UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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IN THE MATTER OF:	)	
	)	CERCLA Docket No. CERCLA-08-2018-0006
ACM Smelter and Refinery Site Great Falls, Cascade County, Montana Operable Unit 2	)	
Atlantic Richfield Company and ARCO Environmental Remediation, L.L.C.,	)	
Respondents. Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	)	

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR OPERABLE UNIT 2 REMEDIAL INVESTIGATION/FEASIBILITY STUDY

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (Settlement) is entered into voluntarily by the United States Environmental Protection Agency (EPA) and Atlantic Richfield Company and ARCO Environmental Remediation, L.L.C. (Respondents). This Settlement provides for the performance by Respondents of a remedial investigation and feasibility study (RI/FS) for Operable Unit 2 (OU2) of the ACM Smelter and Refinery Site (Site) located adjacent to the unincorporated community of Black Eagle along the Missouri River near Great Falls in Cascade County, Montana, and the payment of certain response costs incurred by the United States at or in connection with OU2 of the Site.

2. This Settlement is issued under the authority vested in the President of the United States by Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. §§ 9604, 9607 and 9622. This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923, and further delegated to Regional Administrators by EPA Delegation Nos. 14-14-C (Administrative Actions Through Consent Orders) and 14-14-D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders). This authority was further re-delegated by the Regional Administrator of EPA Region 8 to the undersigned EPA officials.

3. EPA and Respondents recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement do not constitute an admission of any legal or factual matter set forth in this Settlement. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the findings of facts, conclusions of law, and determinations in Section IV (Findings of Fact) and V (Conclusions of Law and Determinations) of this Settlement, or any legal or factual matter set forth in the Statement of Work or any other work plan or document prepared or utilized by EPA or Respondents pursuant to this Settlement. By signing this Settlement, Respondents do not admit or acknowledge any liability or fault with respect to any matter arising out of or relating to conditions at the Site. Respondents agree to comply with and be bound by the terms of this Settlement and further agree that they will not contest the basis or validity of this Settlement or its terms in any proceeding to implement or enforce this Settlement.

II. PARTIES BOUND

4. This Settlement is binding upon EPA and upon Respondents and their successors and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement.

5. Respondents are jointly and severally liable for carrying out all activities required by this Settlement. In the event of the insolvency or other failure of one Respondent to implement the requirements of this Settlement, the remaining Respondent shall complete all such requirements.

6. Each undersigned representative of Respondents certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondents to this Settlement.

7. Respondents shall provide a copy of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing any Respondent with respect to the Site or the Work, and shall condition all contracts entered into under this Settlement upon performance of the Work in conformity with the terms of this Settlement. Respondents or their contractors shall provide written or electronic notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondents shall nonetheless be responsible for ensuring that their contractors and subcontractors perform the Work in accordance with the terms of this Settlement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Settlement, terms used in this Settlement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply:

"ACM Smelter and Refinery Site" or "Site" shall mean the Superfund Site, located generally on the north bank of the Missouri River, north of the center of Great Falls, Montana, at and near the location of the former "Great Falls Refinery" plant operated by Anaconda Copper Mining Company and other companies, encompassing approximately 423 acres at the former plant site, and including those areas where hazardous substances, pollutants and contaminants from former smelter and refinery and other plant operations have been deposited, discharged, released or come to be located, including but not limited to, the adjacent unincorporated community of Black Eagle, other areas surrounding the former smelter and refinery facility, and portions of the Missouri River.

"ACM Smelter and Refinery Site Special Account" shall mean the special account, within the EPA Hazardous Substances Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

"Affected Property" shall mean all real property at the Site and any other real property where EPA determines, at any time, that access, land, water, or other resource use restrictions are needed to implement the RI/FS, including, but not limited to, the area identified on the map attached as Appendix A.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

"Deliverable" shall mean, without limitation, any work plan, report, progress report, plan data, document, information, or submittal, which Respondent is required to submit to EPA under the terms of this Settlement or other document further defined by EPA as a Deliverable.

"Effective Date" shall mean the effective date of this Settlement as provided in Section XXXII.

"Engineering Controls" shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration, or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. §9507.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs after the Effective Date in reviewing or developing Deliverables submitted pursuant to this Settlement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section XI (Property Requirements) (including, but not limited to, cost of attorney time and any monies paid to secure or enforce access, or land, water, or other resource use restrictions, including, but not limited to, the amount of just compensation), Section XV (Emergency Response and Notification of Releases), Paragraph 98 (Work Takeover), Paragraph 122 (Access to Financial Assurance), community involvement (including, but not limited to, the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e), Section XVII (Dispute Resolution), and all litigation costs. Future Response Costs shall also include Agency for Toxic Substances and Disease Registry (ATSDR) costs regarding OU2 of the Site, and all Interim Response Costs Respondents have agreed to pay under this Settlement during the period from October 1, 2016 to the Effective Date.

"Institutional Controls" shall mean Proprietary Controls and state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices that: (a) limit land, water, or other resource use to minimize the potential for human exposure to Waste Material at or in connection with the Site; (b) limit land, water, or other resource use to implement, ensure non-interference with, or ensure the protectiveness of the response action pursuant to this Settlement; and/or (c) provide information intended to modify or guide human behavior at or in connection with the Site.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded

annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at https://www.epa.gov/superfund/superfund-interest-rates.

"Interim Response Costs" shall mean all costs, including but not limited to direct and indirect costs, (a) paid by the United States in connection with OU2 of the Site between October 1, 2016 and the Effective Date, or (b) incurred prior to the Effective Date, but paid after that date.

"MDEQ" shall mean the Montana Department of Environmental Quality and any successor departments or agencies of the State.

"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 any amendments thereto.

"OU2" shall mean Operable Unit 2 of the Site, comprising the former smelter and refinery and certain adjacent areas. OU2 includes, but is not limited to, the following areas: the former copper smelting and refining facility; the electrolytic zinc plant facility, the copper rod, wire and cable mill facility; the cadmium plant facility; the indium plant; the aluminum rod, wire and cable mill; the Anaconda Hills Golf Course; and certain adjacent areas located northeast of the former smelter and refinery facility. A map of OU2, depicting the former boundaries of the smelter and refinery facility and the adjacent areas included in OU2, is attached as Appendix A.

"Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondents.

"Proprietary Controls" shall mean easements or covenants running with the land that (a) limit land, water, or other resource use and/or provide access rights and (b) are created pursuant to common law or statutory law by an instrument that is recorded in the appropriate land records office.

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

"Respondents" shall mean Atlantic Richfield Company and ARCO Environmental Remediation, L.L.C., and any predecessors in interest. It shall also mean any successors in interest to Atlantic Richfield Company and ARCO Environmental Remediation, L.L.C., to the extent such successor's liability at OU2 of the Site derives solely from the liability of Atlantic Richfield Company, ARCO Environmental Remediation, L.L.C., and any predecessors in interest.

"Section" shall mean a portion of this Settlement identified by a Roman numeral.

"Settlement" shall mean this Administrative Settlement Agreement and Order on Consent, all appendices attached hereto (listed in Section XXX (Integration/Appendices)), and any documents incorporated by reference or otherwise into this Settlement, including all Deliverables approved by EPA pursuant to this Settlement. In the event of conflict between this Settlement and any appendix or other incorporated document, this Settlement shall control.

"State" shall mean the State of Montana, including all of its departments, agencies, and instrumentalities.

"Statement of Work" or "SOW" shall mean the RI/FS Statement of Work for OU2, describing the activities Respondents must perform to develop the RI/FS for OU2 for the Site, as set forth in Appendix B to this Settlement. The SOW is incorporated into this Settlement and is an enforceable part of this Settlement as are any modifications made thereto in accordance with this Settlement.

"Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any "hazardous material or deleterious substance" under 75-10-701(8) Montana Code Annotated.

"Work" shall mean all activities and obligations Respondents are required to perform under this Settlement and the SOW, except those required by Section XIII (Record Retention).

IV. FINDINGS OF FACT

9. The Site is located near Great Falls, Cascade County, Montana, and is situated on the north bank of the Missouri River, north of the Great Falls city center. The Site is the location of a former copper concentrating and smelting facility, referred to as the Great Falls Refinery. The unincorporated town of Black Eagle is located immediately to the west and northwest of the former smelter facility. The Site is approximately 423 acres in size. The plant was built and expanded over a period of years on the top and east flank of a prominent feature known as Indian Butte, later referred to as Smelter Hill. The plant facilities extended from the hill top, including the tall slack, down several terraces descending to the north bank of the Missouri River. Elevations at the Site range from approximately 3,250 to 3,550 feet above sea level.

10. Beginning in the 1890s, the Site was owned and operated by the Boston and Montana Consolidated Copper & Silver Mining Company as a copper reduction facility. The

original plant processed unconcentrated ore in a concentrating mill. The concentrated ore then was smelted to produce matte copper. A copper refinery was built at the Site in 1892 and was in operation until 1917.

11. From 1892 to approximately 1915, as a regular practice, the tailings, slag, smelter waste and flue dust were disposed of directly into the Missouri River. Tailings and slag were dumped into the river from a tramway that ran along the riverbank below the Black Eagle Dam raceway.

12. Anaconda Copper Mining Company (ACM) acquired the Site in 1917. By 1918, ACM had largely eliminated smelting operations at the plant and focused on refining. Under the ownership of ACM, the plant became known as the Great Falls Refinery. New facilities and operations were added including: electrolytic copper and zinc refineries, and the production of copper rod and wire. During World War I, the facility produced ferro-manganese used in the production of steel for the war effort. During the 1920s, specialty products like "mineral wool" ("slag wool"), and high-purity cadmium were produced. In 1925, the Great Falls Refinery produced approximately 12.5 million pounds of cathode copper. Blister copper was refined to remove arsenic, antimony and other elements that interfered with the electrical conductivity of the blister copper. After World War I, the facility added a zinc refining plant and the years leading up to World War II saw major growth in copper and zinc production, and construction of arsenic, cadmium and sulphuric acid plants. In 1929, the copper plant consisted of the furnace refinery, copper electrolytic tank house, and anode casting building. The facility also included a zinc electrolytic plant, leaching plant, cadmium plant, residue purification plant, copper rod and wire mill, and roaster building with associated dust chamber, bag house, flue and stack, in addition to various support operations. During World War II, the plant also produced specialty metals such as indium and gallium, vanadium manganese nodules, and arsenic products. In the 1950s and 1960s, the plant produced products such as high purity cadmium, and later aluminum rod, wire and cable. Other processes included experimental recovery of germanium. Concentration, smelting, and processing of zinc ore containing cadmium and lead continued on site into the 1970s.

