

Statement of Work
U.S. EPA, Region 8
Eagle Mine Superfund Site
Minturn, Eagle County, Colorado

Purpose

The purpose of this Statement of Work (SOW) is to: 1) conduct a Focused Feasibility Study (FFS) to develop and evaluate additional or enhanced remedial alternatives for the Eagle Mine Superfund Site (Site) to achieve compliance with Applicable or Relevant and Appropriate Requirements (ARARs); 2) identify additional work needed to repair and maintain existing remedial components; and 3) develop updated Environmental Monitoring and Inspection, Operations & Maintenance Plans. CBS shall furnish all necessary personnel, materials, and services needed for, or incidental to, performing the SOW, except as otherwise specified herein. CBS shall conduct the FFS in accordance with the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (U.S. EPA, October 1988).

This SOW has been developed for the Site which was listed on the NPL in 1986. Remedial Action has been on-going at the Site since 1988. In June 2008, the Colorado Water Quality Control Commission adopted new, permanent water quality standards for segments of the Eagle River that are impacted by the Site. In addition, the EPA conducted a 5-Year Review of the Site remedies and determined that, while the remedies implemented at the Site are protective of human health, additional response actions are necessary to achieve complete protection of the aquatic ecosystem. Further reduction in metals loading to the Eagle River is necessary to attain the new water quality standards ARARs. The FFS required under this SOW directs CBS to evaluate remedial alternatives to accomplish the necessary metals load reduction to attain the new water quality standards.

Scope

The specific activities to be conducted at the Eagle Mine Site are segregated into 6 separate tasks.

- Task 1 - Remedial Alternatives Development and Study Plan.
- Task 2 - Detailed Analysis of Alternatives and Draft FFS Report
- Task 3 - FFS Report
- Task 4 - Existing Remedy Repair
- Task 5 - Environmental Monitoring Plan
- Task 6 - Inspection, Operations & Maintenance Plan

Task 1 - Remedial Alternatives Development and Study Plan.

CBS shall prepare a Preliminary List of Alternatives to be considered during the FFS. Each alternative shall have a brief description. The List shall be comprehensive and include potential remedial actions at the Old Tailings Pile (OTP), Rex Flats, the Consolidated Tailings Pile (CTP), Rock Creek and Belden areas. The Preliminary List of Alternatives shall include all options that may have the potential to reduce metals load in the Eagle River.

CBS shall also prepare a Study Plan that shall describe any additional data collection necessary to fully and accurately evaluate the alternatives included on the Preliminary List of Alternatives. The Study Plan shall also include data collection to determine the amount of metals loading resulting from residual soil contamination at the south end of the OTP that produces direct discharge of contaminated water to the Eagle River. CBS shall submit the Preliminary List of Alternatives and Study Plan containing the supporting data collection strategy to EPA and the State for review and approval. The final product from this Task shall be an agency-approved Preliminary List of Alternatives and Study Plan that shall be implemented under Task 2 below.

Task 2 - Detailed Analysis of Alternatives and FFS Report.

CBS shall conduct a detailed analysis of the alternatives from the agency-approved Preliminary List of Alternatives in Task 1. The analysis shall consider all relevant prior-collected data submitted to EPA that exists in the Site File, including but not limited to: information collected by Ginn entities; information from the December 1997 Belden Area Data Report on waste rock pile characteristics; loading data; surface water and groundwater chemical data. CBS shall collect additional data as determined necessary under the agency-approved Study Plan and perform Field Tests/Treatability Studies as needed to determine the suitability of remedial technologies to site conditions and problems. Technologies that may be suitable to the site shall be identified as early as possible to determine whether there is a need to conduct Treatability Studies to better estimate costs and performance capabilities. If Treatability Studies (or Field Tests) are determined necessary by EPA and the State, a Testing Plan shall be submitted to EPA and the State for review and approval identifying: 1) the types and goals of the studies; 2) the level of effort needed 3) a schedule for completion; 4) the data management guidelines; and 5) a detailed description of the test as being proposed.

