

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE - REGION 6

IN THE MATTER OF:)
)
)

AZURITE MINE SITE)
)

Wenatchee-Okanogan National Forest,)
Washington)
)

ASARCO LLC)
)
)
)

RESPONDENT)
)
)

Proceeding Under Sections 104, 107, 122(a))
and 122(d)(3) of the Comprehensive)
Environmental Response, Compensation)
and Liability Act as amended (42 U.S.C.)
§§ 9604, 9607, 9622(a) and 9622(d)(3)).)
_____)

ADMINISTRATIVE ORDER ON CONSENT
FOR AN ENGINEERING EVALUATION/COST ANALYSIS

Azurite Mine Site
Administrative Order on Consent
May 2005

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I. INTRODUCTION AND STATEMENT OF OBJECTIVES

1. This Administrative Order on Consent ("AOC") is entered into voluntarily by the United States Department of Agriculture Forest Service ("Forest Service") and ASARCO LLC, successor to ASARCO Incorporated ("Asarco" or "Respondent"), as a Respondent, for performance by Respondent of an Engineering Evaluation/Cost Analysis ("EE/CA") pursuant to 40 C.F.R. § 300.415 of the National Oil and Hazardous Substance Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"), at the Azurite Mine Site (the "Site"), and for recovery of certain costs incurred by the United States Department of Agriculture, as further defined in this AOC.

2. The objectives of this AOC are for Respondent to conduct an EE/CA, including a risk assessment to support the establishment of cleanup standards, to determine and evaluate removal action requirements and alternatives designed to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances at the Site in accordance with the NCP, 40 C.F.R. § 300.415, and to reimburse the United States Department of Agriculture for Future Response Costs incurred in connection with the Site, as set forth in Section XVIII of this AOC.

3. All activities conducted under this AOC are subject to the approval of the Forest Service. Respondent shall provide all appropriate and necessary information for an EE/CA that is consistent with CERCLA and the NCP. The activities conducted under this AOC shall be conducted in compliance with all applicable EPA and/or Forest Service guidance documents identified in this AOC.

II. JURISDICTION AND COORDINATION OF AGENCY OVERSIGHT

4. This AOC is entered into under the authority vested in the President of the United States by Sections 104, 107, 122(a) and 122(d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. §§ 9604, 9607, 9622(a) and 9622(d)(3). This authority was delegated to the Secretary of the Department of Agriculture (the "Secretary") by Executive Order 12580, 52 Fed. Reg. 2923-26 (January 23, 1987), 3 C.F.R., 1987 Compilation, p. 193. The Secretary's authority was further delegated to the Chief of the Forest Service (the "Chief") by 7 C.F.R. § 2.60(a)(39). The Chief's authority was re-delegated to Regional Foresters, pursuant to the Forest Service Manual 2164.04c, 2.1, effective November 10, 1994.

5. By signing this Order, Respondent consents to the Forest Service's jurisdiction to issue this AOC and agrees to comply with and be bound by the terms and conditions of this AOC. In any action by the United States to enforce the terms of this AOC, Respondent consents to and agrees not to contest the authority and jurisdiction of the Forest Service to issue and enforce this AOC. Respondent further agrees not to contest the validity of this AOC or its terms.

6. By providing a copy of this AOC to the State of Washington ("State") and the Environmental Protection Agency ("EPA"), the Forest Service has notified the State and EPA that this AOC is being issued and that the Forest Service will act as the lead federal agency for the purpose of overseeing Respondent's Work pursuant to this AOC.

III. PARTIES BOUND

7. This AOC shall apply to, and be binding upon, Respondent and its agents, successors, and assigns. The signatories to the AOC certify that they are authorized to execute and legally bind the parties they represent to this AOC.

8. Respondent shall provide a copy of this AOC to each contractor, subcontractor, laboratory and consultant retained to perform work under the AOC and shall condition its contracts on compliance with the terms of the AOC. Notwithstanding the provisions of any such contract, however, Respondent is, and shall remain, responsible for compliance with this AOC.

IV. DEFINITIONS

"Action Memorandum" shall mean the decision document to be issued by the Forest Service that will select the removal alternative for the Site.

"AOC" shall mean this Administrative Order on Consent and all attachments. In the event of conflict between this AOC and any attachment, this AOC shall control.

"Asarco" and "ASARCO LLC" shall mean the Delaware limited liability company of that name, successor to ASARCO Incorporated, which was formerly known as American Smelting and Refining Company.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation & Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

"Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any

period of time under this AOC, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

"EE/CA" shall mean an engineering evaluation/cost analysis of removal alternatives in accordance with EPA's Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, OSWER Directive No. 9360.0-32, August 1993, EPA's Risk Assessment Guidance for Superfund Volume I-Human Health Evaluation Manual Part (A), EPA's Risk Assessment Guidance for Superfund Volume II - Environmental Evaluation Manual, EPA's Supplemental Ecological Risk Assessment Guidance for Superfund, and State of Washington Ecological and Human Health risk assessment regulations.

"Effective date of this AOC" shall mean the date the AOC has been executed by Respondent and the Forest Service and written concurrence has been issued by the United States Department of Justice.

"EPA" shall mean the United States Environmental Protection Agency.

"Forest Service" shall mean the United States Department of Agriculture Forest Service.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and amendments thereto.

"NFS lands" shall mean National Forest System lands within the Site that are under the custody, jurisdiction and control of the Forest Service.

"Site" shall mean the Azurite Mine Site, which is located in Whatcom County, Washington, in portions of Section 30, T37N, R17E, of the Willamette Meridian. The Site includes NFS lands within the exterior boundaries of the Mt. Baker-Snoqualmie National Forest. The Site is further described in paragraph 10 of this AOC.

"Statement of Work" or "SOW" shall mean the document that outlines the Work to be performed by Respondent to conduct the EE/CA and satisfy the requirements of this AOC. The SOW is attached to this AOC as Attachment 1.

"USDA" shall mean the United States Department of Agriculture.

"WA DOE" shall mean the State of Washington Department of Ecology.

"Work" shall mean all tasks Respondent is required to perform pursuant to this AOC.

V. FINDINGS OF FACT

9. The following findings of fact and conclusions of law are set forth solely for the purpose of establishing jurisdiction for this AOC. Respondent does not admit any finding of fact or conclusion of law stated herein. Moreover, Respondent expressly reserves its rights to contest the admissibility of any finding of fact or conclusion of law stated herein for any purpose other than establishing the Forest Service's jurisdiction in this matter.

10. The Site sits at an elevation of approximately 4320 - 5140 feet. The Site includes the former mill site, mine waste piles and tailings on NFS lands. For the purposes of this AOC, the Site encompasses NFS lands only. A map and aerial photo of the Site are attached as Attachment 2 to this AOC.

11. The Azurite Mine deposit was located in 1916. Less than 1200 tons of ore was shipped from the Site before Asarco leased the Site in 1934. Asarco constructed a mill and other facilities at the Site. Before it relinquished the lease in 1940, Asarco mined and milled 72,700 tons of ore at the Site.

12. During its operations Asarco disposed of tailings and waste rock at the site. The tailings are not confined by any structure and have migrated downslope toward and into a channel of Mill Creek.

13. There is a current release, and a significant threat of additional releases, of hazardous substances, including but not limited to, arsenic, copper and lead from mine wastes at, and from, the Site to adjacent federal lands, Mill Creek, and other surface water and ground water.

