (i) deep tilling and confirmatory sampling of 500 ppm Pb or less; (ii) grading and leveling; (iii) placement of 4" to 6" of clean fill; and (iv) seeding/vegetation or placement of appropriate cover for athletic field use.	\$15,152	\$106,061
Stormwater Detention Areas	79,200	1.82	3.6%	Soil remedy to include: (i) 6" scrape of surface soils; (ii) loading trucks with excavated material; (iii) hauling excavated material to smelter site; (iv) placement of gravel or other material to maintain detention structures; and (v) record ICs to ensure long---term maintenance of detention basins and potential future soil remediation if change in land use (unless remediated to 500 ppm Pb or less).	\$22,991	\$41,801
All Land Use Areas	2,181,451	50.08	100.0%			\$869,321
Fencing Unremediated Areas						\$160,000
				Total Soils Remediation Costs:		\$1,029,321
				20% Contingency:		\$257,330
				Grand Total Soils Remediation Costs:		\$1,286,651
Approximate Property Dimensions	2,177,993		50.00	Average Remediation Cost Per Acre:		\$25,733

**Note:** EHPS requests MDEQ assistance with securing a permit to allow the School District to sell any excavated cobbles, rocks, etc. to a gravel mining company.

<sup>1</sup> Any excavated materials exceeding the cleanup levels would be disposed consistent with the requirements of the Regulations Governing Soil Displacement and Disposal in the East Helena Superfund Area in Lewis and Clark County, Montana, (Lewis and Clark City-County Health Department, 2013) or, if approved by EPA and the Custodial Trust, to be delivered to the Smelter Site for incorporation in ongoing cleanup actions being conducted by the Custodial Trust.

<sup>2</sup> See Footnote 1.

**ATTACHMENT E**

**EMAILS FROM DEQ AND DOJ-NRD  
APPROVING THE PURCHASE AGREEMENT**

**Subject:** RE: TIME SENSITIVE - Custodial Trust Request for Final Approval

**Date:** Monday, April 18, 2016 at 10:32:48 AM Eastern Daylight Time

**From:** Chambers, Jenny

**To:** Cynthia Brooks, Harris, Harley, Betsy Burns, Vranka, Joe, Chuck Figur

**CC:** Stephen Brown, Dean Brockbank, Marc Weinreich, Lauri Gorton, Jennifer Roberts, Elliot Rockler, Alan Tenenbaum

Cindy -- DEQ approves the submitted Purchase and Sale Agreement with the East Helena Public Schools. Thank you for your coordination and work on this transaction. - Thanks, Jenny

Jenny Chambers  
Waste Management and Remediation Division Administrator  
MT Dept. of Environmental Quality  
PO Box 200901  
Helena MT 59620  
406-444-6383 phone  
406-475-2140 work cell  
[jchambers@mt.gov](mailto:jchambers@mt.gov)

---

**m:** Cynthia Brooks [mailto:cb@g-etg.com]

**Sent:** Thursday, April 14, 2016 1:01 PM

**To:** Chambers, Jenny; Harris, Harley; Betsy Burns; Vranka, Joe; Chuck Figur

**Cc:** Stephen Brown; Dean Brockbank; Marc Weinreich; Lauri Gorton; Jennifer Roberts; Elliot Rockler; Alan Tenenbaum

**Subject:** TIME SENSITIVE - Custodial Trust Request for Final Approval

**Importance:** High

Pursuant to §11 of the Settlement Agreement, the Montana Environmental Trust Group, LLC, Trustee of the Montana Environmental Custodial Trust (the Custodial Trust), hereby seeks the final written approval of the US Environmental Protection Agency (EPA) and the State of Montana (the State) (collectively, the Beneficiaries) to enter into the attached Purchase & Sale (P&S) Agreement with the East Helena Public Schools (EHPS). The P&S Agreement incorporates all changes requested by the Beneficiaries since January 15, 2016. The attached P&S Agreement was approved and executed by the EHPS Board of Trustees at their meeting on April 11, 2016. The Custodial Trust requests Beneficiary approval of the sale to the EHPS **no later than April 20, 2016** so that the EHPS can secure the required subdivision and other approvals and the Custodial Trust and the EHPS can consummate the sale.

Thank you in advance for your timely response to this request. Do not hesitate to contact me with any questions.

Cindy

Cynthia Brooks

President

Greenfield Environmental Trust Group, Inc.

Resources for Responsible Site Management, Inc., Trustee for the Industri-plex Custodial Trust

Montana Environmental Trust Group LLC, Trustee of the Montana Environmental Custodial Trust

Greenfield Environmental Multistate Trust LLC, Trustee of the Multistate Environmental Response Trust

Greenfield Environmental Savannah Trust LLC, Trustee of the Savannah Environmental Response Trust

617-448-9762

[cb@g-etg.com](mailto:cb@g-etg.com)

**Subject:** RE: TIME SENSITIVE - Custodial Trust Request for Final Approval

**Date:** Monday, April 18, 2016 at 10:54:06 AM Eastern Daylight Time

**From:** Harris, Harley

**To:** Chambers, Jenny, Cynthia Brooks, Betsy Burns, Vranka, Joe, Chuck Figur

**CC:** Stephen Brown, Dean Brockbank, Marc Weinreich, Lauri Gorton, Jennifer Roberts, Elliot Rockler, Alan Tenenbaum, Joscelyn, Alan

Cindy: NRDP/Mt. Dept. of Justice also concur.

