Work Plan for Upper Arkansas River Basin Consulting Team

Eleven-Mile Reach, Downstream Survey, and Airshed Survey

The Work Plan for this project includes three components, the Operating Guidelines, described in Section A, the Scope of Work, described in Section B, and a Modification clause described in Section C. For the purposes of this Work Plan, all terms not specifically defined herein are defined as set forth in the Memorandum of Understanding for the Upper Arkansas River Basin ("MOU").

A. Operating Guidelines for the Consulting Team

These Operating Guidelines ("Guidelines") are intended to guide the Consulting Team in conducting activities prescribed by the MOU entered into by the United States, the State of Colorado, ASARCO Incorporated, Newmont Mining Corporation, Resurrection Mining Company, and the Res-ASARCO Joint Venture (collectively, the "Parties") dated and effective April 15, 1999. As described in the MOU, the Consulting Team was formed to provide the Parties with objective and sound scientific input concerning the nature and extent of injuries to natural resources in the Upper Arkansas River Basin for which the Department of the Interior (U.S. Fish and Wildlife, U.S. Bureau of Land Management, and U.S. Bureau of Reclamation) ("DOI"), the Department of Agriculture (U.S. Forest Service), and the State (Colorado Department of Public Health and the Environment, the Department of Natural Resources, and the Attorney General's Office) are trustees, and to identify alternatives for achieving appropriate restoration (restoration includes: restoration, replacement, or acquisition of the equivalent of injured natural resources) of those resources. Input from the Consulting Team is to assist the Parties in reaching a settlement of claims concerning the Upper Arkansas River Basin. The services to be provided by the Consulting Team to the Parties (the "Services") are set forth in greater detail in the Scope of Work in Section B of this Work Plan.

Responsibilities and Obligations/ Conflict of Interest

The Consulting Team is charged with the responsibility of providing sound, objective, scientifically defensible input to the Parties regarding possible injuries to natural resources in the Upper Arkansas River Basin and providing alternatives for restoring such injured resources. The Consulting Team, except as provided in the next paragraph, is to act independently in providing these Services, and neither the Consulting Team nor any member of the Consulting Team is or shall be deemed to be an agent or representative of any of the Parties. Each member of the Consulting Team is to provide input without regard to, and shall not be biased or compromised by, any past, present, or possible future affiliation or arrangement with any of the Parties. Although the Consulting Team shall provide input to the Parties, the State and Federal Trustees are ultimately responsible for assessing injuries and planning restoration pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and the Clean Water Act ("CWA"), and are not delegating these responsibilities to the Consulting Team.

The Consulting Team will not make recommendations to the Trustees. Rather, it will prepare an evaluation of injuries, if any, to natural resources, and identify potential restoration alternatives.

The Parties acknowledge that DOI's representative to the Consulting Team, Andrew Archuleta, shall have dual roles. Mr. Archuleta shall act as a DOI representative in providing guidance to the Consulting Team concerning the natural resource damage and restoration process and shall serve as a scientist member of the Consulting Team. Mr. Archuleta's role does not include interpretation of the MOU except as authorized by the Parties. In general, questions regarding the meaning and application of the MOU will only be discussed in the presence of representatives of each of the MOU Parties, or as otherwise agreed to by the Parties.

Composition

The following individuals comprise the Consulting Team:

Dr. Edward Redente

Dr. Stan Schumm

Dr. Will Clements

Mr. Steve Werner

Mr. Andrew Archuleta

As provided in the MOU, the composition of the Consulting Team may be modified by the Parties upon mutual consent.

The Parties (collectively or individually) and the Consulting Team may recommend, at any time, that additional technical experts be included on the Consulting Team or be retained as advisors to address issues that are beyond the expertise of the Consulting Team. The decision on whether to add individuals to the Consulting Team or to retain the services of individuals to assist the Consulting Team shall be within the sole discretion of the Parties. No individuals shall be added to the Consulting Team or retained to assist the Consulting Team without the mutual consent of the Parties.

Contracting

The contracting mechanism to be used by the Mining Companies shall be a Consulting Agreement ("Agreement"). The Mining Companies shall be responsible for retaining the services of each of the members of the Consulting Team and for managing the administrative aspects of the Agreement. Prior to entering into any Agreement with a member of the Consulting Team, the other Parties shall be given the opportunity to review and comment on the terms and conditions of the initial Agreement and any subsequent amendments thereto. Such Agreements shall not be finalized without mutual consent of the Parties. Monthly billing/progress reports will be distributed to all Parties.

The Parties may establish a Contract Management Team if they decide it is appropriate.