Upon completion of the testing, CBS shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by CBS and presented in the FFS report. CBS shall implement all management and QC review activities for this task and provide load reduction predictions for each alternative evaluated.

The detailed analysis of alternatives shall consist of 1) an individual analysis of each alternative against a set of evaluation criteria and 2) a comparative analysis of all options against the evaluation criteria with respect to one another. The evaluation criteria are as follows:

Overall Protection of Human Health and the Environment addresses whether or not a remedy provides adequate protection and describes how risks posed through each pathway are eliminated, reduced, or controlled through treatment, engineering controls, or institutional controls.

Compliance with ARARs addresses whether or not a remedy shall meet all of the applicable or relevant and appropriate requirements of other Federal and State environmental statutes and/or provide grounds for invoking a waiver.

Long-Term Effectiveness and Permanence refers to the ability of a remedy to maintain reliable protection of human health and the environment over time once cleanup goals have been met.

Reduction of Toxicity, Mobility, or Volume Through Treatment is the anticipated performance of the treatment technologies a remedy may employ.

Short-Term Effectiveness addresses the period of time needed to achieve protection and any adverse impacts on human health and the environment that may be posed during the construction and implementation period until cleanup goals are achieved.

Implementability is the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement a particular option. Cost includes estimated capital and operation and maintenance costs, and net present worth costs.

State Acceptance addresses the technical or administrative issues and concerns the support agency may have regarding each alternative.

Community Acceptance addresses the issues and concerns the public may have to each of the alternatives.

The individual analysis shall include: (1) a technical description of each alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion that profiles the performance of that alternative with respect to each of the evaluation criteria. CBS shall prepare a table summarizing the results of this analysis.

Once the individual analysis is complete, the alternatives shall be compared and contrasted to one another with respect to each of the evaluation criteria. CBS shall identify the best options for additional metals load reduction based on this comparison. CBS shall then prepare and submit to EPA and the State a draft FFS Report summarizing the analysis conducted in Task 2. Supporting data, information, and calculations shall be included in appendixes to the FFS Report. CBS shall submit the draft FFS for agency review and approval/modification.

Task 3 Final FFS Report.

Once comments on the draft FFS have been received, CBS shall prepare a final FFS report reflecting the comments, as directed by EPA and the State. 15 Copies of the final report shall be made and distributed to those individuals identified by EPA and the State. 10 electronic copies of the report shall also be provided on Compact Disk. Submit final FFS for agency review and approval/modification.

Task 4 Existing Remedy Repair.

CBS shall provide a plan that addresses any elements of the existing remedy that are in need of repair. This plan shall include repair of run-on collection ditches at the Old Tailings Pile (OTP) and the Consolidated Tailings Pile (CTP) as needed and any other elements of the existing remedy that are in need of repair.

Task 5 Environmental Monitoring Plan.

CBS shall provide a revised Environmental Monitoring Plan (EMP) for the site that addresses all necessary monitoring including, mine pool, surface water and ground water and load reduction/control. Review and update as needed the existing/approved Sampling and Analysis Plan (SAP), Field Sampling Plan (FSP), Health and Safety Plan (HSP) and Quality Assurance Project Plan (QAPP) for consistency with current methods and procedures. Update the aforementioned plans as needed for agency review and approval as part of the EMP submittal.

Task 6 Inspection, Operations & Maintenance Plan.

CBS shall provide a detailed Inspection, Operations and Maintenance Plan that details the O&M activities and the periodic inspections of the remedy that shall be performed. Provide detailed As Built Drawings for any remedy element that was installed by CBS with out the submittal of prior as-built drawings.

Schedule

<u>Task</u>	<u>Deliverable</u>	<u>Due Date</u>
1	Alternatives List & Study Plan	January 31, 2009
2	Draft FFS	August 1, 2009
3	Final FFS	December 31, 2009
4	Remedy Repair Plan	June 1, 2009
5	Environmental Monitoring Plan	December 31, 2009
6	O&M Plan	December 31, 2009