Harley R. Harris  
Lawyer/Program Manager  
Montana Natural Resource Damage Program  
1720 Ninth Avenue  
Helena, MT 59601  
(406) 444-0226

---

**From:** Chambers, Jenny

**Sent:** Monday, April 18, 2016 8:33 AM

**To:** Cynthia Brooks; Harris, Harley; Betsy Burns; Vranka, Joe; Chuck Figur

**Cc:** Stephen Brown; Dean Brockbank; Marc Weinreich; Lauri Gorton; Jennifer Roberts; Elliot Rockler; Alan Tenenbaum

**Subject:** RE: TIME SENSITIVE - Custodial Trust Request for Final Approval

Cindy -- DEQ approves the submitted Purchase and Sale Agreement with the East Helena Public Schools.  
Thank you for your coordination and  
work on this transaction. - Thanks, Jenny

Jenny Chambers  
Waste Management and Remediation Division Administrator  
MT Dept. of Environmental Quality  
PO Box 200901  
Helena MT 59620  
406-444-6383 phone  
406-475-2140 work cell  
[jchambers@mt.gov](mailto:jchambers@mt.gov)

---

**m:** Cynthia Brooks [<mailto:cb@g-etg.com>]

**Sent:** Thursday, April 14, 2016 1:01 PM

**To:** Chambers, Jenny; Harris, Harley; Betsy Burns; Vranka, Joe; Chuck Figur

**Cc:** Stephen Brown; Dean Brockbank; Marc Weinreich; Lauri Gorton; Jennifer Roberts; Elliot Rockler; Alan Tenenbaum

**Subject:** TIME SENSITIVE - Custodial Trust Request for Final Approval

**Importance:** High

Pursuant to §11 of the Settlement Agreement, the Montana Environmental Trust Group, LLC,

Trustee of the Montana Environmental Custodial Trust (the Custodial Trust), hereby seeks the final written approval of the US Environmental Protection Agency (EPA) and the State of Montana (the State) (collectively, the Beneficiaries) to enter into the attached Purchase & Sale (P&S) Agreement with the East Helena Public Schools (EHPS). The P&S Agreement incorporates all changes requested by the Beneficiaries since January 15, 2016. The attached P&S Agreement was approved and executed by the EHPS Board of Trustees at their meeting on April 11, 2016. The Custodial Trust requests Beneficiary approval of the sale to the EHPS **no later than April 20, 2016** so that the EHPS can secure the required subdivision and other approvals and the Custodial Trust and the EHPS can consummate the sale.

Thank you in advance for your timely response to this request. Do not hesitate to contact me with any questions.

Cindy

Cynthia Brooks

President

Greenfield Environmental Trust Group, Inc.

Resources for Responsible Site Management, Inc., Trustee for the Industri-plex Custodial Trust

Montana Environmental Trust Group LLC, Trustee of the Montana Environmental Custodial Trust

Greenfield Environmental Multistate Trust LLC, Trustee of the Multistate Environmental Response Trust

Greenfield Environmental Savannah Trust LLC, Trustee of the Savannah Environmental Response Trust

617-448-9762

[cb@g-etg.com](mailto:cb@g-etg.com)

**ATTACHMENT F**  
**LETTERS OF PROJECT SUPPORT**



April 7, 2016

Ron Whitmoyer, Superintendent  
East Helena Public Schools  
P O Box 1280  
East Helena, MT 59635

Re: East Helena Public Schools - Resource Development Planning Grant Application

Mr. Whitmoyer:

We understand that East Helena Public Schools (EHPS) is engaged in discussions with the Montana Environmental Custodial Trust for the possible purchase of certain Custodial Trust property, in what is often referred to as the Dartman Fields area North of Radley School in East Helena.

As a result of this discussion EHPS is preparing to apply to the Montana Department of Natural Resources and Conservation (DNRC) for a Resource Development Construction Grant that would be used to clean up the property. This letter is to confirm that the Department of Environmental Quality (DEQ) supports your application for such a construction grant, and we encourage you to complete and submit your application by the deadline. You may provide a copy of this letter to DNRC with your application to indicate DEQ's support of your application.

Once the purchase is complete, clean-up will be required to address the contamination and meet the standards for residential use of the undeveloped lands. Standards for clean-up are provided for in the OU-2 Record of Decision and are to be consistent with the East Helena purchase and sale agreement.

Please let us know if you have any questions or concerns.

Sincerely,

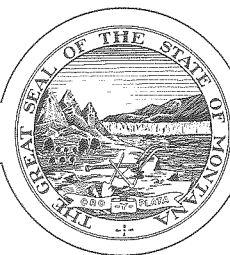
A handwritten signature in cursive script that reads "Tom Livers".

Tom Livers

REF#: DIR-16088

cc: Cindy Brooks, Montana Environmental Custodial Trust  
Jenny Chambers, Division Administrator DEQ

DEPARTMENT OF JUSTICE  
NATURAL RESOURCE DAMAGE PROGRAM



TIM FOX  
ATTORNEY GENERAL

1720 9TH AVENUE

STATE OF MONTANA

(406) 444-0205 (OFFICE)  
(406) 444-0236 (FAX)

PO BOX 201425  
HELENA, MONTANA 59620-1425

April 6, 2016

Ron Whitmoyer, Superintendent  
East Helena Public Schools  
P.O. Box 1280  
East Helena, MT 59635

Re: East Helena Public Schools – Resource Development Planning Grant Application

Mr. Whitmoyer:

East Helena Public Schools (EHPS) is engaged in discussions with the Montana Environmental Custodial Trust for the possible purchase of certain Custodial Trust property in what is often referred to as the Dartman Fields area north of Radley School in East Helena. Once the purchase is complete, clean-up will be required to address the contamination and meet the standards for residential use of the undeveloped lands. Standards for clean-up are provided for in the OU-2 Record of Decision and are to be consistent with the conceptual plan outline agreed to by the State and EHPS at a meeting held March 15, 2016, and incorporated into the purchase and sale agreement.

We understand that East Helena Public Schools is preparing to apply to the Montana Department of Natural Resources and Conservation (DNRC) for a Resource Development Construction Grant, which would be used to clean-up the property. This letter is to confirm that NRDP supports your application for such a construction grant, and we encourage you to complete and submit your application by the deadline. You may provide a copy of this letter to DNRC with your application to indicate DEQ's support of your application.

Please let us know if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Harley Harris".