13. Demolition of plant facilities began in 1972 and metal refining operations at the Great Falls Refinery generally ceased in 1980. Large-scale plant demolition began in 1981, with facility shut-down activities extending at least to 1999. Shut-down activities included building demolition and removal, basement sub-structure backfilling, salvaging and on-Site waste burial of flue dust, granulated slag, asbestos-containing material, demolition debris and other waste. Generally, such wastes were covered with between six inches and five feet of soil and re-vegetation activities were conducted. Surface water impoundments at the Site were closed and filled. Additional related activities at the Site occurred in or around 1987, 1988 and 1998.

14. In 1955, ACM changed its corporate name to The Anaconda Company, retaining incorporation in Montana. In 1977, The Anaconda Company was acquired by the Atlantic Richfield Company, a Pennsylvania corporation, while retaining the Anaconda name. In 1981, The Anaconda Company was merged into the Respondent Atlantic Richfield Company, a Delaware corporation.

15. A solid waste inventory was conducted in 1981, identifying 27 areas of concern at the Site. In 1983, a screening investigation was conducted by Respondent Atlantic Richfield Company documenting groundwater and surface water contamination. In 2002, contaminated Missouri River sediments were collected by MDEQ at a location 30 miles downstream from the Site. EPA investigated the Site several times between 2003 and 2009.

16. Investigations have revealed the presence of elevated levels of antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc at the Site. These and other metals are contained in wastes and byproducts from the smelting, refining and other metal processing operations. During the operation of the plant, large quantities of slag, tailings, flue dust, and other smelter and refinery wastes were produced. These wastes contained the metals listed above.

17. Studies performed by MDEQ and EPA in the Missouri River downstream from OU2 have shown elevated concentrations of arsenic, copper, lead, zinc and other metals in sediment.

18. Antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc are "hazardous substances" as the term is defined in section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

19. The Site was proposed for inclusion on the National Priorities List (NPL) pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on March 4, 2010, 75 Fed. Reg. 9843. The Site was placed on the NPL pursuant to CERCLA Section 105, 42 U.S.C. § 9605, by publication in the Federal Register on March 10, 2011, 76 Fed. Reg. 13089.

20. In 1996, Respondent ARCO Environmental Remediation, LLC was organized as a Delaware corporation and is affiliated with Respondent Atlantic Richfield Company. On December 27, 1996, Respondent ARCO Environmental Remediation, LLC took title to property comprising the former smelter and refinery facility within the Site.

21. Respondent Atlantic Richfield Company and Respondent ARCO Environmental Remediation LLC are corporations doing business in the State of Montana, organized under the laws of State of Delaware.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the EPA's Findings of Fact set forth in Section IV, and the administrative record, EPA has determined that:

22. OU2 of the Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

23. The contamination found at OU2 of the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and "pollutants or contaminants that may present an imminent and substantial danger to public health or welfare" under Section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1).

24. Each Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

25. Each Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. §§ 9607(a).

a. Respondent ARCO Environmental Remediation, L.L.C. is the current "owner" and "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

b. Respondent Atlantic Richfield Company is the former "owner" and "operator" of the facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

26. The conditions described in the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

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

28. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement.

VI. SETTLEMENT AGREEMENT AND ORDER

29. Based upon the Findings of Fact, Conclusions of Law and Determinations set forth above, and the administrative record, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

VII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

30. **Selection of Contractors, Personnel**. All Work performed under this Settlement shall be under the direction and supervision of qualified personnel. Within 30 days after the Effective Date, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, addresses, telephone numbers, email addresses, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. If, after the commencement of Work, Respondents retain additional contractors or subcontractors, Respondents shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors retained to perform the Work at least 10 days prior to commencement of Work by such additional

contractors or subcontractors. EPA retains the right, at any time, to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected contractor or subcontractor, Respondents shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications within 10 days after EPA's disapproval. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," EPA/240/B-01/002 (Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

31. Respondents have designated, and EPA has not disapproved, the following individual as their Project Coordinator, who shall be responsible for administration of all actions by Respondent required under this Settlement: Luke Pokorny, Operation Project Manager, Remediation Management Services on behalf of Atlantic Richfield, 317 Anaconda Road, Butte, MT 59701, (406) 723-1832, lukepokorny@bp.com. To the greatest extent feasible, the Project Coordinator shall be present on Site or readily available during the Work. EPA retains the right to disapprove of any replacement Project Coordinator selected by Respondents who does not meet the requirements of Paragraph 30 (Selection of Contractors, Personnel). If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within 14 days following EPA's disapproval. Respondents shall have the right to change their Project Coordinator, subject to disapproval by EPA. Respondents shall notify EPA 14 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by written notification. Notice or communication relating to this Settlement from EPA to Respondents' Project Coordinator shall constitute notice or communication to all Respondents.

32. EPA has designated Charles Coleman of EPA Region 8 as its Project Coordinator. EPA will notify Respondents of a change of its designated Project Coordinator. Communications between Respondents and EPA, and all documents concerning the activities performed pursuant to this Settlement, shall be directed to the EPA Project Coordinator in accordance with Paragraph 43.a.

33. MDEQ has designated Richard Sloan of the Federal Superfund Section, as its State Project Manager. MDEQ will notify Respondents of any change of its designated State Project Manager. Communications between Respondents and MDEQ, and all documents concerning the activities performed pursuant to this Settlement, shall be directed to the MDEQ State Project Officer in accordance with Paragraph 43.a.

34. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the NCP. In addition, EPA's

Project Coordinator shall have the authority, consistent with the NCP, to halt, conduct, or direct any Work required by this Settlement, or to direct any other response action when s/he determines that conditions at the Site constitute an emergency situation or may present a threat to public health or welfare or the environment. Absence of the EPA Project Coordinator from the area under study pursuant to this Settlement shall not be cause for stoppage or delay of Work.

VIII. WORK TO BE PERFORMED

35. For any regulation or guidance referenced in the Settlement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondents receive notification from EPA of the modification, amendment, or replacement.

36. Respondents shall conduct the RI/FS and prepare all plans in accordance with the provisions of this Settlement, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance"), OSWER Directive # 9355.3-01 (October 1988), available at https://semspub.epa.gov/src/document/11/128301, "Guidance for Data Useability in Risk Assessment (Part A), Final," OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at http://semspub.epa.gov/src/document/11/156756, and guidance referenced therein, and guidance referenced in the SOW. The Remedial Investigation shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from OU2 of the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered for OU2 of the Site. The Feasibility Study shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from OU2 of the Site, which evaluation shall include Engineering Controls and may include Institutional Controls. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, 40 C.F.R. § 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and 40 C.F.R. § 300.430(e).

37. All written documents prepared by Respondents pursuant to this Settlement shall be submitted by Respondents in accordance with Section IX (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and approved by EPA in accordance with Section IX (Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally-approved, or modified Deliverables, in accordance with Paragraph 44.c (Implementation).

38. Upon receipt of the draft Feasibility Study Report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the cost, implementability, and long-term effectiveness of any proposed Institutional Controls for that alternative.

39. **Modification of the RI/FS Work Plan**

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit a memorandum documenting the need for additional data to EPA's Project Coordinator within 30 days after identification. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into Deliverables.

b. In the event of unanticipated or changed circumstances at OU2 of the Site, Respondents shall notify EPA's Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the RI/FS Work Plan, EPA shall modify the RI/FS Work Plan in writing accordingly or direct Respondents to modify and submit the modified RI/FS Work Plan to EPA for approval. Respondents shall perform the RI/FS Work Plan as modified.

c. EPA may determine that, in addition to tasks defined in the initially approved RI/FS Work Plan, additional work may be necessary to accomplish the objectives of the RI/FS. Subject to Paragraph 39.d below, Respondents shall perform this additional work for OU2 in addition to the Work required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such additional work is necessary for a thorough RI/FS.

d. Respondents shall confirm their willingness to perform the additional work for OU2 in writing to EPA within 7 days after receipt of the EPA request. If Respondents object to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondents may seek dispute resolution pursuant to Section XVII (Dispute Resolution). The SOW and/or RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

e. Respondents shall complete the additional work for OU2 according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA reserves the right to conduct the additional work for OU2 itself, to seek reimbursement from Respondents for the costs incurred in performing the additional work, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

40. **Off-Site Shipments**

a. Respondents may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding an off-site shipment if Respondents obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).

b. Respondents may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility's state and to EPA's Project Coordinator. This notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the expected schedule for the shipment; and (4) the method of transportation. Respondents shall also notify the state environmental official referenced above and EPA's Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondents shall provide the written notice after the award of the contract for the RI/FS and before the Waste Material is shipped.

c. Respondents may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3); 40 C.F.R. § 300.440; EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992); and any IDW-specific requirements contained in the SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

41. **Meetings**. Respondents shall make presentations at, and participate in, meetings at the request of EPA during the preparation of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion, and EPA will notify and invite MDEQ to attend any such meeting.