14. The State of Washington (the "State") has conducted sampling activities at the Site, as summarized in a Washington State Department of Natural Resources August 2002 Open File Report 2002-3 entitled "Inactive and Abandoned Mine Lands - Azurite Mine, Whatcom County, Washington."

15. Pursuant to CERCLA, and the CERCLA authorities that have been delegated to the Forest Service, the Forest Service shall be the lead agency for response actions on NFS portions of the Site. The Forest Service has incurred, and continues to incur, response costs associated with the Site.

VI. CONCLUSIONS OF LAW

16. Based on the Findings of Fact set forth above, the Forest Service makes the following Conclusions of Law:

- a. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. There are hazardous substances, as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), pollutants, or contaminants present at the Site including, but not limited to, arsenic, copper and lead.
- c. The presence of hazardous substances at the Site or the past, present or potential migration of hazardous substances currently located at or emanating from the Site, constitute actual and/or threatened "releases," as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- d. Respondent is a "person," as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- e. Respondent may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), as a person who is either a current owner or operator of the Site, a person who at the time of disposal of any hazardous substance owned or operated the Site, a person who arranged for disposal of hazardous substances at the Site, or as a person who transported hazardous substances to the Site.

f. The conditions present at the Site constitute a threat to the public health, welfare or the environment based upon the criteria for a removal action as stated in the National Contingency Plan ("NCP"), 40 C.F.R. § 300.415(b), including, but not limited to, high levels of hazardous substances or pollutants in soils, and surface and ground waters, that may migrate.

g. The response actions required by this AOC are necessary to protect the environment, are in the public interest, are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1) and 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

h. Based on information currently available, the Forest Service has determined, for purposes of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), that Respondent is qualified to properly and promptly perform the EE/CA required by this AOC.

i. The response actions performed by the Forest Service to date have been conducted in a manner not inconsistent with the NCP, 40 C.F.R. Part 300, and the costs incurred in connection with these response actions are recoverable under Sections 107(a) of CERCLA, 42 U.S.C. § 9607(a).

VII. ON-SCENE COORDINATOR/PROJECT COORDINATOR

17. The Forest Service has designated Cheryl Woodall as its On-Scene Coordinator ("OSC"). Within five (5) days of the effective date of this AOC, Respondent shall designate a Project Coordinator for the Site. Each Coordinator or Project Manager shall be responsible for overseeing implementation of the work and/or activities required under this AOC for his/her

agency or organization. All written communications between the parties concerning implementation of this AOC shall be directed to the Forest Service's On-Scene Coordinator, or Respondent's Project Coordinator, by regular or overnight mail, electronically or by facsimile, with copies to such other persons as the Forest Service and Respondent, respectively, may reasonably designate. The parties may change their respective OSC/Project Manager/Project Coordinator and shall notify each other in writing at least five (5) days prior to any such change.

18. Deliverables and other written communications submitted under this AOC shall be sent in hard copy form to the following persons:

For the Forest Service:

Cheryl Woodall - 5 copies
Gifford Pinchot National Forest
10600 NE 51st Circle
Vancouver, WA 98682
PHONE: 360-891-5168
FAX: 360-891-5045
EMAIL: cawoodall@fs.fed.us

Richard Sawaya - 1 copy
Environmental Engineering Group Leader
USDA – Forest Service Region 6
333 SW 1st Avenue
PO Box 3623
Portland, OR 97208-3623
PHONE: 503-808-2260
FAX: 503-808-2511
EMAIL: dsawaya@fs.fed.us

and

James Alexander - 1 copy
USDA Office of the General Counsel
Room 1734 Federal Building
1220 SW 3rd Avenue
Portland, OR 97204
PHONE: 503-326-7264
FAX: 503-326-3807
EMAIL: james.alexander@usda.gov

For the State of Washington:

Rick Roeder
Washington Department of Ecology
Central Regional Office
15 W. Yakima Avenue, Suite 200
Yakima, WA 98902-3401
PHONE: 509-454-7837
FAX: 509-454-4339
EMAIL: rroe461@ecy.wa.gov

For ASARCO:

J. Chris Pfahl
Site Manager
ASARCO LLC
Mail: P.O. Box 440
Wallace, ID 83873
Express: 59148 Silver Valley Road
Osburn, ID 83849
PHONE: (208) 753-4321
FAX: (208) 752-6151
EMAIL: jcpfahl@asarco.com

and

Scott Thomas
Associate General Counsel
ASARCO LLC
2575 Camelback Road, Suite 550
Phoenix, AZ 85016
PHONE: (602) 977-6517
FAX: (602) 977-6706
EMAIL: sthomas@asarco.com

19. The Forest Service's OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any work required by this AOC on NFS lands or to take any necessary response action to abate conditions at the Site that may present an imminent and substantial endangerment to the public health, welfare or the environment. The absence of the Forest Service's OSC from the Site shall not be cause for stoppage or delay or work required pursuant to this AOC.

VIII. WORK TO BE PERFORMED

20. Respondent shall prepare, perform and submit to the Forest Service for review and approval an Engineering Evaluation/Cost Analysis ("EE/CA") in accordance with EPA's Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA, OSWER Directive No. 9360.0-32, August 1993; EPA's Risk Assessment Guidance for Superfund Volume I-Human Health Evaluation Manual Part (A), EPA's Risk Assessment Guidance for Superfund Volume II - Environmental Evaluation Manual, EPA's Supplemental Ecological Risk Assessment Guidance for Superfund, and State of Washington Ecological and Human Health risk assessment regulations; and in accordance with the SOW attached hereto as Attachment 1. The general objective of the EE/CA is to determine and evaluate removal action requirements

and alternatives designed to prevent, mitigate, or otherwise respond to or remedy any releases, or threats of releases, of hazardous substances at, or from, the Site in accordance with the NCP, 40 C.F.R. § 300.415. Respondent shall perform the EE/CA in accordance with the SOW. The EE/CA shall include, but is not limited to, the following:

- a. An identification of removal action objectives, as more specifically set forth in the SOW and OSWER Directive 9360.0-32;
- b. An identification and comparative analysis of removal action alternatives, including an analysis of their effectiveness in terms of responding to risks to human health and the environment posed by current conditions at the Site, ability to meet applicable or relevant and appropriate requirements (ARAR's), cost, and ability to be implemented, as more specifically set forth in the SOW and OSWER Directive 9360.0-32;
- c. A recommended removal action alternative based upon the comparative analysis described in subparagraph b., above;
- d. A compilation of applicable or relevant and appropriate requirements ("ARARs") as set forth by the NCP at 40 C.F.R. § 300.415(j), and
- e. Sufficient information so that the EE/CA can serve as an informal consultation for the purposes of Section 7 of the Endangered Species Act, 16 U.S.C. § 1536 .

21. All Work performed in connection with the preparation of the EE/CA shall be conducted under the direction and supervision of qualified personnel with experience in CERCLA investigations and response actions. Respondent shall notify the Forest Service of

Respondent's qualifications or the names and qualifications of all personnel, contractors or subcontractors retained by Respondent to perform the Work required under this AOC. The Forest Service retains the right to disapprove of any, or all, of the contractors or subcontractors retained by Respondent, or of Respondent's choice of itself to perform the Work. Respondent shall assure that it or any contractor or subcontractor retained by Respondent maintains for the duration of this AOC comprehensive general liability insurance and automobile insurance with limits of at least one million dollars, combined single limit.

22. All samples analyzed as part of the EE/CA shall be analyzed by a laboratory that participates in a quality assurance/quality control program equivalent to that specified in the documents entitled "USEPA Contract Laboratory Program Statement of Work for Organic Analysis" (October 1986) and "USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis" (July 1995) (hereinafter "Contract Lab Statements of Work").