Harley Harris  
Program Manager, Chief Legal Counsel

cc: Cindy Brooks, Montana Environmental Custodial Trust



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 8, MONTANA OFFICE**  
**FEDERAL BUILDING, 10 W. 15<sup>th</sup> STREET, SUITE 3200**  
**HELENA, MONTANA 59626**

Ref: 8MO

May 10, 2016

Stephanie Hester  
Montana Department of Natural Resources and Conservation  
Reclamation and Development Grant Program  
Resource Development Bureau  
P.O. Box 201601  
1625 Eleventh Avenue  
Helena, MT 59620

Dear Ms. Hester:

As the Environmental Protection Agency (EPA) Project Manager for the East Helena Superfund Site, I am writing to express EPA support for the East Helena Public Schools application for funding from the Reclamation and Development Grants Program (RDGP) administered by the Department of Natural Resource and Conservation (DNRC). On April 15, 2016, EPA approved the Purchase and Sale (P&S) Agreement between the Montana Environmental Custodial Trust (MECT) and the East Helena Public Schools for a 50-acre parcel of land adjacent to Radley Elementary School in East Helena. EPA's approval of the P&S Agreement reflects the agency's long-standing, well documented support for community-driven future reuse of the East Helena Site.

The 50-acre parcel was formerly owned by Asarco and was transferred to MECT as a result of the Asarco bankruptcy in 2009. This property was impacted by over 100 years of operation of the Asarco lead smelter. The primary contaminants on the property are lead and arsenic deposited aerially from stack emissions and transported through flood/stormwater channels. The remediation at this property will be required to comply with the EPA *Final Record of Decision for Operable Unit No. 2, Residential Soils and Undeveloped Lands*, September 2009 (OU2 ROD).

During the Asarco bankruptcy, the United States and the State of Montana filed claims for environmental damages in East Helena. In 2009, the Bankruptcy Court approved funding that was transferred to MECT for environmental remediation and natural resource damage restoration. Under the Settlement Agreement, EPA is the Lead Agency for the cleanup and has approved use of limited financial resources on remediation of the groundwater and soil at the former smelter site. Under the P&S the land is being donated to the EHPS, instead of at fair market value, which is normally required because land sale proceeds are used to help pay for site cleanup. EPA approved the P&S fully recognizing



that the EHPS would seek funding to remediate the property to the residential standards in the OU2 ROD.

The DNRC reclamation grant will provide an opportunity for the EHPS to expand their learning environment in a safe and healthy manner, and to return the land to a beneficial use.

Thank you for your consideration.

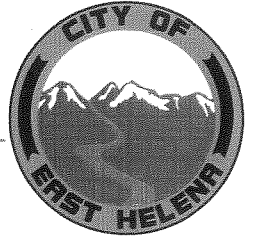
Sincerely,



Betsy Burns  
Project Manager

Cc: Ron Whitmoyer, Superintendent East Helena School District  
Cindy Brooks, Montana Environmental Custodial Trust  
Joe Vranka, EPA 8MO

# City of East Helena



**Mayor**  
James Schell

**Council Members**  
Don Dahl  
Kit Johnson  
Judy Leland  
Mike Misowic

**City Attorney**  
Peter K. Elverum

**City Clerk**  
Gena L. Berry

**Deputy Clerk**

**Public Works  
Director**  
Scott St. Clair

**Chief of Police**  
Dale Aschim

**Fire Chief**  
Troy Maness

**City Judge**  
Dennis Loveless

**P.O. Box 1170  
East Helena  
Montana 59635**

**City Offices  
406-227-5321**

**City Fax  
406-227-5456**

**Police Admin.  
406-227-8686**

April 6, 2016

Montana Department of Natural Resources and Conservation  
Reclamation and Development Grant Program  
Resource Development Bureau  
PO Box 201601  
1625 Eleventh Avenue  
Helena, MT 59620

To Whom It May Concern,

The City of East Helena strongly supports the East Helena School District's application for a DNRC Reclamation and Development Grant.

This grant will be used to re-purpose and reclaim 50 acres of land inside the East Helena City limits to make it a clean environment where children for generations can come to learn and play. The long term importance of planning for a safe and healthy learning environment in East Helena for generations to come cannot be overstated.

Thank you for your attention to this important grant application.

If you have any questions, please do not hesitate to ask.

Sincerely,

James Schell  
City of East Helena Mayor



We Support Fair Housing

Equal Opportunity Employer



Montana Environmental Trust Group, LLC  
Trustee of the Montana Environmental Custodial Trust  
PO Box 1230, East Helena, Montana 59635  
Telephone (1): (617) 448-9762  
Telephone (2): (406) 227-4098

By Electronic Mail

April 19, 2016

Alicia Stickney  
Stephanie Hester  
Resource Development Bureau  
Montana Department of Natural Resources and Conservation  
1625 Eleventh Avenue  
Helena, MT 59601

**RE: East Helena Public Schools (EHPS) Application, Reclamation and Development Grants Program (RDGP), Department of Natural Resources and Conservation**

Dear Ms. Stickney and Ms. Hester:

I am writing on behalf of the Montana Environmental Trust Group, LLC, Trustee of the Montana Environmental Custodial Trust (the Custodial Trust), to document the Custodial Trust's unconditional support for the East Helena Public Schools (EHPS) application for funding from the Reclamation and Development Grants Program (RDGP) administered by the Department of Natural Resources and Conservation (DNRC). The Custodial Trust has entered into an agreement with the EHPS to donate<sup>1</sup> a 50-acre parcel of land adjacent to the Radley Elementary School in East Helena (the Parcel). The EHPS is acquiring the Parcel to construct badly needed facilities to accommodate current and projected elementary and middle school enrollment in the EHPS District (the EHPS Project). Existing EHPS facilities are at capacity. Surface soils on the Parcel are contaminated by more than a century of smelting at the nearby former Asarco facility in East Helena. In order to safely reuse the property for school facilities, the EHPS is seeking RDGP funding to remediate the Parcel consistent with the cleanup standards established by the US Environmental Protection Agency (EPA) for the East Helena Superfund Site. For the reasons enumerated below, the Custodial Trust urges the DNRC to recommend approval by the Governor's Office of the EHPS application for RDGP funds.

---

<sup>1</sup> The Custodial Trust has secured approval to donate the Parcel to the EHPS in exchange for reimbursement of its costs of sale. These costs were incurred over a six-year period of time during which the Custodial Trust worked with the EHPS and endeavored to secure approval of the United States and the State of Montana, which are required to convey, sell or transfer any Custodial Trust property in East Helena property. Final approvals were received on April, 18 2016.