Operation

The Consulting Team shall select one of its members and an alternate to serve as coordinator. The coordinator will be responsible for scheduling, record-keeping and facilitating communications within the Consulting Team and between the Consulting Team and the Parties.

The Consulting Team shall hold, at a minimum, quarterly meetings with the Parties to discuss the status of the Services and to receive input from the Parties. The coordinator of the Consulting Team shall coordinate with all members of the Consulting Team and the Parties in setting the date, time and place of each meeting. Written notice shall, if possible, be provided to the Consulting Team members and the Parties immediately upon establishment of a date, but in no event less than 10 days in advance of the proposed meeting. Any Party or the Consulting Team may call such a meeting upon reasonable written notice to the Parties and the Consulting Team. Data or other information being considered by the Consulting Team shall be identified and discussed

with the Parties during the quarterly meetings. The Consulting Team shall, as reasonably requested by the Parties, participate in briefings for non-Party individuals or groups.

The members of the Consulting Team (and any individuals retained to assist the Consulting Team pursuant to these Guidelines) shall be subject to and shall conduct their activities in accordance with the Confidentiality Order. Each member of the Consulting Team (and any individuals retained to assist the Consulting Team) shall carefully and fully review the terms and conditions of the Confidentiality Order and abide by its terms and conditions.

To the extent practicable, the Consulting Team will report to all Parties at the same time. This provision shall govern the reporting of all documents, data, observations, and recommendations. If one or more of the Parties cannot be present at a meeting among the Consulting Team and the Parties, the coordinator of the Consulting Team shall advise them of discussions conducted at the meeting. The Consulting Team members are not to have *ex parte* communications with the Parties concerning scientific or technical issues. If the Consulting Team coordinator receives information from one Party that has not been distributed to the other Parties, he will notify the other Parties that the information is available and shall provide the information to them upon request.

B. Scope of Work

This portion of the Work Plan establishes the Scope of Work ("SOW") for the functioning of the Consulting Team, pursuant to the Memorandum of Understanding ("MOU") entered into by the United States, the State of Colorado, ASARCO Incorporated, Resurrection Mining Company, Newmont Mining Corporation and the Res-ASARCO Joint Venture (collectively the "MOU Parties") dated and effective April 15, 1999, in the identification and restoration of natural resources in the Upper Arkansas River Basin which may have been injured as a result of past and current releases of hazardous substances related to historic mining activities in the Leadville area. This SOW lists objectives and tasks to be accomplished by the Consulting Team.

This SOW addresses three activities: (1) a study of the Eleven-Mile Reach, (2) a literature review of information concerning the Arkansas River downstream of the Eleven-Mile Reach, and (3) a literature review of information concerning the Airshed that may have been impacted by ASARCO smelter stack emission and subsequent deposition. The above activities will be the initial focus of the Consulting Team's evaluation with particular priority on the Eleven-Mile Reach. The Parties may request that the Consulting Team address other issues related to releases of hazardous substances to facilitate resolution of potential claims.

Study of the Eleven-Mile Reach

The Eleven-Mile Reach of the Arkansas River may have been affected by releases of hazardous substances resulting from mining activities in the Leadville Mining District. The reach includes Operable Unit 11 of the California Gulch Superfund Site, which is the stretch of the Arkansas River from the confluence with California Gulch downstream to the confluence with Lake Fork. The objectives of the Eleven-Mile Reach study are: (1) to evaluate the nature and extent of any injuries to natural resources in the Eleven Mile Reach resulting from past and current releases of hazardous substances from mining related activities in the Leadville area, and (2) to develop alternatives for addressing any identified injuries, including identification of specific restoration projects or response actions.

The Upper Arkansas River and California Gulch have been studied extensively. The Consulting Team shall consider pertinent available information, including the results of investigations currently being conducted on behalf of EPA. In developing restoration alternatives, the Consulting Team shall consider ongoing and proposed

activities in the Upper Arkansas River Basin to ensure against duplicative, inconsistent, or counter-productive activities.

Task List for the Eleven-Mile Reach Study

The following tasks will be completed by the Consulting Team to achieve the objectives of the study of the Eleven-Mile Reach:

- 1. Review the regulations concerning natural resource damages at 43 C.F.R. Part 11 as background information for the types of natural resources and injuries that should be considered in this study.
- 2. Identify and review pertinent available information, including investigations currently being conducted.
- 3. Conduct site reconnaissance.
- 4. Identify significant data gaps, if any.
- 5. Develop and propose a plan to obtain any additional data needed. The proposed plan will provide: (1) a listing of available information, (2) a description of the findings of the site reconnaissance, (3) a description of additional data needed and justification for the additional data, and (4) a plan for acquisition of the additional data and projected associated costs.
- 6. Implement the data acquisition plan, subject to approval by the parties.
- 7. Evaluate the data and produce a Site Characterization Summary that: (1) describes the nature and extent of contamination, (2) provides mapping of areas affected by mine waste, (3) describes injuries to natural resources, (4) identifies potential contaminant pathways, and (5) defines areas where restoration is needed to obtain a healthy, functioning ecosystem and mitigate exposure pathways. The Summary will also include an index or bibliography of all documents/data reviewed and a discussion of uncertainties and minority views, if any, concerning the items identified in this paragraph 7.