23. All Work performed pursuant to this AOC, including all sample collection and analysis, shall be conducted in accordance with CERCLA, the NCP, and applicable agency guidance documents. Applicable guidance documents include, but are not limited to the following EPA guidances: Contract Lab Statements of Work; "NEIC Manual for Groundwater/Subsurface Investigations at Hazardous Waste Sites," Document No. EPA/330/9-81-002; "Removal Program Representative Sampling Guidance, Volume 1-Soil", EPA 540/G-90/004 (Nov. 1991); and "EPA Guidance for Quality Assurance Project Plans," EPA QA/G-5 (EPA/600/R-98/018, February 1998).

24. During performance of the Work required under this AOC, Respondent shall provide the Forest Service and the State with data and deliverables as described below and/or in the SOW.

25. Upon the Forest Service OSC's request, Respondent shall provide the Forest Service with non-validated data analysis within 30 days after analysis.

26. The documents required to be submitted for approval pursuant to this AOC shall be known as "deliverables." For the purposes of this AOC, the deliverables include a Sampling and Analysis Plan, a Health and Safety Plan, and a Final EE/CA Report. These deliverables are described more fully below:

a. Sampling and Analysis Plan. Respondent shall submit a Sampling and Analysis Plan ("SAP"), that will include procedures for collecting, transporting and analyzing all samples collected at the Site that are consistent with the SOW, as well as procedures for quality assurance/quality control ("QA/QC"). The SAP shall incorporate the provisions of paragraphs 22 and 23 of this AOC and shall be consistent with 40 C.F.R. § 300.415(b)(4)(ii); and EPA's guidance entitled "EPA Guidance for Quality Assurance Project Plans," EPA QA/G-5 (EPA/600/R-98/018, February 1998). The SAP shall identify laboratories and data quality assurance organizations to be used during performance of the EE/CA.

b. Health and Safety Plan. Respondent shall submit a Health and Safety Plan consistent with the NCP, any applicable state regulations, and EPA's current Standard Operating Safety Guide.

c. Final EE/CA Report. Respondent shall submit a report documenting implementation of the SOW, including modifications approved by the Forest Service as provided herein, if any, made during such implementation. The final report shall contain a detailed analysis of removal alternatives, as described in the SOW and this AOC.

27. Respondent shall submit the deliverables required by this AOC to the Forest Service and WA DOE in accordance with the schedule included in Appendix A of the SOW. All deliverables shall be submitted initially by Respondent in draft and are subject to review, comment, and approval by the Forest Service. Respondent shall amend and submit all revised deliverables to the Forest Service and the State in a redline format that responds substantively to all the Forest Service's comments and corrects all deficiencies identified by the Forest Service and according to the schedule provided in Appendix A of the SOW. It is anticipated that some deliverables may require more than one set of revisions. Deliverables may be modified, if necessary, only upon the approval of the Forest Service. In the event Respondent amends or revises a report, plan or other deliverable upon receipt of the Forest Service's comments, if subsequent deliverables do not fully reflect the Forest Service's directions for change and the Forest Service disapproves the revised deliverable, then the Forest Service retains the right to seek stipulated or statutory penalties pursuant to Section 109 of CERCLA, 42 U.S.C. § 9609, and Section XIX of this AOC, perform its own studies, complete the Work itself (or any portion of the Work) under CERCLA and the NCP, and seek reimbursement from Respondent for its costs, and/or seek any other appropriate relief.

28. Respondent shall not implement the actions described in each deliverable until receiving Forest Service approval of each such deliverable. Moreover, all Work performed pursuant to this AOC shall be in accordance with approved deliverables. Neither a failure of the Forest Service to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by the Forest Service.

29. The Forest Service reserves the right to stop work from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during performance of the Work required under this AOC if Respondent fails to comply materially with the terms of this AOC, or as otherwise provided herein.

30. If the Forest Service performs any of the Work required under this AOC pursuant to Section X of the AOC, or as otherwise provided herein, Respondent shall incorporate or integrate the results of such work into any appropriate report or deliverable required pursuant to this AOC.

31. The Forest Service will prepare a Community Relations Plan in accordance with applicable EPA guidances(s) and the NCP. To the extent requested by the Forest Service, Respondent shall provide information and otherwise cooperate with the Forest Service in support of the Community Relations Plan.

IX. EMERGENCY RESPONSE AND NOTIFICATION

32. In the event of conditions posing an immediate threat to human health, welfare or the environment, Respondent shall immediately notify the Forest Service's OSC by telephone

within 24 hours of discovery of the threat. In the event that the Forest Service determines that the immediate threat warrants changes to the SOW, the Forest Service shall modify or amend, in writing, the SOW as appropriate. Respondent shall implement the SOW as modified or amended. Any determination by the Forest Service that an immediate response at the Site is required shall not be subject to the dispute resolution provisions of this AOC.

33. Nothing in the preceding paragraph shall be deemed to limit any authority of any agency of the United States, including the Forest Service or EPA, to take, direct, or order all appropriate action to protect human health, welfare or the environment.

X. ADDITIONAL INVESTIGATION AND ANALYSIS

34. If the Forest Service determines that additional work is required to meet the objectives of this AOC, it may notify Respondent in writing of its determination and specify any changes to the SOW or any other deliverable required to implement the additional work. Within ten (10) days of receipt of the Forest Service's determination that additional work is required, Respondent shall advise the Forest Service in writing whether it will perform the additional work. In the event that Respondent does not agree to perform the additional work, the Forest Service may complete the work itself and seek reimbursement from the Respondent for its costs, and/or seek any other appropriate relief. If Respondent agrees to perform the additional work, within fifteen (15) calendar days of its notice of agreement to the Forest Service, Respondent shall submit to the Forest Service a revised SOW or other appropriate deliverable describing and providing a schedule for performance of the additional work. If the Forest Service and

Respondent agree in writing to the revisions to the SOW and/or the new deliverable, the revised SOW and/or the new deliverable shall become an attachment to this AOC and incorporated herein. Respondent shall perform all agreed upon additional tasks, including providing any additional analytical results and reports as requested by the Forest Service in accordance with the standards, specifications, and schedules determined or approved by the Forest Service.

Respondent shall have the right to invoke the dispute resolution provisions of Section XVI of this AOC in the event that it does not agree that the additional work requested by the Forest Service is required to meet the objectives of this AOC.

XI. ADMINISTRATIVE RECORD AND PUBLIC COMMENT

35. The Forest Service retains the responsibility for releasing to the public the final EE/CA Report and any decision documents for the Site. The Forest Service will, after providing opportunity for public comment on the final EE/CA Report, in accordance with 40 C.F.R. §§ 300.415 and 300.820, select the removal alternative that the Forest Service determines is appropriate for the Site. The Forest Service's selection of the removal action shall not be subject to the dispute resolution procedures of this AOC.

36. Respondent shall submit to the Forest Service, upon submission of the draft EE/CA Report, any documents developed during the course of the EE/CA or utilized in the preparation of the EE/CA. Documents developed during performance of the EE/CA that Respondent shall submit to the Forest Service include, but are not limited to, copies of plans, task memoranda, documentation of field modifications, recommendations for further action, cost methodologies

and assumptions used to develop the ranges of alternatives (including any information related to assessment of risk), quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports required pursuant to this AOC. Respondent shall also submit any correspondence between Respondent and state, local, or other federal authorities concerning the performance of the EE/CA or the selection of the removal action for the Site.