Implementation of the EHPS Project will result in significant benefits to the region and the state as a “mineral development impact” project pursuant to DNRC’s RDGP guidance. Specifically, as set forth in the DNRC guidance document,<sup>2</sup> in order to be eligible for RDGP funds, an applicant’s proposed project must satisfy at least one of the following five criteria:

1. Reclaim land, water or other resources adversely affected by mineral development
2. Mitigate damage to public resources caused by mineral development
3. Research, demonstrate, or provide technical assistance to promote the wise use of Montana minerals, including efforts to make processing more environmentally compatible
4. Investigate and remediate sites where hazardous wastes or regulated substances threaten public health or the environment
5. Research to assess existing or potential environmental damage resulting from mineral development.

The EHPS Project satisfies two of the above five criteria, including reclamation of land adversely affected by mineral development and investigation and remediation of a site where hazardous wastes threaten public health and the environment.

Contamination on the Parcel is the direct result of Asarco’s smelting and processing of ores, concentrates and other minerals extracted from mines in Montana and other locations to produce lead bullion and other processed metals (including copper, arsenic, gold and silver) that were then loaded on rail cars for transportation to the market. When the smelter was in operation between 1888 and 2001, lead, arsenic and other contaminants were transported by wind from the smelter stacks and then deposited in surface soils on thousands of acres of public and private lands surrounding the facility, including the Parcel. Areas where contaminants were aurally deposited in soils (which include the smelter property, the entire City of East Helena, nearby residential subdivisions, rural developments, and surrounding undeveloped lands that extend into Lewis and Clark County and Jefferson County) have been included in the administrative boundary of the EPA-designated East Helena federal superfund site. Any development of undeveloped lands and/or changes in existing land uses with the superfund Administrative Boundary must comply with the EPA’s Record of Decision (ROD) for the

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<sup>2</sup> See “Reclamation and Development Grants Program, Grant Application Guidelines 2016,” (Revised December 2015), Montana Department of Natural Resources and Conservation, Resource Development Bureau.

East Helena Superfund Site and the Lewis & Clark County Soils Ordinance (the Soils Ordinance).<sup>3</sup> Therefore, the EHPS Project will have to comply with the EPA ROD and the County Soils Ordinance. Because the Parcel is located directly downwind from the Asarco smelter, contaminant levels, primarily for lead, significantly exceed the cleanup standards set forth in the ROD and the Soils Ordinance for use of the Parcel by school children. Therefore the EHPS Project cannot be implemented unless the Parcel is remediated to prevent school children from coming into contact with lead in surface soils. Although the remediation costs far exceed the maximum award amount, receipt of RDGP funds by the EHPS is critical to ensuring that the EHPS is able to finance the EHPS Project.

Expansion of the EHPS facilities in East Helena is required to alleviate significant overcrowding in the Radley Elementary School, the Eastgate Elementary School and the East Valley Middle School. At the present time, the existing EHPS facilities are at capacity and cannot meet projected enrollment needs. In 2014, the EHPS commissioned a study to evaluate the feasibility of expanding existing EHPS facilities to accommodate the anticipated increase in the EHPS student population and to evaluate alternative sites for the expansion of school facilities. A total of eight (8) sites were analyzed for a number of criteria, including: financial feasibility; public opinion; environmental impacts; operation and maintenance; technical feasibility; access and safety; and long-term flexibility.<sup>4</sup> The Parcel was identified as the preferred site for the EHPS Project based on cost, location, acreage, access to utilities, site conditions and transportation infrastructure required for all children in the EHPS District.

As set forth in the 2009 Asarco bankruptcy settlement under which it was established, the Custodial Trust's East Helena responsibilities include: owning the former Asarco property in East Helena; holding and managing the cleanup funds earmarked for the site; cleaning up the site pursuant to EPA-approved cleanup plans and budgets; and effecting the sale or disposition of the property, subject to the prior approval of EPA and the State of Montana. Since it was created in 2009, the Custodial Trust has been using its finite funds to address contamination on the former Asarco smelter property (including soils contamination and groundwater contamination that is migrating off-site), pursuant to EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action program and EPA-approved cleanup plans and budgets. If sufficient funds are available after the RCRA cleanup is complete, EPA may approve the expenditure of Custodial Trust funds to remediate contaminated soils on its undeveloped lands in East

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<sup>3</sup> In 2013, the Lewis & Clark City-County Health Department adopted the Soils Displacement and Disposal Ordinance, which governs and regulates the displacement and disposal of contaminated soils for properties within the Administrative Boundary of the East Helena Superfund Site.

<sup>4</sup> See "Preliminary Engineering Report School Site Evaluation," prepared for the East Helena Public School District No. 9 by Great West Engineering (October 2014).

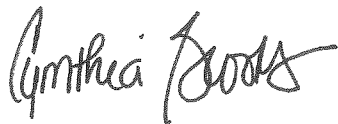
Helena, which include the EHPS Parcel. EPA has advised that it does not expect to decide whether there are sufficient funds available to perform soils remediation for a number of years, if at all. In light of the urgent need to increase existing East Helena school capacity and the uncertainty as to timing and funding for cleanup of soils by the Custodial Trust, the EHPS cannot wait until such a decision is made.

As required under the bankruptcy documents, the Custodial Trust secured the prior approval of its beneficiaries—EPA and the State—for sale of the Parcel to the EHPS. Based on the Custodial Trust's recommendation, the beneficiaries approved the Custodial Trust's request that the Parcel be donated to the EHPS (after reimbursement of the costs of sale) in lieu of seeking fair market value, which would normally be required under the bankruptcy settlement agreement. The donation is intended to help offset the EHPS costs to remediate the soils. The Custodial Trust's donation also recognizes that the community of East Helena has already paid a significant price for contamination from the Asarco smelter (including health impacts, stigma and cleanup costs) and therefore should not be asked to pay again for property that must be remediated in order to be used for the charitable purpose of public education.

The EHPS Project is eminently worthy of RDGP funding because, among other things, it reclaims contaminated land and remediates hazardous wastes resulting from decades of mine-related activities that must be mitigated to protect public health. In light of the overwhelming public need for and benefit of the EHPS Project and its contribution to public education in Montana, it is hard to imagine a more worthy recipient of RDGP funding. For the reasons outlined in this letter, the Custodial Trust respectfully urges DNRC to recommend approval of the EHPS application.