42. **Progress Reports**. In addition to the Deliverables set forth in this Settlement, Respondents shall submit written monthly progress reports to EPA, with a copy to MDEQ, by the 10th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall:

a. describe the actions that have been taken to comply with this Settlement;

b. include, or make available by reference to a web-available data site, all results of sampling and tests and all other data received by Respondents;

c. describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion; and

d. describe all problems encountered in complying with the requirements of this Settlement and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

IX. SUBMISSION AND APPROVAL OF DELIVERABLES

43. **Submission of Deliverables**

a. **General Requirements for Deliverables**

(1) Except as otherwise provided in this Settlement, Respondents shall direct all submissions required by this Settlement to EPA's Project Coordinator, Charles Coleman, at the following address: U.S. EPA Region 8, Montana Office, Federal Building, 10 West 15th Street, Suite 3200, Helena, MT 59626, and to the MDEQ Project Manager, Richard Sloan, at: P.O. Box 200901, Helena, MT 59620. Respondents shall submit all Deliverables required by this Settlement, the attached SOW, or any approved work plan in accordance with the schedule set forth in the SOW or other approved work plan.

(2) Respondents shall submit all Deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 43.b. All other Deliverables shall be submitted in the electronic form specified by EPA's Project Coordinator. If any Deliverable includes maps, drawings, or other exhibits that are larger than 8.5 x 11 inches, Respondents shall also provide paper copies of such exhibits by overnight delivery.

b. **Technical Specifications for Deliverables**

(1) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

(2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (i) in the ESRI File Geodatabase format; and (ii) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/.

(3) Each file must include an attribute name for each site unit or sub-unit submitted. Consult https://www.epa.gov/geospatial/geospatial-policies-and-standards for any further available guidance on attribute identification and naming.

(4) Spatial data submitted by Respondents does not, and is not intended to, define the boundaries of the Site.

44. **Approval of Deliverables**

a. **Initial Submissions**

(1) After review of any Deliverable that is required to be submitted for EPA approval under this Settlement or the attached SOW, EPA, after reasonable opportunity for review and comment by MDEQ, shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission, requiring Respondents to correct the deficiencies; or (iv) any combination of the foregoing.

(2) EPA also may modify the initial submission to cure deficiencies in the submission. EPA shall not modify a Deliverable pursuant to this Paragraph without first providing Respondents with notice of any deficiencies and an opportunity to cure the deficiencies within 21 days of the notice or such longer time as specified by EPA. EPA may modify a Deliverable absent providing an opportunity for Respondents to cure deficiencies only if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable Deliverable.

b. **Resubmissions and Responses to EPA Reviews.** Upon receipt of a notice of disapproval under Paragraph 44.a(1) (Initial Submissions), Respondents shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies resubmit the Deliverable for EPA approval. After review of the resubmitted Deliverable, EPA may: (a) approve, in whole or in part, the resubmission; (b) approve the resubmission upon specified conditions; (c) modify the resubmission; (d) disapprove, in whole or in part, the resubmission, requiring Respondents to correct the deficiencies; or (e) any combination of the foregoing. Upon receipt of and if required by a notice of approval upon specified conditions under Paragraph 44.a(1), Respondents shall, within 30 days or such longer time as specified by EPA in such notice, respond to the specified conditions and provide written responses to EPA. Respondents need not resubmit a Deliverable approved upon specified conditions to EPA for further review and approval unless specifically requested by EPA.

c. **Implementation**. Upon approval, approval upon conditions, or modification by EPA under Paragraph 44.a (Initial Submissions) or Paragraph 44.b (Resubmissions) of any Deliverable, or any portion thereof: (i) such Deliverable, or portion

thereof, will be incorporated into and enforceable under the Settlement; and (ii) Respondents shall take any action required by such deliverable, or portion thereof. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for penalties under Section XIX (Stipulated Penalties) for violations of this Settlement.

45. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA.

46. In the event that EPA takes over some of the tasks, but not the preparation of the Remedial Investigation Report or the Feasibility Study Report, Respondents shall incorporate and integrate information supplied by EPA into those reports.

47. Respondents shall not proceed with any activities or tasks dependent on the following Deliverables until receiving EPA approval, approval on condition, or modification of such Deliverables: RI/FS Work Plan; Sampling and Analysis Plan; draft Remedial Investigation Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; and draft Feasibility Study Report. While awaiting EPA approval, approval on condition, or modification of these Deliverables, Respondents shall proceed with all other tasks and activities that may be conducted independently of these Deliverables, in accordance with the schedule set forth under this Settlement.

48. For all remaining Deliverables not listed in Paragraph 47, Respondents shall proceed with all subsequent tasks, activities, and Deliverables without awaiting EPA approval of the submitted Deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or Deliverable at any point during the Work.

49. **Material Defects.** If an initially submitted or resubmitted plan, report, or other Deliverable contains a material defect, and the plan, report, or other Deliverable is disapproved or modified by EPA under Paragraph 44.a (Initial Submissions) or 44.b (Resubmissions) due to such material defect, Respondents shall be deemed in violation of this Settlement for failure to submit such plan, report, or other Deliverable timely and adequately. Respondents may be subject to penalties for such violation as provided in Section XIX (Stipulated Penalties).

50. Neither failure of EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA.

X. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

51. Respondents shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)," EPA/240/B-01/003 (March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)," EPA/240/R-02/009 (December 2002), and "Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3," EPA/505/B-04/900A-900C (March 2005).

52. **Laboratories**

a. Respondents shall ensure that EPA and MDEQ personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondents pursuant to this Settlement. In addition, Respondents shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the Quality Assurance Project Plan (QAPP) for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with EPA's "Field Operations Group Operational Guidelines for Field Activities" (http://www.epa.gov/region8/qa/FieldOperationsGroupOperationalGuidelinesForFieldActivities.pdf) and "EPA QA Field Activities Procedure" CIO 2105-P-02.1 (9/23/2014), available at https://www.epa.gov/irmpoli8/epa-qa-field-activities-procedures. Respondents shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions," available at https://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements, and that the laboratories perform all analyses using EPA-accepted methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (https://www.epa.gov/superfund/programs/clp/), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (https://www.epa.gov/hw-sw846), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org/), and 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (https://www.epa.gov/ttnamti1/airtox.html).

b. Upon approval by EPA, after a reasonable opportunity for review and comment by the MDEQ, Respondents may use other appropriate analytical methods, as long as (i) quality assurance/quality control (QA/QC) criteria are contained in the methods and the methods are included in the QAPP, (ii) the analytical methods are at least as stringent as the methods listed above, and (iii) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc.

c. Respondents shall ensure that all laboratories they use for analysis of samples taken pursuant to this Settlement have a documented Quality System that complies with ASQ/ANSI E4:2014 "Quality Management Systems for Environmental Information and Technology Programs – Requirements With Guidance for Use" (American Society for Quality, February 2014), and "EPA Requirements for Quality Management Plans (QA/R-2)" EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network (ERLN) laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements.

d. Respondents shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the approved QAPP.

53. **Sampling**

a. Upon request, Respondents shall provide split or duplicate samples collected in implementing the Work to EPA and MDEQ or their authorized representatives. Respondents shall notify EPA and MDEQ not less than 3 days in advance of any sample collection activity as described in the SOW, RI/FS Work Plan, or Sampling and Analysis Plan unless shorter notice is agreed to by EPA. In addition, EPA and MDEQ shall have the right to take any additional samples that EPA or MDEQ deem necessary to implement this Settlement. Upon request, EPA and MDEQ shall provide to Respondents split or duplicate samples of any samples they take as part of EPA's oversight of Respondents' implementation of the Work, and any such samples shall be analyzed in accordance with the approved QAPP.

b. Respondents shall submit to EPA and MDEQ, in the next monthly progress report as described in Paragraph 42 (Progress Reports), the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondents with respect to OU2 of the Site and/or the implementation of this Settlement.

c. Respondents waive any objections to any data gathered, generated, or evaluated by EPA, MDEQ or Respondents in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by the Settlement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondents object to any other data relating to the RI/FS, Respondents shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days after the monthly progress report containing the data.

XI. PROPERTY REQUIREMENTS

54. **Agreements Regarding Access and Non-Interference.** If areas within OU2 of the Site or any other Affected Property is owned or controlled by the Respondents, Respondents shall, commencing on the Effective Date, provide EPA and MDEQ and their representatives, including contractors, with access at all reasonable times to such areas of OU2 of the Site, or such other Affected Property, for the purpose of conducting any activity related to this Settlement. Respondents shall, with respect to any Affected Property they do not own or control, use best efforts to secure an agreement, enforceable by Respondents and the United States, that: (i) provides EPA, MDEQ, and their representatives, contractors, and subcontractors with access at all reasonable times to such Affected Property to conduct any activity regarding the Settlement, including those listed in Paragraph 54.a (Access Requirements); and (ii) provides that the owner will refrain from using such Affected Property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or interfere with or adversely affect the implementation or integrity of the Work.

a. **Access Requirements.** The following is a list of activities for which access to an Affected Property is to be obtained:

(1) Monitoring the Work;

(2) Verifying any data or information submitted to EPA or MDEQ;

(3) Conducting investigations regarding contamination at or near OU2 of the Site;

(4) Obtaining samples;

(5) Assessing the need for, planning, implementing, or monitoring response actions;

(6) Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;

(7) Implementing the Work pursuant to the conditions set forth in Paragraph 98 (Work Takeover);

(8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondents or their agents, consistent with Section XII (Access to Information);

(9) Assessing Respondents' compliance with the Settlement;

(10) Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Settlement; and

(11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Affected Property.

55. **Best Efforts**. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondents would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If Respondents are unable to accomplish what is required through "best efforts" in a timely manner, they shall notify EPA and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondents, or take independent action, in obtaining such access and/or use restrictions. All costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time and the amount of monetary consideration or just compensation paid, constitute Future Response Costs to be reimbursed under Section XVI (Payment of Response Costs).

56. If EPA determines in a decision document prepared in accordance with the NCP that Institutional Controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices are needed, Respondents shall cooperate with EPA's and the State's efforts to secure and ensure compliance with such Institutional Controls.