Following the submittal of the Site Characterization Summary and after consultation with the MOU Parties, the Consulting Team will develop and evaluate alternatives for restoration within the Eleven-Mile Reach, including the identification of specific restoration projects or actions. The following tasks will be completed:

- 1. Develop a range of restoration alternatives which will effectively restore injured resources.
- 2. Evaluate the restoration alternatives based on technical feasibility, the relationship of the expected costs of the proposed actions to the expected benefits from the restoration, cost effectiveness (as defined in 43 CFR 11), potential for additional injury resulting from the proposed actions, the results of any proposed or planned response actions, the natural recovery period, and the ability of the resources to recover with or without alternative actions.
- 3. Develop alternatives for the coordination and sequencing of the implementation of potential restoration actions.

- 4. Produce a Restoration Alternatives Analysis Report which describes Tasks 1-3 above. This Report will also include minority views of the Consulting Team, if any.
- 5. Respond to questions and issues raised by the Parties concerning the final Restoration Alternatives Analysis Report.

Study of the Upper Arkansas River Basin Downstream of the Eleven-Mile Reach

The Consulting Team shall conduct a literature review regarding potential injuries to natural resources in that portion of the Upper Arkansas River Basin downstream from the Eleven-Mile Reach, to and including Pueblo Reservoir (the Downstream Area), caused by the release of hazardous substances from mining related activities. The purpose of the literature review is to determine the nature and extent of information available for evaluating potential natural resource injury. The Consulting Team will determine the need for additional information as appropriate and the type, amount and cost of acquisition of such needed information. The results of this study/literature review will be included in the Site Characterization Summary.

Airshed Survey

The Consulting Team shall conduct a literature review regarding potential injuries to natural resources in the Upper Arkansas River Basin resulting from the release of hazardous substances through ASARCO smelter stack emissions and subsequent deposition in the surrounding area (the "Airshed"). The purpose of the literature review is to determine the nature and extent of information available for evaluating potential natural resource injury. The Consulting Team will determine the need for additional information as appropriate and the type, amount and cost of acquisition of such needed information. The results of this study/literature review will be included in the Site Characterization Summary.

Consulting Team Interaction with the Parties

At a minimum, quarterly meetings among the parties and the Consulting Team will be held. At these meetings, the Consulting Team will provide a summary of all activities undertaken and planned. The Consulting Team may recommend changes to the schedule at these meetings. If the Parties determine that additional data acquisition is needed, the Consulting Team will propose a work plan to guide the data acquisition process. The Consulting Team will produce two reports that document the results of their work, a Site Characterization Summary, and a Restoration Alternative Analysis report. All documents will be issued in draft form to the parties for their review and comments. Comments will be addressed by the Consulting Team and final versions of the documents will be issued.

C. Modifications

This Work Plan may be modified only upon the concurrence of the Parties.

The following is a tentative schedule of the Consulting Team's activities and deliverables:

Activities/Deliverable	Completion Schedule
	(effective as of 7/15/99)
Conduct site reconnaissance	October 15, 1999
Conduct literature review of the Eleven-Mile Reach, Downstream Area, and the Airshed (w/ complete bibliography or index)	October 15, 1999
Issue draft plan for data acquisition (if required)	November 1, 1999
Receive comments from Parties on draft plan for data acquisition (if required)	November 15, 1999
Issue final plan for data acquisition (if required)	December 1, 1999
Conduct additional data acquisition (if required)	when feasible
Issue outline for Site Characterization Summary	January 1, 2000
Receive comments from Parties on outline for Site Characterization Summary	January 15, 2000
Issue draft Site Characterization Summary	February 15, 2000
Receive comments from Parties on draft Site Characterization Summary	March 1, 2000
Issue final Site Characterization Summary	April 1, 2000
Issue outline for Restoration Alternatives Analysis Report	April 15, 2000

Receive comments from Parties on outline for Restoration Alternative Analysis Report	May 1, 2000
Issue draft Restoration Alternatives Analysis Report	May 15, 2000
Receive comments from Parties on draft Restoration Alternatives Analysis Report	June 15, 2000
Issue final Restoration Alternatives Analysis Report	July 15, 2000