Please do not hesitate to contact me with any questions about this transmittal by telephone at (617) 448-9762 or by email at [cb@g-etg.com](mailto:cb@g-etg.com).

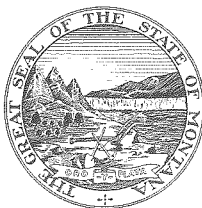
Sincerely,

A handwritten signature in black ink, appearing to read "Cynthia Brooks". The signature is fluid and cursive, with the first name "Cynthia" written in a larger, more prominent script than the last name "Brooks".

Montana Environmental Trust Group, LLC  
Trustee of the Montana Environmental Custodial Trust  
By: Greenfield Environmental Trust Group, Inc., Member  
By: Cynthia Brooks, President

cc: Betsy Burns—EPA  
Jenny Chambers—MDEQ  
Chuck Figur—EPA  
Lauri Gorton—Custodial Trust  
Kris Goss—EHPS  
Harley Harris—MDOJ  
The Honorable Jamie Schell—Mayor, City of East Helena  
Marc Weinreich—Custodial Trust  
Ron Whitmoyer—EHPS  
Joe Vranka—EPA  
EHPS Board of Trustees

# Montana State Senate



**SENATOR JILL COHENOUR**  
SENATE DISTRICT 42

HELENA ADDRESS:  
PO BOX 200500  
HELENA, MONTANA 59620-0500  
CAPITOL, RM 327  
PHONE: (406) 444-4634

HOME ADDRESS:  
2610 COLT DRIVE  
EAST HELENA, MT 59635  
PHONE: (406) 227-1144

*The Big Sky Country*

COMMITTEES:  
TAXATION  
EDUCATION  
AGRICULTURE

April 18, 2016

Kevin Rauch, Program Manager  
Olympus Technical Services  
765 Colleen Street  
Helena, MT 59601

Dear Mr. Rauch,

I am honored to support the application by the East Helena Public School District #9 for the \$500,000 Reclamation and Development grant awarded by the Department of Natural Resource and Conservation (DNRC). The District will use the grant to remediate the 50-acre Dartman Fields to the north of East Helena. With the grant in place, the District would then have the opportunity to purchase the land to be used for the construction of a new elementary school.

I believe the requested monies will serve a crucial state, as well as community, need. The land that will be cleaned up, using the grant, is within an area that has suffered much due to the historical environmental damage caused by the crushing and smelting of minerals in the City of East Helena. The condition of the land has made redevelopment difficult and possibly unlikely due to the costs associated with cleaning up the area.

With financial support from this grant, mitigation of the land can be accomplished on behalf of the families and children in East Helena and the surrounding area. The economic future of the community will be improved, and the potential for future redevelopment and mitigation of the rest of the land in that area will also improve. This is East Helena Schools leading the way in our community.

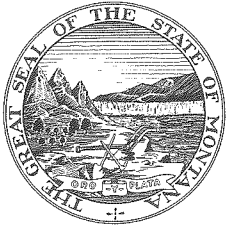
The East Helena School District is the center of our community. The District is a growing, with several new subdivisions in the surrounding area that are attracting families with school age children. It is with great forethought that the School Board and Superintendent have been planning to address the school population issue proactively within the community. Taxpayers, parents, business owners, and elected leaders have been involved in planning for the future needs of the school district. The Reclamation and Development Grant funding will go a long way to making our community school plan a reality as well as improving the prognosis of future development in the East Helena area.

I appreciate your consideration of the East Helena Public School application. The completed project will improve the future of our families and the children in our community.

With thanks,

Senator Jill Cohenour, East Helena

Cc: Ron Whitmoyer- Superintendent-East Helena School District, John Tubbs- Director of the Department of Natural Resources and Conservation, Tom Livers- Director of the Department of Environmental Quality, Tracy Stone-Manning, Chief of Staff Governor Steve Bullock



*The Big Sky Country*

## MONTANA HOUSE OF REPRESENTATIVES

**REPRESENTATIVE MARY ANN DUNWELL**  
HOUSE DISTRICT 84

HELENA ADDRESS:  
CAPITOL BUILDING  
PO BOX 200400  
HELENA, MONTANA 59620-0400  
PHONE: (406) 444-4800

COMMITTEES:  
TAXATION  
NATURAL RESOURCES  
LEGISLATIVE ADMINISTRATION

HOME ADDRESS:  
2520 LOOKOUT CIRCLE  
HELENA, MT 59601  
PHONE: (406) 461-5358  
EMAIL: REP.MARYANN.DUNWELL@MT.GOV

January 31, 2016

Kevin Rauch  
Program Manager  
Olympus Technical Services  
765 Colleen Street  
Helena, MT 59601

Dear Mr. Rauch,

I am pleased to lend my full support for the East Helena Public School District's application to secure a \$500,000 Reclamation and Development Grant from the Montana Department of Natural Resources and Conservation (DNRC). The school district intends to use the grant for remediation of an approximately 50 acre parcel of land at Dartman Field, North of East Helena. The remediation of this site is critical to advancing the much needed East Helena School District's K-8 school facility expansion project.

The school district hopes to acquire the 50 acre site as part of the effort to ease overcrowding at Eastgate Elementary (K-1), Radley Elementary (2-5) and East Valley Middle School (6-8). It is my understanding that the Montana Natural Resource Damage Program and Department of Environmental Quality would support the land acquisition, provided the school district remediates the property to a level consistent with requirements for school building occupancy.

There is significant public benefit that would result from the acquisition and remediation of the identified site. Benefits to the public wellbeing and quality of life include improvements in public health and environmental safety, enhancement of educational opportunities, and furthering local economic opportunity.

Currently, East Helena students are learning in school buildings that are crowded beyond capacity. Without the expansion, the school district cannot accommodate the anticipated population growth and increased student enrollment.

The remediated site would provide the school district with the tools and resources to develop a forward-looking school facility planning process. The resulting building project would create jobs in the skilled trades, general construction and additional jobs connected to a large school development project. With the use of contemporary technology, development of the vacant Asarco land would result in state of the art, energy efficient facilities. Finally, securing the grant would benefit the community at large by ensuring that lead and arsenic soil contamination from past smelter emissions is remediated.