37. Respondent agrees to make presentations at, and participate in, meetings at the request of the Forest Service during the initiation, conduct, and completion of the EE/CA. In addition to discussion of technical aspects of the EE/CA, topics include anticipated problems or new issues. Meetings may be scheduled at the Forest Service's discretion. If it requests the participation of the Respondent at any meeting, the Forest Service shall make reasonable efforts to schedule any such meeting at a time when a representative of the Respondent can be available.

38. In accordance with 40 C.F.R. §§ 300.800-825, the Forest Service will determine the contents and location(s) of the administrative record for response actions selected for the Site.

XII. ACCESS

39. Pursuant to the terms and conditions of this AOC, Respondent and its authorized representatives are authorized by the Forest Service to have access to those parts of the Site that are under the custody, control and jurisdiction of the Forest Service solely for the purpose of implementing the terms of this AOC. If, to perform the work required by this AOC, access is needed to any area or land not under the custody, control and jurisdiction of the Forest Service, Respondent shall use best efforts to secure access for itself and its authorized representatives, as

well as for the Forest Service, EPA and the State, and their authorized representatives and contractors. Such agreements shall specify that Respondent is not EPA's, the State's or the Forest Service's representative with respect to liability associated with Site activities; copies of such agreements shall be provided to the Forest Service prior to Respondent's initiation of field activities. Respondent shall immediately notify the Forest Service if after using its best efforts, it is unable to obtain such access agreements. Respondent shall describe in writing its efforts to obtain access. The Forest Service may obtain access for the Respondent, perform those tasks or activities with Forest Service contractors, or terminate the AOC in the event that Respondent cannot obtain access. In the event that the Forest Service performs those tasks or activities with its contractors and does not terminate the AOC, Respondent shall perform all other activities not requiring access, and shall reimburse the Forest Service for all costs incurred in performing such activities. Respondent additionally shall integrate the results of any such tasks undertaken by the Forest Service into its reports and deliverables. Respondent shall also reimburse USDA and/or the Forest Service for all costs and attorney's fees incurred by or on behalf of the Forest Service in obtaining access for the Respondent. Nothing herein shall be interpreted as limiting or affecting either EPA's or the Forest Service's right of entry or inspection authority under federal law. All parties with access to the Site under this paragraph shall comply with all approved health and safety plans.

XIII. SAMPLING AND DATA AVAILABILITY

40. At the request of the Forest Service, Respondent shall allow split or duplicate samples to be taken of any samples collected by them in the course of implementing this AOC. All split samples taken by Respondent shall be analyzed by methods required in the SAP.

41. Respondent waives objections to the validity and admissibility of data generated in the course of performance of work under this AOC if such data has been validated in accordance with the QA/QC procedures set forth in the SAP.

42. Respondent agrees not to assert any business confidentiality claim, or attorney client or attorney work product privilege, with respect to any data or other information relating to conditions at or resulting from releases at the Site generated in the course of the performance of the Work pursuant to this AOC. Respondent may assert a claim of business confidentiality covering any other type of information generated pursuant to the requirements of this AOC, provided such claim is consistent with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). Any such claim shall be asserted in the manner described in 40 C.F.R. § 2.203(b) and substantiated at the time the claim is made. Information determined to be confidential by the Forest Service will be given the protection specified in 7 C.F.R. § 1.12. If no such claim accompanies the information when it is submitted to the Forest Service, it may be made available to the public by the Forest Service without further notice to Respondent.

43. In the event Respondent decides to withhold any document or information otherwise required to be disclosed by the provisions of this AOC on the basis of a claim of privilege, it

shall inform the Forest Service of that decision and provide the Forest Service with the date, author, recipient(s), title, and description of the document or information withheld. Respondent shall also identify which privilege it asserts applies to the document or information withheld and explain the basis for its assertion. The Forest Service may at any time challenge Respondent's claim of privilege.

XIV. COMPLIANCE WITH OTHER APPLICABLE LAWS

44. All actions required to be taken pursuant to this AOC shall be performed in accordance with the requirements of all applicable local, state and federal laws and regulations except as provided in CERCLA Section 121(e), 42 U.S.C. § 9621(e), and 40 C.F.R. § 300.415(i).

XV. RECORD PRESERVATION

45. The original or one copy of all records and documents, excluding internal drafts of deliverables, in the possession, custody or control of Respondent that are generated or collected pursuant to this AOC shall be preserved for ten years following completion of the work required by this Order. At the end of this ten year period and 30 days before any document or information is destroyed, Respondent shall notify the Forest Service in writing that such documents or information may be destroyed and, upon request, shall provide the originals or copies of such documents and information to the Forest Service.

XVI. DISPUTE RESOLUTION

46. The dispute resolution procedures in this Section are the exclusive mechanism for resolving disputes arising under this AOC. This section applies only to disputes arising between

Respondent and the Forest Service. A dispute shall be considered to have arisen when Respondent sends the Forest Service a written Notice of Dispute.

47. In the first instance, the parties shall attempt to resolve any dispute arising under this AOC by informal negotiations. The period for informal negotiations shall not exceed fifteen (15) days from the date of receipt of the Notice of Dispute, unless the parties agree in writing to modify the period for informal negotiations. If the parties fail to resolve the dispute informally, the formal dispute resolution procedure in the following paragraphs shall apply.

48. In the event the parties cannot resolve the dispute through informal negotiations, then the Forest Service's position shall be binding unless, within seven (7) days after the conclusion of the informal negotiations period, Respondent invokes the formal dispute resolution procedures of this section by serving on the Forest Service a written Statement of Position on the matter in dispute. Respondent's written Statement of Position shall be sent by facsimile, overnight mail or some equivalent service or electronically and shall define the dispute and state the basis of Respondent's objections to the Forest Service's position.

49. Following receipt of Respondent's Statement of Position, the Forest Service shall promptly provide the Regional Forester, Forest Service Region 6, with a copy of Respondent's Statement of Position and a written response to Respondent's Statement of Position. A copy of the Forest Service's response shall be simultaneously sent to Respondent by facsimile and/or overnight mail or some equivalent service.

50. Following receipt of Respondent's Statement of Position and the Forest Service's response, the Regional Forester or his/her designee, shall make a final written determination resolving the matter in dispute. No Forest Service decision made pursuant to this section shall constitute a final agency action giving rise to judicial review.

51. Respondent shall proceed in accordance with the final determination regarding the matter in dispute. If Respondent does not perform any required Work in accordance with the final determination, the Forest Service may perform the Work itself and/or pursue any other appropriate relief, including judicial enforcement of this AOC pursuant to Section 122(d)(3) of CERCLA, 42 U.S.C. § 9622(d)(3), and cost recovery pursuant to Section XVIII of this AOC or other applicable law.

52. The invocation of the dispute resolution provisions of this AOC shall not extend, postpone or affect in any way any obligation of Respondent under this AOC not directly in dispute, unless the Forest Service agrees in writing otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of the AOC. In the event Respondent does not prevail on the disputed matter, stipulated penalties shall be assessed and paid as provided in Section XVIII.

XVII. FORCE MAJEURE

53. Delays or inability to perform any of the requirements of the AOC within the time limits prescribed shall not be a violation of this AOC where performance is prevented or delayed by a force majeure event. Force majeure is defined as any event arising from causes entirely beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors, that delays or prevents performance of any obligation under this AOC despite Respondent's best efforts to fulfill the obligation. Force majeure does not include the financial inability of Respondent to complete performance of the obligation or increased cost of performance. Respondent shall have the burden of proving force majeure by a preponderance of the evidence.