57. **Notice to Successors-in-Title**

a. Respondents shall, within 30 days after the Effective Date, submit for EPA approval a notice to be filed regarding Respondent's Affected Property in the appropriate land records. The notice must: (1) include a proper legal description of the Affected Property; (2) provide notice to all successors-in-title that: (i) the Affected Property is part of, or related to, the Site; (ii) EPA has entered into an agreement with Respondents for performance of an RI/FS with respect to the Affected Property; and (iii) potentially responsible parties have entered into an Administrative Settlement Agreement and Order on Consent requiring performance of the RI/FS; and (3) identify the name, docket number, and effective date of this Settlement. Respondent shall record the notice within 10 days after EPA's approval of the notice and submit to EPA, within 10 days thereafter, a certified copy of the recorded notice.

b. Respondent shall, prior to entering into a contract to Transfer Respondent's Affected Property, or 60 days prior to Transferring Respondent's Affected Property, whichever is earlier:

(1) Notify the proposed transferee that EPA has entered into an agreement with Respondents for performance of an RI/FS with respect to the Affected Property (identifying the name, docket number, and the effective date of this Settlement); and

(2) Notify EPA and MDEQ of the name and address of the proposed transferee and provide EPA and MDEQ with a copy of the notice that it provided to the proposed transferee.

58. In the event of any Transfer of the Affected Property, unless EPA otherwise consents in writing, Respondents shall continue to comply with their obligations under the Settlement, including their obligation to secure access and ensure compliance with any land, water, or other resource use restrictions regarding the Affected Property.

59. Notwithstanding any provision of the Settlement, EPA and the State retain all of their access authorities and rights, as well as all of their rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, and any other applicable statute or regulations.

XII. ACCESS TO INFORMATION

60. Respondents shall provide to EPA and MDEQ, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Respondents' possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondents shall also make available to EPA and MDEQ, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work. The parties acknowledge that EPA has

previously issued information requests pursuant to CERCLA Section 104(e) to Respondents on August 5, 2010. Respondents provided responses to these requests dated January 18, 2011 and a supplemental response dated March 25, 2011.

61. **Privileged and Protected Claims**

a. Respondents may assert that all or part of a Record requested by EPA or MDEQ is privileged or protected as provided under federal or state law, in lieu of providing the Record, provided Respondents comply with Paragraph 61.b, and except as provided in Paragraph 61.c.

b. If Respondents assert a claim of privilege or protection, they shall provide EPA and MDEQ with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondents shall provide the Record to EPA and MDEQ in redacted form to mask the privileged or protected portion only. Respondents shall retain all Records that they claim to be privileged or protected until EPA and MDEQ have had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondents' favor.

c. Respondents may make no claim of privilege or protection regarding: (1) any data regarding OU2 of the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other factual information that evidences conditions at or around OU2 of the Site; or (2) the portion of any final Record that Respondents are required to create or generate pursuant to this Settlement.

62. **Business Confidential Claims**. Respondents may assert that all or part of a Record provided to EPA and MDEQ under this Section or Section XIII (Record Retention) is business confidential to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondents shall segregate and clearly identify all Records or parts thereof submitted under this Settlement for which Respondents assert business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA, MDEQ, or if EPA has notified Respondents that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondents.

63. Notwithstanding any provision of this Settlement, EPA and the State retain all of their information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. RECORD RETENTION

64. Until 10 years after EPA provides Respondents with notice, pursuant to Section XXIX (Notice of Completion of Work), that all Work has been fully performed in accordance with this Settlement, each Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its liability under CERCLA with regard to the Site, provided, however, that Respondents who are potentially liable as owners or operators of the Site must retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Each Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that each Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

65. At the conclusion of the document retention period, Respondents shall notify EPA and MDEQ at least 90 days prior to the destruction of any such Records, and, upon request by EPA or MDEQ, and except as provided in Paragraph 61 (Privileged and Protected Claims), Respondents shall deliver any such Records to EPA or MDEQ.

66. Each Respondent certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or MDEQ and that it has fully complied with any and all EPA and State requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and state law.

XIV. COMPLIANCE WITH OTHER LAWS

67. Nothing in this Settlement limits Respondents' obligations to comply with the requirements of all applicable state and federal laws and regulations when performing the Work. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-Site (i.e., within the areal extent of contamination or in close proximity to the contamination or within any other Affected Property and necessary for implementation of the Work), including studies, if the Work is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-Site requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondents may seek relief under the provisions of Section XVIII (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to

obtain all such permits or approvals. This Settlement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XV. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

68. **Emergency Response.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondents shall take these actions in accordance with all applicable provisions of this Settlement, including, but not limited to, the Health and Safety Plan. Respondents shall also immediately notify EPA's Project Coordinator or, in the event of his/her unavailability, the Regional Duty Officer at (303) 293-1788, and the National Response Center at (800) 424-8802 of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA for all costs of such response action not inconsistent with the NCP pursuant to Section XVI (Payment of Response Costs).

69. **Release Reporting.** Upon the occurrence of any event during performance of the Work that Respondents are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, Respondents shall immediately orally notify EPA's Project Coordinator or, in the event of his/her unavailability, the Regional Duty Officer at (303) 293-1788, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

70. For any event covered under this Section, Respondents shall submit a written report to EPA, with a copy to MDEQ, within 7 days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

XVI. PAYMENT OF RESPONSE COSTS

71. **Payments for Future Response Costs.** Respondents shall pay to EPA all Future Response Costs not inconsistent with the NCP.

a. **Periodic Bill.** On a periodic basis, EPA will send Respondents an electronic billing notification to the following email address: Cord.Harris@bp.com.

The billing notification will include a standard EPA cost report, which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, the United States Department of Justice, and any other federal or state agency, including ATSDR. Respondents shall make all payments within 60 days after Respondents' receipt of each bill requiring payment, except as

otherwise provided in Paragraph 74 (Contesting Future Response Costs), and in accordance with Paragraphs 72.a and 72.b (Payment of Future Response Costs).

If the electronic billing notification is undeliverable, EPA will mail a paper copy of the billing notification to:

Cord Harris
Mining Portfolio Manager
Atlantic Richfield Company
201 Helios Way, 6.374C
Houston, TX 77079

b. Respondents may change their email address by providing notice of the new address to:

Financial Management Officer
U.S. EPA, Region 8 (TMS-FMP)
1595 Wynkoop Street
Denver, Colorado 80202-1129

72. **Payment of Future Response Costs**

a. Respondents shall make payments to EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York, NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number 08-19 and the EPA docket number for this action.

For ACH payment:

Respondents shall make payment to EPA by Automated Clearinghouse (ACH) to:

PNC Bank
808 17th Street, NW
Washington, DC 20074
Contact – Jesse White 301-887-6548
ABA = 051036706
Transaction Code 22 - checking
Environmental Protection Agency
Account 310006

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and shall reference Site/Spill ID Number 08-19 and the EPA docket number for this action.

For online payment:

Respondents shall make payment at https://www.pay.gov to the U.S. EPA account in accordance with instructions to be provided to Respondents by EPA.

b. At the time of payment, Respondents shall send notice that payment has been made to David Sturn, Financial Analyst, U.S. EPA Region 8, Montana Office, Federal Building, 10 West 15th Street, Suite 3200, Helena, MT, and to the EPA Cincinnati Finance Office by email at cinwd_acctsreceivable@epa.gov, or by mail to

EPA Cincinnati Finance Office
26 W. Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number 08-19 and the EPA docket number for this action.

c. **Deposit of Future Response Costs Payments**. The total amount to be paid by Respondents pursuant to Paragraph 71.a (Periodic Bill) shall be deposited by EPA in the ACM Smelter and Refinery Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the ACM Smelter and Refinery Site Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum.

73. **Interest**. In the event that any payment for Future Response Costs is not made by the date required, Respondents shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of Respondents' payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XIX (Stipulated Penalties).

74. **Contesting Future Response Costs.** Respondents may initiate the procedures of Section XVII (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 71 (Payments for Future Response Costs) if they determine that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate

such a dispute, Respondents shall submit a Notice of Dispute in writing to EPA's Project Coordinator within 60 days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondents submit a Notice of Dispute, Respondents shall within the 60-day period, also as a requirement for initiating the dispute: (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 71, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC) and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to EPA's Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within 7 days after the resolution of the dispute, Respondents shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 72. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 72. Respondents shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse EPA for its Future Response Costs.

XVII. DISPUTE RESOLUTION

75. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement. The Parties shall attempt to resolve any disagreements concerning this Settlement expeditiously and informally.

76. **Informal Dispute Resolution**. If Respondents object to any EPA action taken pursuant to this Settlement, including billings for Future Response Costs, they shall send EPA a written Notice of Dispute describing the objection(s) within 14 days after such action. EPA and Respondents shall have 21 days from EPA's receipt of Respondents' Notice of Dispute to resolve the dispute through informal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted verbally, but must be confirmed in writing. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

77. **Formal Dispute Resolution**. If the Parties are unable to reach an agreement within the Negotiation Period, Respondents shall, within 30 days after the end of the Negotiation Period, submit a statement of position to EPA's Project Coordinator. EPA may, within 30 days thereafter, submit a statement of position. Thereafter, an EPA management official at the Assistant Regional Administrator level or higher will issue a written decision on the dispute to Respondents. EPA's decision shall be incorporated into and become an enforceable part of this Settlement. Respondents shall fulfill the requirement that was the

subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

78. Except as provided in Paragraph 74 (Contesting Future Response Costs) or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondents under this Settlement. Except as provided in Paragraph 88, 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 this Settlement. In the event that Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XIX (Stipulated Penalties).

XVIII. FORCE MAJEURE

79. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondents, of any entity controlled by Respondents, or of Respondents' contractors that delays or prevents the performance of any obligation under this Settlement despite Respondents' best efforts to fulfill the obligation. The requirement that Respondents exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or increased cost of performance.

80. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement, Respondents shall notify EPA's Project Coordinator orally or, in his or her absence, the alternate EPA Project Coordinator, or, in the event both of EPA's designated representatives are unavailable, the Director of the EPR Waste Management Division, EPA Region 8, within 3 days of when Respondents first knew that the event might cause a delay. Within 10 days thereafter, Respondents shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondents shall include with any notice all available documentation supporting their claim that the delay was attributable to a force majeure. Respondents shall be deemed to know of any circumstance of which Respondents, any entity controlled by Respondents, or Respondents' contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondents from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 79 and whether Respondents have exercised their best efforts under Paragraph 79, EPA may, in its

unreviewable discretion, excuse in writing Respondents' failure to submit timely or complete notices under this Paragraph.

81. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, the time for performance of the obligations under this Settlement that are affected by the force majeure will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a force majeure, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure.

82. If Respondents elect to invoke the dispute resolution procedures set forth in Section XVII (Dispute Resolution), they shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Respondents shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondents complied with the requirements of Paragraphs 79 and 80. If Respondents carry this burden, the delay at issue shall be deemed not to be a violation by Respondents of the affected obligation of this Settlement identified to EPA.

83. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondents from meeting one or more deadlines under the Settlement, Respondents may seek relief under this Section.

XIX. STIPULATED PENALTIES

84. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 85.a and 86 for failure to comply with the obligations specified in Paragraphs 85.b and 86, unless excused under Section XVIII (Force Majeure). "Comply" as used in the previous sentence includes compliance by Respondents with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

85. **Stipulated Penalty Amounts: Payments, Financial Assurance, Major Deliverables, and Other Milestones**

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with any obligation identified in Paragraph 85.b:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$2,500	15th through 30th day
$12,000	31st day and beyond

b. **Obligations**

(1) Completion of all activities required under Section VIII of this Settlement Agreement, except reporting, in accordance with the schedules and deadlines set forth in this Settlement Agreement.

(2) Timely and adequate submittal of the RI/FS Work Plan, Draft Remedial Investigation Report, Draft Feasibility Study Report, and any required modification to such report, in accordance with this Settlement Agreement.

(3) Payment of any amount due under Section XVI (Payment of Response Costs) within 60 days of Respondents' receipt of the bill or within 7 days of resolution of a dispute as to any billed costs.

(4) Establishment and maintenance of financial assurance in accordance with Section XXVII (Financial Assurance).

(5) Establishment of an escrow account to hold any disputed Future Response Costs under Paragraph 74 (Contesting Future Response Costs).

86. **Stipulated Penalty Amounts: Other Deliverables.** The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate Deliverables required by this Settlement, other than those specified in Paragraph 85.a:

Penalty Per Violation Per Day	**Period of Noncompliance**
$500	1st through 14th day
$1,000	15th through 30th day
$2,500	31st day and beyond

87. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 98 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of $200,000. Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 98 (Work Takeover) and 122 (Access to Financial Assurance).

88. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 15 days after the agreement or the receipt of EPA's decision. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section IX (Submission and Approval of Deliverables), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondents of any deficiency; and (b) with respect to a decision by the EPA Management Official at the Assistant Regional Administrator level or higher, under Paragraph 77 (Formal Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this

Settlement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.

89. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement, EPA may give Respondents written notification of the failure and describe the noncompliance. EPA may send Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondents of a violation.

90. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the Dispute Resolution procedures under Section XVII (Dispute Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 71 (Payments for Future Response Costs).

91. If Respondents fail to pay stipulated penalties when due, Respondents shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondents have timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 88 until the date of payment; and (b) if Respondents fail to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 90 until the date of payment. If Respondents fail to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.

92. The payment of penalties and Interest, if any, shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement.

93. Nothing in this Settlement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(*l*) of CERCLA, 42 U.S.C. § 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek civil penalties pursuant Section 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement, except in the case of willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 98 (Work Takeover).

94. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

XX. COVENANTS BY EPA

95. Except as provided in Section XXI (Reservations of Rights by EPA), EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and

Future Response Costs. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement. These covenants extend only to Respondents and do not extend to any other person.

XXI. RESERVATIONS OF RIGHTS BY EPA

96. Except as specifically provided in this Settlement, nothing in this Settlement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing in this Settlement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

97. The covenant not to sue set forth in Section XX (Covenants by EPA) above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

a. liability for failure by Respondents to meet a requirement of this Settlement;

b. liability for costs not included within the definition of Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;

e. liability for violations of federal or state law that occur during or after implementation of the Work;

f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement.

98. **Work Takeover**

a. In the event EPA determines that Respondents: (1) have ceased implementation of any portion of the Work; (2) are seriously or repeatedly deficient or late in their performance of the Work; or (3) are implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondents. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondents a period of 30 days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

b. If, after expiration of the 30-day notice period specified in Paragraph 98.a, Respondents have not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary ("Work Takeover"). EPA will notify Respondents in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 98.b. Funding of Work Takeover costs is addressed under Paragraph 122 (Access to Financial Assurance).

c. Respondents may invoke the procedures set forth in Section XVII (Dispute Resolution) to dispute EPA's implementation of a Work Takeover under Paragraph 98.b. However, notwithstanding Respondents' invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 98.b until the earlier of (1) the date that Respondents remedy, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a written decision terminating such Work Takeover is rendered in accordance with Paragraph 77 (Formal Dispute Resolution).

d. Notwithstanding any other provision of this Settlement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXII. COVENANTS AND RESERVATIONS BY RESPONDENTS

99. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund through Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding the Work, Future Response Costs, and this Settlement, provided, however, Respondents reserve: (i) all claims each may have pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613, against the United States arising from the United States' status at the Site as an owner, operator, or arranger under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), based on the activities of the United States, other than EPA, at or in connection with the Site; or (ii) in the event a court of competent jurisdiction determines that Respondents cannot assert a claim against the United States pursuant to 42 U.S.C. § 9613, all claims each may

have pursuant to Section 107 of CERCLA, 42 U .S.C. § 9607, against the United States arising from the United States' status at the Site as an owner, operator, or arranger under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), based on the activities of the United States, other than EPA, at or in connection with the Site; or

c. any claim arising out of the Work or arising out of response actions at or in connection with OU2 of the Site for which Future Response Costs have or will be incurred, including any claim under the United States Constitution, the Montana Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law.

100. Except as provided in Paragraph 103 (Waiver of Claims by Respondents) these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Section XXI (Reservations of Rights by EPA), other than in Paragraph 97.a (liability for failure to meet a requirement of the Settlement), 97.d (criminal liability), or 97.e (liability for violations of federal or state law), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

101. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

102. Respondents reserve, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondents' Deliverables or activities.

103. **Waiver of Claims by Respondents**

a. Respondents agree not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that they may have:

(1) **De Micromis Waiver**. For all matters relating to OU2 of the Site against any person where the person's liability to Respondents with respect to OU2 of the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances

contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials;

(2) ***De Minimis*/Ability to Pay Waiver.** For response costs relating to OU2 of the Site against any person that has entered or in the future enters into a final CERCLA § 122(g) *de minimis* settlement, or a final settlement based on limited ability to pay, with EPA with respect to OU2 of the Site.

b. **Exceptions to Waivers**

(1) The waivers under this Paragraph 103 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person otherwise covered by such waivers if such person asserts a claim or cause of action relating to the Site against such Respondent.

(2) The waiver under Paragraph 103.a(1) (De Micromis Waiver) shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at OU2 of the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to OU2 of the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise.

104. In any subsequent proceeding, other than any proceedings to implement or enforce this Settlement, Respondents reserve all statutory and other legal defenses to joint and several liability for performance of response actions and payment of response costs incurred or to be incurred with respect to OU2 of the Site. By entering into this Settlement and agreeing to perform and/or fund response actions pursuant to this Settlement, Respondents do not waive such defenses. Respondents' agreement to perform and/or fund response actions under this Settlement shall in no way alter Respondents' defenses or result in Respondents being liable for any response actions or response costs for which it would not otherwise be liable under CERCLA, except as provided in this settlement agreement.

XXIII. OTHER CLAIMS

105. By issuance of this Settlement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents. The United States or EPA shall not be deemed a party to any contract entered into by Respondents or their directors, officers, employees, agents, successors,

representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement.

106. Except as expressly provided in Paragraphs 103 (Waiver of Claims by Respondents) and Section XX (Covenants by EPA), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

107. No action or decision by EPA pursuant to this Settlement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIV. EFFECT OF SETTLEMENT/CONTRIBUTION

108. Except as provided in Paragraphs 103 (Waiver of Claims by Respondents), nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XXII (Covenants by Respondents), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)–(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

109. The Parties agree that this Settlement constitutes an administrative settlement pursuant to which each Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement. The "matters addressed" in this Settlement are the Work and Future Response Costs.

110. The Parties further agree that this Settlement constitutes an administrative settlement pursuant to which each Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

111. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement against any person not a party to this Settlement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within 10 days after service or receipt of any

Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

112. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XX (Covenants By EPA).

XXV. INDEMNIFICATION

113. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondents as EPA's authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. § 300.400(d)(3). Respondents shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondents' behalf or under their control, in carrying out activities pursuant to this Settlement. Further, Respondents agree to pay the United States all costs it incurs, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Settlement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

114. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

115. Subject to Respondents' reservation in Paragraph 99.b, Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to OU2 of the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to OU2 of the Site, including, but not limited to, claims on account of construction delays.

XXVI. INSURANCE

116. No later than 5 days before commencing any on-Site Work, Respondents shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section XXIX (Notice of Completion of Work), commercial general liability insurance with limits of liability of $1 million per occurrence, automobile liability insurance with limits of liability of $1 million per accident, and umbrella liability insurance with limits of liability of $2 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Settlement. In addition, for the duration of the Settlement, Respondents shall provide EPA with certificates of such insurance. Respondents shall resubmit such certificates each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing Work on behalf of Respondents in furtherance of this Settlement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, then, with respect to the contractor or subcontractor, Respondents need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondents shall ensure that all submittals to EPA under this Paragraph identify the ACM Smelter Site, Great Falls, Montana and the EPA docket number for this action.