With the annexation of the ASARCO lands, East Helena has grown from 550 acres to more than 2,500 acres that are available for development. I strongly support awarding the Reclamation and Development Grant to the East Helena School District, thereby ensuring a strong public school system positioned as a pivotal component in the vitality and economic growth of East Helena.

Thank you for your attention to this important issue. Please feel free to contact me with any questions or clarifications you may need.

Regards,

A handwritten signature in cursive script, appearing to read "Mary Ann Dunwell".

Representative Mary Ann Dunwell

Cc:

Ron Whitmoyer, Superintendent, East Helena School District

John Tubbs, Director, Montana Department of Natural Resources and Conservation DNRC

Tom Livers, Director, Montana Department of Environmental Quality

Tracy Stone-Manning, Chief of Staff, Montana Governor Steve Bullock



# HELENA SMALL FRY FOOTBALL ASSOCIATION

PO Box 6204 • Helena, Montana 59604-6204

April 21, 2016

Dear Mr. Whitmoyer,

Thank you for taking time to visit with members of Helena Small Fry Football (HSFF) and discuss the potential partnership that could be established between the East Helena Public School District (EHPS) and HSFF if the property north of the existing Radley School, in East Helena, is secured by EHPS. We understand that EHPS would be required to complete reclamation of the property, and specifically, the floodplain area where the athletic fields would be located, in order to enable any public use.

HSFF applauds the initiative that EHPS is taking in planning for the impacts caused by the growth trend that has been exhibited within the area. Securing the 50 acre site in question should prove beneficial to EHPS and the city of East Helena. HSFF's potential engagement with EHPS through this property use should provide public benefit and potential economic benefit to the city of East Helena by exposing more families to its amenities each weekend through the football seasons.

HSFF supports EHPS's effort to secure the property and its submission of the grant application to secure funding necessary for the remediation of this 50 acre site. Good luck with your quest to obtain the subject property and the grant funding.

We look forward to additional discussion, further defining roles in this partnership between EHPS and HSFF.

Sincerely,

Bill Cockhill  
President  
Helena Small Fry Football, Inc.

## **ATTACHMENT G**

### **METG LETTER TO EPA REGARDING AVAILABILITY OF CLEANUP FUNDS FOR REMEDICATION OF DARTMAN FIELD SOILS**



Montana Environmental Trust Group, LLC  
Trustee of the Montana Environmental Custodial Trust  
PO Box 1230, East Helena, Montana 59635  
Telephone (1): (617) 448-9762  
Telephone (2): (406) 227-4098

May 6, 2016

Betsy Burns  
RCRA Project Officer  
USEPA Region 8, Montana Operations Office  
Federal Building  
10 West 15th St., Suite 3200, Mail Code: 8MO  
Helena, MT 59626

RE: Availability of Cleanup Funds for Remediation of Dartman Field Soils  
East Helena Public Schools DNRC Grant Application

Dear Betsy:

By way of this letter, the Montana Environmental Trust Group, LLC, Trustee of the Montana Environmental Custodial Trust (the Custodial Trust), is documenting its understanding of the US Environmental Protection Agency (EPA) position and priorities for the use of funds to remediate contamination from the former Asarco smelter in East Helena. This documentation is required to support the application submitted by the East Helena Public Schools (EHPS) to the Montana Department of Natural Resources and Conservation (DNRC) Reclamation and Development Grants Program (RDGP). Specifically, the Custodial Trust is seeking EPA confirmation that cleanup funds from the 2009 Asarco bankruptcy settlement are not currently available to help fund remediation of Dartman Field soils. Contaminated soils on the property, which are the result of Asarco's historic lead smelter operations in East Helena, must be remediated in order for the EHPS to safely reuse the property for additional school facilities. EPA's confirmation is required because RDGP funds cannot be used for projects that can, *"reasonably be expected to receive funding from other state or federal programs, or any program or act that provides funding to accomplish remedial action for environmental damage."*<sup>1</sup>

After operating the East Helena lead smelter for more than a century, in 2005, Asarco filed for bankruptcy under Chapter 11 of the US Bankruptcy Code, apparently due to the company's inability to finance its extensive environmental liabilities throughout the US. The Montana Environmental Custodial Trust was established in 2009 as part of the court-approved global bankruptcy settlement entered into by the US government and nineteen (19) state governments, including the State of Montana. The responsibilities of the Custodial Trust, which are set forth in

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<sup>1</sup> According to the DNRC RDGP 2016 Application Guidelines, "A project is **not** eligible for funding under the RDGP to the extent that the project is eligible for and can reasonably be expected to receive funding from other state or federal programs, or any program or act that provides funding to accomplish remedial action for environmental damage, or if the project is permitted under Title 82, Chapter 4 or 11 (Reclamation and Oil and Gas Conservation statutes)."

the Consent Decree and Settlement Agreement Regarding the Montana Sites (the Settlement Agreement), include the following:

- ✓ Taking title to the four hazardous waste sites that were owned by Asarco in Montana, including the East Helena smelter;
- ✓ Holding and managing the finite funds specifically allocated for cleanup of each of the four Montana sites;
- ✓ Cleaning up the sites pursuant to cleanup plans and budgets approved by the designated Lead Agency for each site (or funding the Lead Agency's cleanup of the sites);
- ✓ Transferring and/or selling the properties subject to the approval of the Lead Agency and the Non-Lead Agency for each site; and
- ✓ Fulfilling its overall fiduciary obligations to the US and the State of Montana, who are the sole beneficiaries of the Custodial Trust.

The US Environmental Protection Agency (EPA) is the designated Lead Agency for the East Helena Site (the Site). The State of Montana (represented by the Montana Department of Justice (MDOJ) and the Montana Department of Environmental Quality (MDEQ)) is the Non-Lead Agency for the Site. Under the Settlement Agreement, the Custodial Trust must secure the prior approval of EPA for its cleanup plans and annual budgets and, therefore, cannot perform any cleanup activities that are not approved by EPA and included in an EPA-approved budget. Under the Settlement Agreement, EPA and the State must approve of the sale of property in East Helena. Consistent with the Settlement Agreement, the Custodial Trust secured the prior approval of EPA, MDEQ and MDOJ for sale of the Dartman Field property to the EHPS.