54. If any event occurs that may materially delay performance of any obligation under this AOC or submittal of any deliverable past the applicable deadline, Respondent shall notify the OSC verbally within twenty-four (24) hours of the time Respondent knew that the event would delay such performance or submittal. Within five (5) business days thereafter, Respondent shall notify the Forest Service in writing of the reasons for the delay, its anticipated length, measures taken or to be taken to minimize the delay, and an estimated timetable for implementation of these measures. Failure to comply with these requirements shall waive any claim of force majeure by Respondent.

55. The OSC shall notify Respondent in writing of the Forest Service's determination as to whether force majeure applies to the event or circumstances whenever practicable within

seven (7) days after receipt of written notice from Respondent. If the Forest Service determines that the delay has been or will be caused by circumstances constituting a force majeure, the due date for each uncompleted task in this AOC shall be extended for a sufficient period to complete the tasks that were delayed or prevented. Such period shall be at least equal to the delay resulting from the force majeure circumstance. If the Forest Service does not sustain Respondent's force majeure claim, or if there is no agreement on the length of an extension of time, the dispute shall be resolved in accordance with the dispute resolution provisions in Section XVI of this AOC or the stipulated penalties provisions of Section XIX, as appropriate.

XVIII. REIMBURSEMENT OF COSTS

56. Respondent shall reimburse the Forest Service for all Future Response Costs incurred by the Forest Service in connection with this AOC. For the purpose of this AOC, Future Response Costs are defined to encompass all costs that the United States Department of Agriculture and the Forest Service have incurred in negotiating this AOC and will incur overseeing the implementation of the terms of this AOC, including all direct and indirect costs, including contractor costs, compliance monitoring costs (including the collection of and analysis of split samples) associated with reviewing and commenting on proposals, inspection of documents and field activities, coordinating with federal and state agencies and the public, and holding meetings.

57. Prior to the termination of this Order, the Forest Service will submit to Respondent one or more bills, including a cost summary, for Future Response Costs incurred in connection

with overseeing the implementation of the terms of this AOC. Within thirty (30) days of receipt of each bill, Respondent shall remit a cashier's or certified check, referencing the Azurite Mine Site, for the full amount of the bill. Provided, however no bill for Future Response Costs shall require payment be due prior to February 1, 2006.

Payment shall be sent to the following address:

USDA Forest Service
C/O Citibank Unit Collection Officer
PO Box 894183
Los Angeles, CA 90189-4183

58. In the event that full reimbursement of Future Response Costs is not paid by Respondent when due, as provided in the preceding paragraph, Respondent shall be liable to pay interest on the unpaid balance at the rate provided in Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4). Interest shall begin to accrue on the due date of the bill and shall continue to accrue until the date that full payment of the bill is received by the Forest Service. In addition, stipulated penalties for unpaid Future Response Costs shall accrue under this AOC beginning sixty (60) days after the bill becomes due.

59. In accordance with the provisions of Section XVI of this AOC, Respondent may dispute all or part of a bill for reimbursement of Future Response Costs submitted pursuant to this Order only on the basis of accounting errors or inclusion of costs outside the scope of this AOC. Any such objection shall be made in writing within thirty (30) days of receipt of the demand for payment and shall specifically identify the disputed costs and the basis of the dispute.

All undisputed costs shall be remitted by Respondent in accordance with the instructions in

paragraph 57 of this AOC. Respondent bears the burden of establishing a Forest Service error or the inclusion of costs outside the scope of this AOC.

60. The United States reserves its rights to bring an action against Respondent to enforce the cost reimbursement provisions of this AOC, to seek penalties pursuant to Section 109 of CERCLA, 42 U.S.C. § 9609, and to bring an action pursuant to Section 107 of CERCLA, 42 U.S.C. § 9607, to recoup response costs set forth in the accounting not reimbursed by Respondent. The Forest Service also reserves its rights to recover any past or future costs not reimbursed under this AOC.

61. At the time of payment of any response costs, Respondent shall send notice that payment has been made to:

Vickie M. Petsch
R-6 Financial Management
Claims/NFC Security Access
Willamette National Forest
PO Box 10607
Eugene, OR 97440

XIX. STIPULATED PENALTIES

62. Unless there has been a written modification of a compliance date by the Forest Service or force majeure event as defined herein, in the event Respondent fails to meet any requirement of this AOC, Respondent shall pay stipulated penalties in the amount of \$500 per day, per violation for the first 10 days of violation; \$2,000 per day, per violation for the 11th through 20th day of noncompliance; and \$5,000 per day, per violation for the 21st day of

noncompliance and every day thereafter. Compliance by Respondent shall include complete and timely performance of each activity required under this AOC or complete and timely performance of all work described in any plan, statement or deliverable approved under this AOC.

63. All penalties shall begin to accrue on the date that complete performance is due or a violation occurs and shall continue to accrue through the final day of correction of the noncompliance. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this AOC.

64. Respondent may dispute the Forest Service's right to the stated amount of penalties by invoking the dispute resolution procedures under Section XVI of this AOC. Penalties shall accrue but need not be paid during the dispute resolution period. If Respondent does not prevail upon resolution, all penalties shall be due within thirty (30) days of resolution of the dispute. If Respondent prevails upon resolution, no penalties shall be paid.

65. The imposition of stipulated penalties is in the Forest Service's discretion. The Forest Service may in its discretion impose a lesser penalty or no penalty at all for violations subject to stipulated penalties. Imposition of the stipulated penalty provisions of this AOC does not preclude the Forest Service from conducting all or part of the Work because of the Respondent's violation of, or failure, or refusal to comply with this AOC. In the event that the Forest Service assumes performance of a portion or all of the Work because of Respondent's violation of, or failure or refusal to perform the Work as set forth in this AOC, Respondent shall

be liable for all costs incurred by the Forest Service in performing the Work in addition to the stipulated penalties that will be assessed.

66. The Forest Service will advise Respondent in writing of any stipulated penalties owed by Respondent pursuant to this Section. All penalties shall be paid to the Forest Service, as directed in the written demand, by certified or cashier's check within thirty (30) days of the date of receipt of the demand for payment by the Forest Service. Interest shall begin to accrue on the unpaid balance thirty (30) days from the date of receipt of the Forest Service's demand for payment. Interest shall accrue at the rate provided in paragraph 58 of this AOC. Payment shall be made in accordance with the instructions in paragraph 57 of this AOC.

67. The stipulated penalties set forth in this Section do not preclude the Forest Service from pursuing any other remedies or sanctions that may be available to the Forest Service by reason of Respondent's failure to comply with any of the requirements of this AOC, nor shall payment of stipulated penalties relieve Respondent of the responsibility to comply with any requirement of this AOC.

XX. RESERVATION OF RIGHTS

68. Except as expressly provided in this AOC, the United States reserves all rights, claims and defenses it may have, including the right to bring an action against Respondent under Section 106 of CERCLA, 42 U.S.C. § 9606, for an abatement action; and/or Sections 107 or 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613, for recovery of any response costs incurred in connection with the Site, including past response costs, that are not reimbursed by Respondent.

Except as provided in Section XXI, Covenants Not to Sue, nothing in this AOC shall be construed as releasing Respondent from any liability for any of its actions. The United States reserves the right to take any enforcement action pursuant to CERCLA or any other legal authority for relief, including, but not limited to, injunctive relief, monetary penalties, and damages for any violation of this AOC. Furthermore, nothing in this AOC shall be construed to limit the power and authority of the United States to take, direct, or order all actions necessary to protect the public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants at or from the Site.