XXVII. FINANCIAL ASSURANCE

117. In order to ensure completion of the Work, Respondents shall secure financial assurance, initially in the amount of $2,000,000.00 ("Estimated Cost of the Work"), for the benefit of EPA. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA or under the "Financial Assurance - Settlements" category on the Cleanup Enforcement Model Language and Sample Documents Database at https://cfpub.epa.gov/compliance/models/, and satisfactory to EPA. Respondents may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, and/or insurance policies.

a. A surety bond guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. An irrevocable letter of credit, payable to or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;

c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;

d. A policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency;

e. A demonstration by a Respondent that it meets the financial test criteria of Paragraph 119, accompanied by a standby funding commitment, which obligates the affected Respondent to pay funds to or at the direction of EPA, up to the amount financially assured through the use of this demonstration in the event of a Work Takeover; or

f. A guarantee to fund or perform the Work executed in favor of EPA by a company: (1) that is a direct or indirect parent company of a Respondent or has a "substantial business relationship" (as defined in 40 C.F.R. § 264.141(h)) with a Respondent; and (2) can demonstrate to EPA's satisfaction that it meets the financial test criteria of Paragraph 119.

118. Respondents have selected, and EPA has found satisfactory, as an initial financial assurance a surety bond prepared in accordance with Paragraph 117 and attached hereto as Appendix C. Within 30 days after the Effective Date, or 30 days after EPA's approval of the form and substance of Respondents' financial assurance, whichever is later, Respondents shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to:

CERCLA Financial Analyst
U.S. EPA, Region 8 (8ENF-RC)
1595 Wynkoop Street
Denver, Colorado 80202-1129

119. Respondents seeking to provide financial assurance by means of a demonstration or guarantee under Paragraph 117.e or 117.f, must, within 30 days of the Effective Date:

a. Demonstrate that:

(1) the affected Respondent or guarantor has:

i. Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

ii. Net working capital and tangible net worth each at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

iii. Tangible net worth of at least $10 million; and

iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; or

(2) The affected Respondent or guarantor has:

i. A current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and

ii. Tangible net worth at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

iii. Tangible net worth of at least $10 million; and

iv. Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

b. Submit to EPA for the affected Respondent or guarantor: (1) a copy of an independent certified public accountant's report of the entity's financial statements for the latest completed fiscal year, which must not express an adverse opinion or disclaimer of opinion; and (2) a letter from its chief financial officer and a report from an independent certified public accountant substantially identical to the sample letter and reports available from EPA or under the "Financial Assurance-Settlements" subject list category on the Cleanup Enforcement Model Language and Sample Documents Database at https://cfpub.epa.gov/compliance/models/.

120. Respondents providing financial assurance by means of a demonstration or guarantee under Paragraph 117.e or 117.f must also:

a. Annually resubmit the documents described in Paragraph 119.b within 90 days after the close of the affected Respondent's or guarantor's fiscal year;

b. Notify EPA within 30 days after the affected Respondent or guarantor determines that it no longer satisfies the relevant financial test criteria and requirements set forth in this Section; and

c. Provide to EPA, within 30 days of EPA's request, reports of the financial condition of the affected Respondent or guarantor in addition to those specified in Paragraph 119.b; EPA may make such a request at any time based on a belief that the affected Respondent or guarantor may no longer meet the financial test requirements of this Section.

121. Respondents shall diligently monitor the adequacy of the financial assurance. If any Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, such Respondent shall notify EPA of such information within 14 days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify the affected Respondent of such determination. Respondents shall, within 45 days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for the affected Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed 60 days. Respondents shall follow the procedures of Paragraph 123 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondents' inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Settlement.

122. **Access to Financial Assurance**

a. If EPA issues a notice of implementation of a Work Takeover under Paragraph 98.b, then, in accordance with any applicable financial assurance mechanism, and/or related standby funding commitment, EPA is entitled to: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid in accordance with Paragraph 122.d.

b. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel the mechanism, and the affected Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section within 30 days after the notice of cancellation, the funds guaranteed under such mechanism must be paid in accordance with Paragraph 122.d.

c. If, upon issuance of a notice of implementation of a Work Takeover under Paragraph 98.b, either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism and/or related standby funding commitment, whether in cash or in kind, to continue and complete the Work; or (2) the financial assurance is a demonstration or guarantee under Paragraphs 117.e or 117.f, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondents shall, within 30 days of such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph 122 shall be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA or by

EPA's authorized representative; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by EPA's authorized representative. If payment is made to EPA, EPA may deposit the payment into the EPA Hazardous Substance Superfund or into the ACM Smelter and Refinery Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with OU2 of the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

e. All EPA Work Takeover costs not paid under this Paragraph 122 must be reimbursed as Future Response Costs under Section XVI (Payment of Response Costs).

123. **Modification of Amount, Form, or Terms of Financial Assurance.** Respondents may submit, on any anniversary of the Effective Date or at any other time agreed to by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to EPA in accordance with Paragraph 118, and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondents of its decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Respondents may reduce the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) if there is a dispute, the agreement or written decision resolving such dispute under Section XVII (Dispute Resolution). Respondents may change the form or terms of the financial assurance mechanism only in accordance with EPA's approval. Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum. Within 30 days after receipt of EPA's approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Respondents shall submit to EPA documentation of the reduced, revised, or alternative financial assurance mechanism in accordance with Paragraph 118.

124. **Release, Cancellation, or Discontinuation of Financial Assurance.** Respondents may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Section XXIX (Notice of Completion of Work); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XVII (Dispute Resolution).

XXVIII. MODIFICATION

125. EPA's Project Coordinator may modify any plan or schedule under this Settlement or the SOW in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of EPA's Project Coordinator's oral direction. Any other requirements of this Settlement may be modified only in writing by mutual agreement of the parties.

126. If Respondents seek permission to deviate from any approved work plan or schedule under this Settlement or the SOW, Respondents' Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondents may not proceed with the requested deviation until receiving oral or written approval from EPA's Project Coordinator pursuant to Paragraph 125.

127. No informal advice, guidance, suggestion, or comment by EPA's Project Coordinator or other EPA representatives regarding any Deliverable submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

XXIX. NOTICE OF COMPLETION OF WORK

128. When EPA determines that all Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, including, but not limited to Record Retention, EPA will provide written notice to Respondents. If EPA determines that any Work has not been completed in accordance with this Settlement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Work Plan, if appropriate, in order to correct such deficiencies. Respondents shall implement the modified and approved RI/FS Work Plan and shall submit a modified draft Remedial Investigation Report and/or Feasibility Study Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement.

XXX. INTEGRATION/APPENDICES

129. This Settlement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement and its appendices. The following appendices are attached to and incorporated into this Settlement:

a. "Appendix A" is the map of OU2 of the Site.

b. "Appendix B" is the SOW.

c. "Appendix C" is the approved form of financial assurance described in Paragraph 118.

XXXI. ADMINISTRATIVE RECORD

130. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to EPA documents developed during the course of the RI/FS for OU2 under this Settlement upon which selection of the remedial action may be based. Upon request of EPA, Respondents shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory

analytical reports, and other reports, except as exempt from disclosure under Paragraph 61 (Privileged and Protected Claims). Upon request of EPA, Respondents shall additionally submit any previous studies conducted under state, local, or other federal authorities that may relate to selection of the remedial action for OU2 of the Site, and all communications between Respondents and state, local, or other federal authorities concerning selection of the remedial action, except as exempt from disclosure under Paragraph 61 (Privileged and Protected Claims).

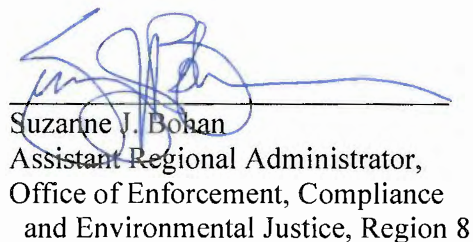
XXXII. EFFECTIVE DATE

131. This Settlement shall be effective on the date it is signed by the Regional Administrator or his/her delegatee.

IT IS SO AGREED AND ORDERED:

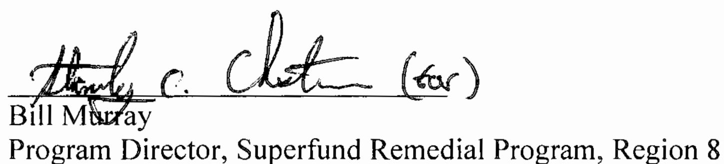
U.S. ENVIRONMENTAL PROTECTION AGENCY:

5/3/18
Date



Suzanne J. Bohan
Assistant Regional Administrator,
Office of Enforcement, Compliance
and Environmental Justice, Region 8