In 1984, EPA listed the Site on the National Priorities List (NPL) pursuant to the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), which is sometimes referred to as Superfund. Between 1984 and 1997, Asarco performed remedial actions at the Site under CERCLA. In 1998, EPA transferred Site cleanup activities for the smelter property from CERCLA to the Resource Conservation and Recovery Act (RCRA) corrective action program. EPA and Asarco entered into a Consent Decree in Federal District Court for the District of Montana, which sets forth Asarco's cleanup obligations under RCRA at the Site. In 2012, EPA and the Custodial Trust entered into the First Modification to the RCRA Consent Decree (the First Mod) under which the Custodial Trust succeeded to Asarco's obligations under the 1998 RCRA Consent Decree. Under the First Mod, the Custodial Trust must remediate the former Asarco smelter property and certain adjacent parcels under RCRA. Contaminated soils on the Custodial Trust's remaining, extensive undeveloped land holdings in East Helena, including the Dartman Field parcel, are to be remediated pursuant to the EPA's 2009 Operable Unit 2 Record of Decision (OU2 ROD) under CERCLA.

As required by the First Mod, since 2009, the Custodial Trust has been addressing contamination on the former smelter property, including contaminated groundwater that is migrating off-site, consistent with EPA's requirements under the RCRA corrective action program utilizing the finite cleanup funds earmarked for the Site. The Custodial Trust understands that EPA will not authorize the use of cleanup funds to remediate soils contamination on the undeveloped lands under CERCLA unless and until the Custodial Trust has fulfilled its cleanup obligations under RCRA and the First Mod. After EPA has determined that the RCRA corrective actions are complete, cleanup funds remaining for the Site, if any, the agency may authorize the expenditure of funds on remediation of contaminated soils on the undeveloped land under CERCLA. The Custodial Trust further understands that such a determination by EPA may not occur for many years, if at all. Therefore, even if requested by the Custodial Trust, the EPA will not approve a budget or plans to cleanup soils on the undeveloped lands, including the Dartman Field property, until such time as the RCRA corrective actions are complete.

As indicated above, the Custodial Trust is requesting written confirmation from EPA, as Lead Agency for the Site, that cleanup funds from the Asarco bankruptcy settlement are not available to help fund remediation of contaminated soils on the Dartman Field property as required under the OU2 ROD to allow the property to be used for a school facility.

Thank you in advance for your timely consideration of this request. Please do not hesitate to contact me by telephone at 617-448-9762 or by email at [cb@g-etg.com](mailto:cb@g-etg.com) with any questions.

Sincerely,

Montana Environmental Trust Group, LLC  
Trustee of the Montana Environmental Custodial Trust  
By: Greenfield Environmental Trust Group, Inc., Member



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By: Cynthia Brooks, President

cc: Dean Brockbank—Custodial Trust  
Lauri Gorton—Custodial Trust  
Kris Goss—EHPS  
The Honorable James Schell—Mayor, City of East Helena  
Joe Vranka—EPA  
Ron Whitmoyer—EHPS  
Marc Weinreich—Custodial Trust

**ATTACHMENT H**

**EMAIL RESPONSE FROM EPA TO METG LETTER  
REGARDING AVAILABILITY OF CLEANUP FUNDS**

**From:** [Burns, Betsy](#)  
**To:** [cb.g-etg.com](#); [Ron Whitmoyer](#)  
**Cc:** [Dean Brockbank](#); [Lauri Gorton](#); [Kris Goss](#); [Jamie Schell](#); [Vranka, Joe](#); [Marc Weinreich](#); [Kevin Rauch](#); [Moores, Steven](#)  
**Subject:** RE: Availability of Cleanup Funds For Soils Remediation (Dartman Field)  
**Date:** Friday, May 06, 2016 2:50:58 PM

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Cindy – You are correct in the understanding that EPA will not authorize the use of cleanup funds to remediate soils contamination on the formerly owned undeveloped lands until the RCRA Corrective Actions at the site are complete and long-term O&M costs have been identified and segregated. If you need any additional clarification, please feel free to contact me.

*Betsy Burns*  
*RCRA/CERCLA Project Manager*  
*US EPA Region 8 Montana Office*  
*10. W. 15<sup>th</sup> St., Suite 3200*  
*Helena, MT 59626*  
*(406) 457-5013*  
[Burns.betsy@epa.gov](mailto:Burns.betsy@epa.gov)

---

**From:** Cynthia Brooks [mailto:cb@g-etg.com]  
**Sent:** Friday, May 06, 2016 2:13 PM  
**To:** Burns, Betsy <Burns.Betsy@epa.gov>; Ron Whitmoyer <rwhitmoyer@ehps.k12.mt.us>  
**Cc:** Dean Brockbank <db@g-etg.com>; Lauri Gorton <lg@g-etg.com>; Kris Goss <kgoss@mtsba.org>; Jamie Schell <jschelleh@gmail.com>; Vranka, Joe <vranka.joe@epa.gov>; Marc Weinreich <mw@g-etg.com>; Kevin Rauch <krauch@olytech.com>  
**Subject:** Availability of Cleanup Funds For Soils Remediation (Dartman Field)

Betsy and Ron:

Attached is a letter from the Custodial Trust confirming that funds are not currently available in the East Helena Cleanup Account for remediation of soils in Dartman Field. The purpose of this letter is to provide the EHPS with an written explanation as to why there are no other funds for cleanup of the property so that it can be included in the EHPS grant submission to DNRC.

Do not hesitate to contact me with any questions.