69. The parties to this AOC reserve any claims they now have, or may have in the future, against any third party including, but not limited to, claims under Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, for recovery of response costs, including oversight costs arising out of, or related to, this AOC, and any future and/or past costs incurred in connection with the Site, including claims for contribution under Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B). Nothing in this AOC shall constitute or be construed as a release from any claim, cause of action or demand against any person, firm, partnership, or corporation not a signatory to this AOC for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, pollutants, or contaminants found at, taken to, or taken from the Site.

XXI. COVENANTS NOT TO SUE

70. Respondent covenants not to sue and agrees not to assert any action or claim against the Forest Service, EPA, USDA, or the United States with respect to any work it performs pursuant to this AOC for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through CERCLA Sections 106(b)(2), 107, 111, 112, 113, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, 9613, or under any other provision of law. This AOC does not constitute any decision or preauthorization of funds under section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2).

XXII. INDEMNIFICATION

71. Respondent agrees to indemnify and hold the United States and its agencies, departments, agents and employees harmless from all claims arising from acts or omissions of Respondent or those acting on its behalf, including its officers, employees, agents, contractors, subcontractors, or assigns, in carrying out activities under this AOC. Respondent has an affirmative duty to protect from injury and damage the land, property, and other interests of the United States. Damage includes, but is not limited to, fire suppression costs if the fire occurs as a result of Respondent or those acting on Respondent's behalf, and all costs and damages associated with restoration or rehabilitation of natural resources injured by Respondent's activities undertaken in connection with the implementation of this AOC at the Site. Respondent shall be liable for injuries and damage to all roads, trails and other improvements of the United

States caused by Respondent, or those acting on its behalf, except that liability shall not include reasonable and ordinary wear and tear.

XXIII. OTHER CLAIMS

72. By entering into this AOC, the Forest Service assumes no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The Forest Service shall not be deemed to be a party to any contract entered into by Respondent or its contractors to carry out actions pursuant to this AOC.

XXIV. NOTICE OF COMPLETION

73. Upon completion of the EE/CA and all requirements in the SOW, Respondent shall certify in writing to the Forest Service that all requirements under this AOC, including any additional work and payment of stipulated penalties, have been completed. The certification shall be signed by a representative of Respondent with the requisite knowledge and authority, and shall include the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete." If the Forest Service agrees with Respondent's certification, it will so notify Respondent in writing and this AOC, with the exception of any continuing obligations, shall be terminated. For the purposes of this Section, continuing obligations shall include, but not be limited to, the following obligations contained in this AOC: Section XV (Record Preservation), Section XXI (Covenants Not to Sue), Section XX (Reservation of Rights), Section XXII (Indemnification), and Section XXIII (Other Claims). If the Forest Service determines that any requirements of this AOC have not been completed by

Respondent, the Forest Service will notify Respondent in writing and specify the deficiencies.

Respondent shall correct such deficiencies in accordance with the Forest Service's notice.

Failure by Respondent to correct such deficiencies shall be a violation of this AOC.

XXV. EFFECTIVE DATE, MODIFICATION
AND RESPONDENT'S COSTS

74. The effective date of this AOC shall be the date it has been executed by all of the parties and written concurrence has been issued by the United States Department of Justice.

75. The terms of this AOC may be modified only by the written agreement of the parties.

76. No informal advice, guidance, suggestion or comment by the Forest Service regarding any document or deliverable submitted by Respondent relieves Respondent of its obligation to obtain the formal written approvals required by this AOC or to comply with the requirements of this AOC.

77. Respondent shall bear its costs and attorneys fees.

XXVI. MISCELLANEOUS


78. During the performance of this AOC, Respondent agrees that in connection with the performance of any Work under this AOC, Respondent shall not discriminate against any employee, or applicant for employment, because of race, color, religion, national origin, sex or sexual orientation, age or handicap. Respondent shall include and require compliance with the above non-discrimination in any subcontract made with respect to this AOC. The Forest Service shall have the right to enforce the foregoing nondiscrimination provisions by suit for specific

performance or other remedy under the laws of the United States or the state which the breach or violation occurs.

79. Respondent shall immediately notify the OSC of any and all threatened and endangered species encountered on the Site, and shall take no actions which might endanger said species or their habitat unless otherwise instructed by the OSC. Formal or informal consultation provisions shall be the responsibilities of the Respondent and shall be included in the EE/CA Final report.

80. If, while implementing the terms of this AOC, Respondent discovers any objects of historic or scientific interest, it shall notify the OSC and leave such discoveries intact until and unless otherwise instructed by the OSC. For the purposes of this Section, objects of historic or scientific interest include, but are not limited to, historic or prehistoric ruins, fossils, or artifacts. Compliance with any protective and mitigative measures specified by the OSC shall be Respondent's responsibility.

FOR THE UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE REGION 6:

By: 
Linda Goodman
Regional Forester
Date: 6/8/05

Azurite Mine Site
Administrative Order on Consent
May 2005

FOR ASARCO LLC

By: D. E. McAllister

Name: Douglas E. McAllister

Title: V.P., G.C. & Sec.

Date: June 27, 2005

By: Thomas L. Aldrich

Name: Thomas L. Aldrich

Title: VP Env. Affairs

Date: June 29, 2005

STATEMENT OF WORK
AZURITE MINE
Administrative Order on Consent

I. OBJECTIVE:

The purpose of this Statement of Work (SOW) is to reduce the potential for release of contaminants from mine wastes at the Azurite Mine Site and associated mill site. In order to achieve this objective, the main work element will be development of a project work plan for completion of an Engineering Evaluation/Cost Analysis (EE/CA).

II. WORK ELEMENTS:

Project Work Plan

Respondent shall submit for review and approval a Project Work Plan within thirty (30) days of the effective date of the Administrative Order on Consent (AOC) entered into between Respondent and the Forest Service. The Project Work Plan shall describe all major tasks from the date of signing the AOC through Notice of Completion and shall include a schedule for all tasks. The schedule shall indicate start and end dates of all tasks.

Task 1 – Field Sampling and Analysis Plans

A Sampling and Analysis Plan (SAP) shall be prepared to describe specific methods that will be used to address identified data gaps, if any, and collect any additional data needed to evaluate removal action alternatives. The SAP will delineate:

- The environmental media to be sampled (e.g. surface water, soil, ground water, and aquatic life)
- Specific sample locations within these media (including a map)
- Data collection methods, sample frequency, and constituents to be analyzed for each environmental media to be tested
- Analytical methods and associated method detection limits
- Quality assurance/quality control procedures

The SAP shall also include a summary of fieldwork completed at the site prior to the signing of the Administrative Order on Consent (AOC). Field sampling activities already conducted include the Site Inspection (SI). The SI included

sampling of mine waste, mine tailings, mill area soil, mine drainage water, stream water, and stream sediments. The SAP shall be prepared consistent with the guidance documents referenced in the Administrative Order on Consent. Respondent is responsible for fulfilling any additional data needs identified by the Respondent or the Forest Service, consistent with the general scope and objectives of the AOC.

Background documentation provided by the Forest Service includes:

05/2005, Cascade Earth Sciences, Site Inspection Report - Azurite Mine, Wenatchee-Okanogan National Forest, Whatcom County, Washington: prepared for the U.S. Forest Service

08/2002, Washington Division of Geology and Earth Resources, Open File Report 2002-3---Inactive and Abandoned Mine Lands-Azurite Mine, Whatcom County, Washington, 7 pages, 1 appendix.