5/3/18
Date



Bill Murray
Program Director, Superfund Remedial Program, Region 8

Signature Page for Settlement Regarding ACM Smelter and Refinery Superfund Site

ATLANTIC RICHFIELD COMPNAY

Date: 23 APRIL 2018

BY: Patricia Gallery
Patricia Gallery
Vice President

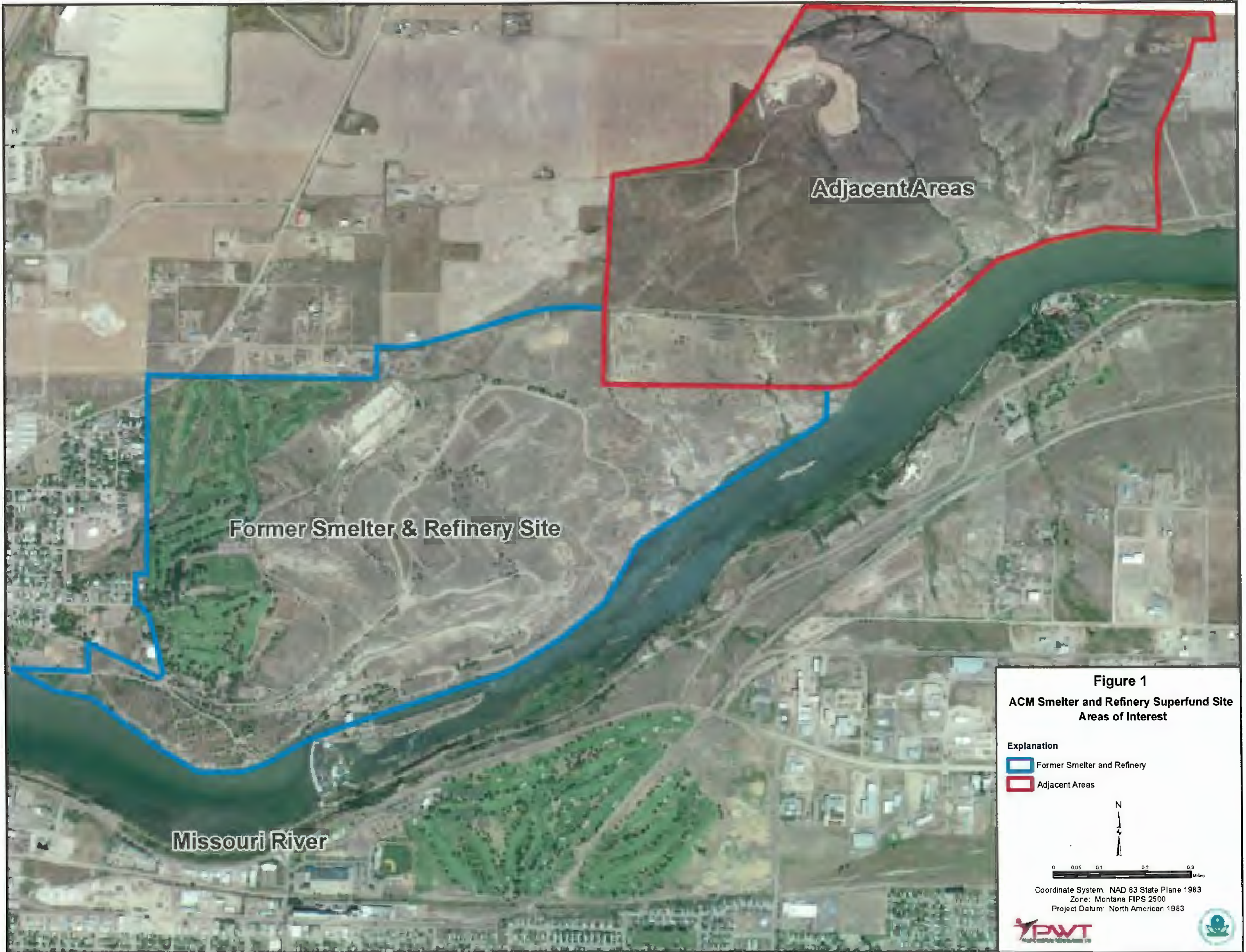
ARCO ENVIRONMENTAL REMEDIATION LLC

Date: 23 APRIL 2018

BY: Patricia Gallery
Patricia Gallery
Vice President

EFFECTIVE DATE: 5/3/18

APPENDIX A: MAP OF OPERABLE UNIT 2


Adjacent Areas
Former Smelter & Refinery Site
Missouri River
Figure 1
ACM Smelter and Refinery Superfund Site
Areas of Interest
Explanation
Former Smelter and Refinery
Adjacent Areas
N
Coordinate System: NAD 83 State Plane 1983
Zone: Montana FIPS 2500
Project Datum: North American 1983
PWT
Path: K:\GIS Library\ACM\127.001.006 HSP\Figure 2 LocationMap_03142017.mxd

APPENDIX B: STATEMENT OF WORK

DRAFT STATEMENT OF WORK

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

OPERABLE UNIT 2 - Former Facility and Adjacent Areas

1. INTRODUCTION

The purpose of the Remedial Investigation/Feasibility Study (RI/FS) for Operable Unit 2 (OU2) of the ACM Smelter and Refinery Site (the Site) is to investigate the nature and extent of contamination in soils, sediment, groundwater and surface water within and near the former smelter facility property and adjacent areas and drainage basins, to assess human health and ecological risks and to develop and evaluate potential remedial alternatives for OU2.

The United States Environmental Protection Agency (EPA) has established the initial study area boundaries of OU2 for the purpose of planning and developing the preliminary scope of the RI/FS. OU2 sampling and investigation under the Administrative Settlement Agreement and Order on Consent for Operable Unit 2 RI/FS (Settlement) and Statement of Work (SOW) will initially focus on the investigation of seeps between areas of historical facility operations and the Missouri River (North Bank Seepage Area), including upgradient characterization of potential sources to seep contamination. The study area is the area defined as the "Former Facility Area" and the "Adjacent Areas" in the attached Figure 1 (Figure 1 is the base map used to prepare "Appendix A" to the Settlement.) An RI sampling plan under this SOW will be developed to characterize the commercial, industrial, recreational and undeveloped land areas of the Former Facility Area and the Adjacent Areas.

This SOW is "Appendix B" to and incorporated as part of the Settlement between the Environmental Protection Agency and Atlantic Richfield Company and ARCO Environmental Remediation, LLC (Respondents). Discrepancies between the Settlement and this SOW are unintended, and wherever necessary, the Settlement will control. The definitions set forth in the Settlement are incorporated herein by reference and shall apply to this SOW.

The RI/FS for Operable Unit 1 (OU1) addresses the nature and extent of contamination in soils for the adjacent residential and outlying areas such that investigation of soil contamination is limited to the "Former Smelter & Refinery Site" study area in the attached Figure 1. OU1 related groundwater and surface water contamination and ecological risks were deferred to the OU2 RI/FS and incorporated in to this SOW.

2. PURPOSE OF THE STATEMENT OF WORK

This SOW sets forth requirements for conducting an RI/FS for OU2. The Respondents shall conduct the RI/FS in accordance with this SOW and the requirements in the Settlement and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Contingency Plan (NCP), 40 CFR Part 300, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (OSWER Directive 9355.3-01, October 1988) and other guidance documents that EPA identifies as relevant to conducting an RI/FS. A list of the primary guidance documents is included as Attachment A to this SOW.

EPA will establish and maintain the official project database. EPA may perform data validation in addition to the validation required to be performed by the Respondents as described in the final project Quality Assurance Project Plans (QAPPs)required under this SOW for OU2. Respondents shall provide written comments on the SOW and draft documents prepared by EPA for the OU2 RI/FS and may provide responses to EPA comments on Deliverables prepared and submitted by Respondents under this SOW to EPA within 30 days of receipt or such longer time as specified by EPA. EPA will take Respondents' comments into consideration when finalizing documents prepared by EPA for the OU2 RI/FS. Respondents will prepare and submit and EPA, in consultation with the State of Montana acting through its Department of Environmental Quality (MDEQ), will review and EPA will either approve, approve with conditions, modify, disapprove, or provide written comments on, the Respondents' QAPPs, Work Plans, Risk Assessments, RI Report, FS Report and other Deliverables required under the Settlement and this SOW, in accordance with the procedures and deadlines set forth in Section IX of the Settlement. The Respondents may discuss comments with EPA and/or MDEQ to determine revisions acceptable to EPA on Respondents' QAPPs, Risk Assessments, Work Plans, RI Report, FS Report, and other Deliverables required under the Settlement and this SOW, but such discussions shall not extend the submittal and re-submittal deadlines absent agreement by EPA. QAPPs must be approved by EPA prior to implementation.

As specified in CERCLA Section 104(a)(1), as amended by SARA, EPA, in consultation with MDEQ, will provide oversight of the Respondents' performance of the Work required under the Settlement and this SOW. The Respondents shall support EPA's initiation and conduct of oversight activities. EPA's determinations, approvals and activities as provided for in the Settlement and in this SOW, shall be conducted in consultation with MDEQ as provided for in the Settlement, and by CERCLA, the NCP, and applicable EPA guidance, including the guidance listed in Attachment A to this SOW.

Performance of the Work described in this SOW by the Respondents and EPA's review and approval of Deliverables and Work described in this SOW shall be performed in accordance with the procedures and other requirements in the Settlement. The Respondents shall furnish the

necessary personnel, materials, and services needed or incidental to, performing the Work described in this SOW, except as otherwise specified in the Settlement.

3. INITIAL PLANNING FOR THE REMEDIAL INVESTIGATION

EPA has reviewed a variety of existing reports that summarize sampling activities carried out during prior investigations of the geographic area identified as OU2. Specifically, this includes the December 2016 Preliminary Conceptual Site Model (CSM) and May 2017 NBS Area Source Investigation Report. Based on these efforts, EPA anticipates multiple phases of RI/FS for OU2, including:

- preliminary NBS focused investigation and associated treatability studies,
- remedial investigations, including baseline human health and ecological risk assessments,
- feasibility study development and screening of alternatives,
- possible additional treatability studies; and
- feasibility study detailed analysis of alternatives.

The 2016 Preliminary CSM has been accepted by the EPA and will be utilized to serve as the basis of RI/FS Work Plan development. EPA will determine the number of phases necessary to complete the RI/FS and the activities included in each phase, subject to the provisions of the Settlement.

3.1 NBS Area Focused Investigation and Treatability Study

As part of a preliminary remedial investigation for OU2, the Respondents shall develop a work plan to further investigate the sources, fate and transport of contaminants associated with the NBS Area and, if warranted, conduct treatability studies evaluating one or more treatment alternatives identified to minimize the migration and release of such contaminants to the Missouri River.

This work plan shall include available data relating to the types and quantities of hazardous substances, pollutants, or contaminants in and near the NBS Area and adjacent areas and may include past and current waste management and disposal practices and a sampling and analysis plan to determine the fate and transport of the identified contaminants. The work plan shall also identify potential alternatives to reduce or eliminate the release of such contaminants to the Missouri River.

The Respondents shall provide the work plan to EPA, with a copy to MDEQ, in accordance with the schedule contained in Section 11 of this SOW. Respondent shall submit environmental sampling data in an electronic format consistent with the project database structure and in accordance with Paragraph 43 of the Settlement to allow the data to be uploaded to the project database.

3.2 Conduct Field Visits

The Respondents shall provide support necessary to allow EPA and MDEQ to conduct field visits of OU2 in order to complete the project scoping phase and to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors. Payment of money for access to private property to sample or collect other OU2 RI/FS data is not required by this SOW or the "best efforts" provisions of the Settlement. EPA shall coordinate Respondents to determine the field visit dates, times, and scope and shall provide at least two weeks' notice of an agreed date. EPA will invite MDEQ and EPA may invite other interested agencies to participate in the field visits.