Cindy

Cynthia Brooks  
President  
Greenfield Environmental Trust Group, Inc.  
Resources for Responsible Site Management, Inc., Trustee for the Industri-plex Custodial Trust  
Montana Environmental Trust Group LLC, Trustee of the Montana Environmental Custodial Trust  
Greenfield Environmental Multistate Trust LLC, Trustee of the Multistate Environmental Response Trust

Greenfield Environmental Savannah Trust LLC, Trustee of the Savannah Environmental Response Trust  
617-448-9762  
[cb@g-etg.com](mailto:cb@g-etg.com)

**ATTACHMENT I**

**LETTER FROM CUSTODIAL TRUST COUNSEL  
REGARDING PAST, CURRENT, AND FUTURE  
POTENTIAL RESPONSIBLE PARTIES**



May 9, 2016

Cynthia Brooks  
Montana Environmental Trust Group, LLC  
Trustee of the Montana Environmental Custodial Trust  
PO Box 1230  
East Helena, MT 59635

RE: East Helena Public Schools, Dartman Field Reclamation Project  
2016 Reclamation and Development Grants Application to DNRC

Dear Cindy:

I am writing as counsel to the Montana Environmental Trust Group, LLC, Trustee of the Montana Environmental Custodial Trust (the “Custodial Trust”), to document our understanding of the past, current, and future potentially responsible parties (“PRPs”) for contamination at the former Asarco facility in East Helena. It is my understanding that the Custodial Trust requests this letter to support a grant application submitted by the East Helena Public Schools (“EHPS”) to the Montana Department of Natural Resources and Conservation (“DNRC”) Reclamation and Development Grants Program.

In 1888, the Helena and Livingston Smelting and Refining Company began smelting at the site in East Helena. In 1890, United Smelting and Refining Company (“USRC”) acquired the facility. In 1899, USRC merged with several other companies to form the American Smelting and Refining Company (“ASARCO” or “Asarco”). For the next century, Asarco produced lead bullion by smelting concentrates, ores, and fluxes, as well as copper byproducts and food-grade sulfuric acid. In 2001, Asarco ceased smelting operations East Helena. Apparently, because of its inability to finance extensive environmental liabilities throughout the United States, Asarco filed for protection under Chapter 11 of the US Bankruptcy Code with the United States Bankruptcy Court in the Southern District of Texas in 2005.

The United States government and nineteen (19) state governments, including the State of Montana, asserted claims for environmental damage at more than one hundred (100) sites, including thirty eight (38) hazardous waste sites, throughout the United States. For the next four (4) years, the United States (including the US Department of Justice (“USDOJ”), the U.S. Environmental Protection Agency (“EPA”), the U.S. Department of Interior (“DOI”), and the US Department of Agriculture

Cynthia Brooks

RE: East Helena Public Schools, Dartman Field Reclamation Project  
2016 Reclamation and Development Grants Application to DNRC

May 9, 2016

Page 2

("DOA")), nineteen (19) State governments, and the Debtor (Asarco) engaged in extensive negotiations to resolve Asarco's liability. In December of 2009, the Bankruptcy Court approved a plan of reorganization and bankruptcy settlement agreement that was agreed to by the governments and Asarco. As part of the bankruptcy settlement, four (4) environmental custodial trusts, including the Montana Environmental Custodial Trust, were established to cleanup twenty-five (25) Asarco hazardous waste sites in fifteen (15) states. The trustees of the environmental custodial trusts were given responsibility for owning the Asarco waste sites, remediating the sites using the funds specifically earmarked for each site, and effecting the disposition of the former Asarco properties.

The bankruptcy agreements included a 2009 Consent Decree and Settlement Agreement Regarding the Montana Sites (the Montana Settlement Agreement), which was entered into by the USDOJ, USEPA, USDOJ, USDOA, the State of Montana (including the Montana Department of Justice ("MDOJ")), and the Montana Department of Environmental Quality ("MDEQ")), the Debtor (Asarco) and the Custodial Trust. The Montana Environmental Trust Group, LLC is the court-approved Trustee of the Montana Environmental Custodial Trust pursuant to the Montana Settlement Agreement. The Custodial Trust is responsible for remediation and redevelopment of the former Asarco sites in Montana, including the former smelter in East Helena. As the designated Lead Agency, EPA approves all cleanup plans and budgets for the East Helena site. (The Custodial Trust cannot perform any cleanup activities that are not approved by EPA and covered in an EPA-approved budget.) The Custodial Trust is an independent fiduciary whose sole beneficiaries are the US and the State of Montana.

Under the Montana Settlement Agreement, Asarco was fully absolved by the United States and the State of Montana of any past and future liability under federal and state environmental laws, including the Comprehensive Environmental Response, Compensation & Liability Act ("CERCLA") (also known as "Superfund"), the Resource Conservation and Recovery Act ("RCRA"), and parallel state laws. Specifically, the United States, the State of Montana, and the Custodial Trust each covenanted not to sue Asarco for its liabilities under all environmental laws. The United States and the State also granted contribution protection to Asarco and the Custodial Trust against any claims that might be filed against Asarco or the Custodial Trust for contamination at the former Asarco sites. Therefore, notwithstanding that Asarco owned and operated the East Helena smelter for more than one hundred (100) years, under the Montana Settlement Agreement, based on these arrangements, Asarco no longer is considered a potentially responsible party for its Montana sites, including the East Helena facility. Furthermore, although the Custodial Trust succeeded to Asarco's cleanup responsibilities in East Helena for the benefit of the US, the State of Montana, and the citizens of East Helena, it is also not a PRP.

In summary, based upon everything we are aware of, although Asarco was the owner and operator of East Helena and the Custodial Trust is responsible for cleanup of contamination from the Asarco smelter, neither entity is a PRP under state and federal environmental laws. If there are other PRPs, the United States and the State of Montana have not elected to pursue them to date.

Cynthia Brooks

RE: East Helena Public Schools, Dartman Field Reclamation Project  
2016 Reclamation and Development Grants Application to DNRC

May 9, 2016

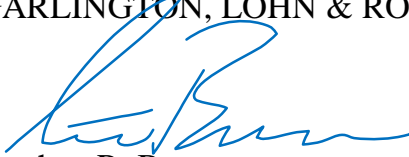
Page 3

Although we cannot advise EHPS as to its CERCLA liability as an owner or developer, we do recommend that it discuss with its counsel the “all appropriate inquiry rules” set forth in 40 CFR Part 312 and parallel Montana rules to potentially establish an innocent landowner defense from liability under CERCLA and Montana law.

Please do not hesitate to contact me, if you or any representative of the EHPS has any questions pertaining to the information set forth in this letter.

Sincerely,

GARLINGTON, LOHN & ROBINSON, PLLP



Stephen R. Brown

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