Assumptions for Task 1:

1. SAPs shall have methods to determine the potential effects and impacts to surface water and ground water
2. Field parameters including pH, conductivity, and temperature will be completed when surface water and sediment samples are collected
3. SAPs shall have methods to determine fate and transport of target constituents
4. SAPs shall have methods to assess pathways and risks to local and distant receptors
5. Following the effective date of the Administrative Order on Consent, sampling for surface water, ground water, and biological components shall be completed at the first opportunity when approved sampling locations are open and safely accessible

Task 2 – Engineering Evaluation/cost Analysis (EE/CA) Report

The Respondent shall prepare and submit to the Forest Service for review and approval an Engineering Evaluation/Cost Analysis (EE/CA) which follows the outline and content described in the publication "*Guidance On Conducting Non-Time-Critical Removal Actions under CERCLA*" (EPA540-R-93-057, August 1993), *EPA's Risk Assessment Guidance for Superfund Volume I-Human Health Evaluation Manual Part (A)*, *EPA's Risk Assessment Guidance for Superfund Volume II - Environmental Evaluation Manual*, *EPA's Supplemental Ecological Risk Assessment Guidance for Superfund*, and State of Washington Ecological

and Human Health risk assessment regulations. The EE/CA Report shall conform to the outline shown in Appendix B.

The Respondent will coordinate with the Forest Service and the State of Washington to define ARARs.

Respondent will identify and propose plans for interim removal action activities in areas requiring immediate measures to protect human health or the environment, or to mitigate on-going releases.

Respondent will submit work plans for any proposed treatability studies or pilot testing programs unless the Respondent demonstrates that treatability or pilot studies are not necessary to validate removal alternatives.

Respondent will coordinate with the Forest Service to develop a Site-specific monitoring program to assess the effectiveness of selected removal action activities.

Respondent will coordinate with the Forest Service for the development and screening of alternatives to be presented in the EE/CA. The Respondent will prepare a memorandum describing the alternative, screening, and selection processes.

Task 3 –Health and Safety Plan

Within thirty (30) days prior to any on-site activity conducted under this AOC, respondent shall submit for review a Health and Safety Plan. The site Health and Safety Plan shall, at a minimum, ensure compliance with EPA and OSHA requirements for hazardous waste operations at uncontrolled hazardous waste sites (40 CFR Part 311 and 29 CFR Part 1910).

Requirements Common to All Tasks:

1. Respondent shall obtain approval of contractor qualifications by the On-Scene Coordinator as required in the AOC.
2. On-Scene Coordinator (with other agency coordination when applicable) must have concurrence of contractor selection, their proposed study processes including modeling, etc., and the drafts before final studies are completed or specifications developed.
3. All data collected in the applicable tasks shall be summarized in the reports and available for review by the On-Scene Coordinator.
4. All data and reports shall be available in electronic format.

5. Acceptance of schedules or timelines of deliverables (based on attached Summary of Deliverables Table) or demonstration of why any due dates can not be met.

III. COORDINATION

Respondent shall submit a written progress report to the Forest Service concerning activities undertaken pursuant to the AOC every thirty (30) days unless otherwise directed by the OSC, commencing thirty-five (35) days from the effective date of the AOC, until the AOC is terminated or unless directed otherwise by the Forest Service. Following the initial thirty-five (35) day submission, the report shall be submitted by the 10th of every month thereafter. These reports shall describe all significant developments during the preceding period; work performed and problems encountered, if any; the developments anticipated and the work scheduled during the next reporting period, including a schedule of completion for the unfinished work from the preceding period and work to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

Respondent shall notify the Forest Service at least twenty one (21) days prior to conducting field events involving ground disturbance, including construction, excavation, drilling and sampling events. Respondent shall also notify the Forest Service in writing of the completion of all significant field activities, including all sampling events, within seven (7) days of completion.

APPENDIX A

Summary of Deliverables:

| Deliverable | Description of Deliverable | Date Due |
|---------------------------------|------------------------------------|---|
| Project Work Plan | 1. Draft Project Work Plan, | 30 days from effective date of AOC |
| | 2. Final Project Work Plan | ** 15 days |
| Task 1– Field SAP | 1. Draft SAP | 30 days from effective date of AOC |
| | 2. Final SAP | ** 15 days |
| Task 2 – EE/CA Report | 1. Draft EE/CA | December 31, 2005 |
| | 2. Final EE/CA Report | ** 30 days |
| Task 3 – Health and Safety Plan | 1. Final Health and Safety Plan | 30 days from effective date of this AOC |
| Coordination | 1. Initial Monthly Progress Report | 35 days from the effective date of the AOC |
| | 2. Monthly Progress Report | By 10 th every month, thereafter, unless otherwise directed by the OSC |

** Days after receipt of Forest Service comments to draft document

APPENDIX B

Outline for Engineering Evaluation/Cost Analysis Report

EXECUTIVE SUMMARY

- This section is to be one-two pages in length.
- This will describe briefly the location of the project and description of the impact.
- Identify the scope and objective of the removal action.
- Describe the removal action alternatives.
- Discuss the recommended removal action alternative and as to why it was recommended.

I. INTRODUCTION

State that the Engineering Evaluation/Cost Analysis (EE/CA) is being performed for the Forest Service under its cleanup authorities (42 USC 9604(a), 7 CFR 2.60(a)(3b) and Federal Executive Order 12580). State that this EE/CA has been prepared in accordance with the provisions of NCP, 40 CFR 300.415(b)(4)(i). The purpose of this EE/CA is to select an alternative to minimize or eliminate any release or threat of release of a hazardous substance into the environment or impact on public health and welfare as outlined in 40 CFR 300.415(b)(2)(i)-(viii). The EE/CA has been prepared utilizing the EPA "Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA".

II. SITE CHARACTERIZATION

2.1. Site Description and Background

2.1.1. Site Location and Status

- Include type of facility, years of operation, present/prior uses, regulatory history, quad and/or site maps, lat/long description, estimated quantities of contaminants, etc.
- Do not repeat information already included in PAs or SIs. Instead, refer the reader to these documents. For example, refer the reader to the SI for more information about the history of the Site.

2.1.2. Previous Removal Actions

- Scope and objectives of previous removal actions.
- Timeframes and costs.
- Nature and extent of hazardous substances, pollutants, or contaminants treated or controlled.
- Technologies used and/or treatment levels.

2.1.3. Site Physiography

- Include topography, drainage area, surface water bodies, drainages, open ditches/canals, springs, historical/archaeological features, etc.

2.1.4. Climate and Meteorology

- Rainfall/snowfall, temperature ranges, wind conditions, etc.

2.1.5. Geology/Soil Data

- Rock formations, soil types, depth of soil, faults, local as well as regional geologic formation, etc.

2.1.6. Hydrogeology

- Depth to groundwater/aquifer, important water bearing formations, groundwater uses, etc.

2.1.7. Hydrology

- Discuss whether the stream(s) in the area are receiving or recharge, flow rates, surface water uses, drainage areas, etc.

2.1.8. Surrounding Land Use

- EPA has designated mines as industrial sites.
- What are the uses of the land surrounding the Site? Recreational uses?
- Sensitive human populations? Population densities?
- Historic and archeological resources?
- Etc.

2.1.9. Sensitive Ecosystems

- Wetlands, wildlife breeding areas, wild and scenic rivers, threatened and endangered species, etc.

2.2. Source, Nature, and Extent of Contamination

This section should include all supporting analytical data, volumes, quantities, etc. As a minimum, the reader should be referred to supporting documents or Tables in Appendices.

2.2.1. Surface water

2.2.2. Sediment

2.2.3. Groundwater

2.2.4. Air

2.2.5. Soil

2.2.6. Building Materials and Process Equipment

III. STREAMLINED RISK EVALUATION AND ASSESSMENT

3.1 Streamlined Human Health Risk Evaluation

3.2. Ecological Risk Assessment

Note: The Human and Ecological Risk Assessments are to be incorporated into one Appendix and this Appendix is not to be written as a stand-alone document.

IV. SITE CLEANUP CRITERIA

4.1 Applicable or Relevant and Appropriate Requirements

Note: This information can be presented in a Table format.

4.2 ARAR-Based Preliminary Remediation Goals (PRGs)

4.3 Risk-Based PRGs

4.4 Proposed Cleanup Goals

V. IDENTIFICATION OF REMOVAL ACTION OBJECTIVES

5.1 Goals and Objective of the Removal Action

5.2 Scope of the Removal Action

5.3 Timeframes for the Removal Action

VI. IDENTIFICATION AND ANALYSIS OF REMOVAL ACTION ALTERNATIVES

6.1. Identification and Screening of Removal Action Alternatives

6.1.1. Identification of Removal Action Alternatives

- Identify all viable alternatives in this section
- Alternatives can be shown in Table format with brief descriptions and citing literature, regulations, excessive costs and/or maintenance, experiences on other sites, etc., as to why the alternative was dropped from further evaluation.

6.1.2. Identification and Description of Alternatives for Further Evaluation

6.2 Analysis of Selected Removal Action Alternatives

6.2.1. Overall Protection of Human Health and the Environment

- List alternatives as appropriate.
- The use of bullet statements is advantageous in this aspect of the evaluation process for each alternative. How does the alternative protect human health and/or the environment?
- The format mentioned here is applicable to the rest of the section.

6.2.2. Compliance with ARARs

6.2.3. Long-term Effectiveness and Permanence

6.2.4. Reduction of Toxicity, Mobility, or Volume Through Treatment

6.2.5. Short-term Effectiveness

6.2.6. Implementability

6.2.7. Cost

6.2.8. State and Other Federal Acceptance

6.2.9. Community Acceptance

6.3 Identification of Data Gaps

VII. COMPARATIVE ANALYSIS OF REMOVAL ACTION ALTERNATIVES

Once the alternatives have been described and individually assessed against the criteria in the preceding section, a comparative analysis is to be conducted between the

alternatives to identify the advantages of one alternative over the next. If bullet statements were carefully developed in the preceding section, then the advantage of one alternative can easily be shown in table format. The "No Action" alternative is to be included in this section. One way to display this information for the reader is to develop a table using the nine criteria from the preceding section as the heading for each column. Each alternative would be shown in the left hand side of the table, one alternative per line. Lets assume Alternative 1 has two statements as to the protection of human health and the environment. And alternative 2 had three statements, but the first two statements where the same as stated in alternative 1. Then the advantage of alternative 2 over alternative 1 becomes the third statement.

VIII. RECOMMENDED REMOVAL ACTION ALTERNATIVE

The EE/CA shall identify the alternative that best satisfies the evaluation criteria based on the comparative analysis.

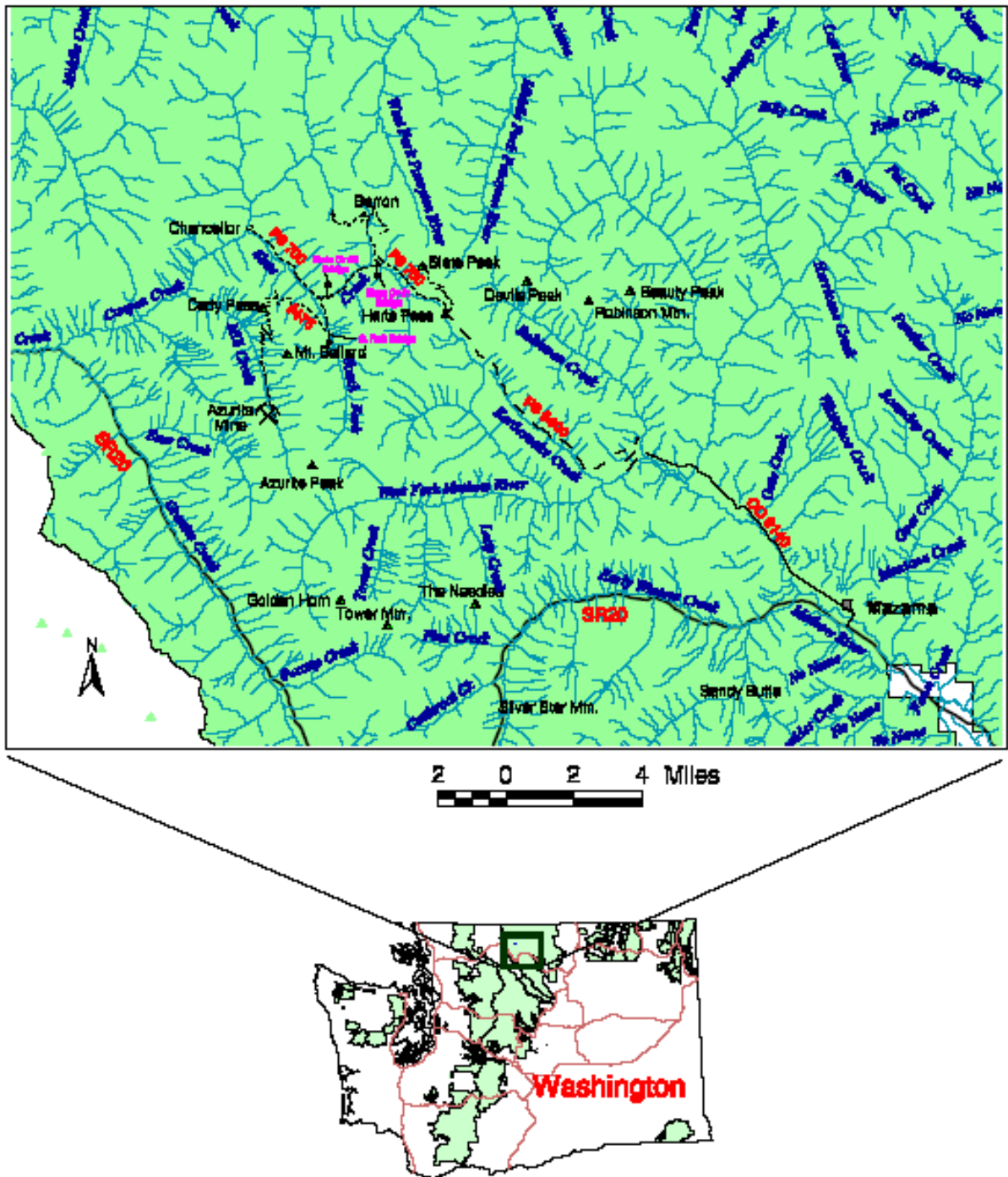
REFERENCES

TABLES

FIGURES AND PLATES

APPENDICES

**Azurite Mine Site
Location Map**



**Attachment #2
Azurite Mine Site
Administrative Order on Consent
May 2005**

Azurite Mine Site Map



Attachment #2
Azurite Mine Site
Administrative Order on Consent
May 2005