4. COMMUNITY RELATIONS

EPA will continue to implement community relations activities for the Site in accordance with CERCLA and the NCP. EPA will consider Respondents' input in implementation of the Community Relations Plan for the Site. The Respondents shall, as requested by EPA, assist EPA by providing information regarding the Site history, participating in public meetings, developing graphics, placing newspaper ads developed by EPA, or distributing fact sheets developed by EPA.

5. RI/FS WORK PLAN

The Respondents shall submit a draft RI/FS Work Plan to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in Section of 11 of this SOW.

The RI/FS Work Plan shall fully describe Work to be performed in connection with the RI/FS for OU2 and shall include:

- A discussion of background information which addresses the nature and extent of the contamination within OU2, describes the history of regulatory and response actions for OU2 of the Site, identifies a preliminary OU2 study area boundary, and presents a local and regional summary of the environs surrounding the Site;
- A list of key personnel and responsibilities;
- A description of the overall technical approach;
- A general discussion of Data Quality Objectives (DQOs) including measurements of performance;
- A data management plan; and
- A RI/FS schedule.

6. SITE CHARACTERIZATION

The overall objective of site characterization is to describe the nature and extent of contamination within OU2 and to describe areas of OU2 that may pose a threat to human health or the environment. The Respondents shall perform the Work described in this section including:

- Prepare and submit to EPA, with a copy to MDEQ, for review and EPA approval, or comment, in consultation with MDEQ, detailed QAPPs which include standard operating procedures and other detailed information (e.g., identification of the Respondents' key project personnel) as requested by EPA, in consultation with MDEQ;
- Implement EPA-approved QAPPs and work plans;
- Document field activities;
- Perform the laboratory analysis of samples at laboratories approved by EPA and in accordance with the EPA-approved QAPPs;
- Deliver laboratory data to EPA, with a copy to MDEQ, in the format specified in the QAPPs;
- Prepare summary reports for each phase of investigation;
- Prepare draft and final remedial investigation reports; and
- Comply with the milestone schedule included in each EPA-approved QAPP.

The Respondents shall notify EPA at least 15 days in advance of field work starting for each phase of the RI and shall provide a monthly progress report, with a copy to MDEQ, and participate in meetings at EPA's request. The Respondents shall notify EPA in writing upon completion of field activities for each phase of the RI.

6.1 Development and Implementation of Quality Assurance Project Plans

The Respondents will develop and submit to EPA, with a copy to MDEQ, for review and EPA approval, or comment, in consultation with MDEQ, pursuant to the procedures in the Settlement, a detailed QAPP for each phase of the RI that requires sample collection and field or laboratory analysis of the collected samples. Required elements of sampling and analysis quality assurance/quality control (QA/QC) to be reflected in the RI/FS work plan are found in EPA's Requirements for Quality Assurance Project Plans (QA/R-5). The QAPPs will be prepared and submitted in accordance with Section IX of the Settlement and the schedule contained in Section 11 of this SOW. Each QAPP will be issued by the Respondents first in draft form to the EPA, with a copy to MDEQ, for review. Following satisfactory revisions by the Respondents to address EPA and/or MDEQ comments, the Respondents shall fully implement a Final QAPP for each phase of the RI. EPA may require the Respondents to include detailed information in the final QAPP (e.g., standard operating procedures, analytical laboratory reporting limits, names and responsibilities of key project personnel, schedule). EPA will approve final QAPPs.

It is anticipated that there will be multiple phases of the RI for OU2. The number of phases required for the RI for OU2 will be determined by EPA, in consultation with MDEQ. The final EPA-approved QAPP for each phase of the RI will include a description of the goals for the specific phase, a list of key personnel and responsibilities, Data Quality Objectives (DQOs), field sampling plans, QAPPs, and data management plans and schedules. Each final EPA-approved QAPP will describe the sampling program to be implemented for each phase, including the rationale, number, type, and location of samples; the sample collection, handling and custody

procedures; the required field documentation and the required analytical methods. QAPP procedures will describe the measures necessary to generate data of sufficient quality to achieve the DQOs. The QAPP will specify special training requirements and certifications, quality control requirements for field activities and analytical processes, and data validation requirements.

Respondents shall prepare a Health and Safety Plan (HSP) specific to the activities and submit it to EPA, with a copy to MDEQ, in accordance with the schedule contained in Section 11 of this SOW. Respondents are solely responsible for ensuring the health and safety of their respective employees and/or contractors performing the Work described in this SOW. The Respondents shall exercise best efforts, as defined in Paragraph 55 of the Settlement, to obtain access to properties for sampling and shall implement each final EPA-approved QAPP in accordance with the schedule included in the QAPP. The Respondents shall arrange for validated analytical data from laboratories to be reported to EPA, with a copy to MDEQ, in the format specified by EPA in the final EPA-approved QAPP. Respondent will perform required data validation described in the final EPA-approved QAPP.

The Respondents shall consistently document and adequately record in well maintained field logs and laboratory reports, information gathered during implementation of each final EPA-approved QAPP. The method(s) of documentation shall be consistent with that specified in the final EPA-approved QAPP. The Respondents shall use field logs to document observations, measurements, and significant events that occur during field activities. The Respondents shall ensure that laboratory reports document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

The Respondents shall maintain field reports and sample shipment records. Analytical results developed under the QAPP shall not be included in site characterization summary reports or RI report unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondents shall establish a data security system to safeguard field logs, field data sheets, laboratory reports, chain of custody forms and other project records to prevent loss, damage, or alteration of project documentation. The Respondents shall submit a written description of the data security system to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in Section 11 of this SOW.

6.2 Summary Reports

For each phase of the RI, the Respondents shall prepare a summary report describing the implementation of the QAPP. Each summary report shall include the field documentation specified in the QAPP, a description of the physical characteristics of the study area, results of required field quality control procedures, and results of field and laboratory audits performed by the Respondents as specified in the final EPA-approved QAPP. The Respondents shall submit, for EPA review and approval, in consultation with MDEQ, a summary report for sampling of each phase of the RI to EPA, with a copy to MDEQ, for review in accordance with Section IX of the Settlement and the schedule established in the final EPA-approved QAPP for that phase.

6.3 RI Report

After the QAPP for the final phase of the OU2 RI has been implemented, the Respondents shall prepare and submit a draft RI Report to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in Section 11 of this SOW. The RI Report shall summarize results of field activities, the sources of contamination, the nature and extent of contamination and the fate and transport of contaminants. The Respondents shall refer to Table 3-13 in the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA", OSWER Directive 9355.3-01, October 1988 for a suggested RI Report format.

Within the RI Report, the Respondents shall analyze and evaluate the data to describe the following, including but not limited to:

- Physical and biological characteristics of OU2;
- Contaminant source characteristics;
- Nature and extent of contamination; and
- Contaminant fate and transport.

The RI Report will include the actual and potential magnitude of releases from the identified sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified in a letter submitted to EPA, with a copy to MDEQ, for review and EPA approval, in consultation with MDEQ, prior to their use. Data and programming, including proprietary programs, shall be made available to EPA. Also, this evaluation shall provide information relevant to Site characteristics necessary for the development and evaluation of remedial alternatives.

6.4 Baseline Human Health Risk Assessment

After the SAP for the final phase of the OU2 RI has been implemented, the Respondents shall prepare and submit a draft Baseline Human Health Risk Assessment (BHHRA) report to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in Section 11 of this SOW. The BHHRA report shall summarize calculations of potential risk to human receptors. The Respondents shall refer to Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A) EPA/540/1-89/002, December 1989 for a suggested BHHRA report format.

6.5 Baseline Ecological Risk Assessment

After the QAPP for the final phase of the OU2 RI has been implemented, the Respondents shall prepare and submit a draft Baseline Ecological Risk Assessment (BERA) report to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in Section 11 of this SOW. The BERA report shall summarize calculations of potential risk to ecological receptors. The Respondents shall refer to "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological

Risk Assessments" OSWER Directive 9285.7-25, June 1997 for a suggested BERA report format

6.6 Remedial Action Objectives

EPA, in consultation with MDEQ, will develop Remedial Action Objectives (RAOs) and a list of potential State and federal Applicable or Relevant and Appropriate Requirements (ARARs) and to-be considered advisories, criteria or guidance (TBCs) based on the information provided in the final EPA approved RI Report, BHHRA, and BERA.

6.7 Designation of Operable Units.

EPA reserves all rights to establish other operable unit(s) at the Site.

7. DEVELOPMENT AND SCREENING OF REMEDIAL ALTERNATIVES

The Respondents shall perform the following activities to complete the development and screening of remedial alternatives.

7.1 Develop General Response Actions

The Respondents shall develop general response actions that will satisfy the RAOs developed by EPA, in consultation with MDEQ, for OU2. General response actions may include treatment, containment, excavation, extraction, disposal, institutional controls, or a combination of these actions.

For each environmental medium for which RAOs have been developed by EPA, in consultation with MDEQ, the Respondents shall make an initial determination of areas or volumes to which general response actions may apply, taking into account Site conditions, the nature and extent of contamination within OU2, and acceptable exposure levels and potential exposure routes identified in the RAOs.

7.2 Identify and Screen Remedial Technology Types and Process Options

The Respondents shall identify and evaluate remedial technology types and process options applicable to each general response action. The term "technology types" refers to general categories of technologies. The term "process options" refers to specific processes within each technology type. Several broad technology types may be identified for each general response action and numerous technology process options may exist within each technology type.

The Respondents shall use information from the RI on contaminant types and concentrations and Site characteristics to screen out technologies and process options that cannot be effectively

implemented at OU2 of the Site. The Respondents shall document the results of the initial screening of technology types and process options for OU2 in a technical memorandum (Technology and Process Option Screening Memo). For efficiency, the Technology and Process Option Screening Memo (referenced in this Section) can be combined with the Development and Screening of Alternatives Technical Memo (referenced in Section 7.5) and Treatability Studies Letter Report (referenced in Section 8.1) into a single submittal, subject to EPA's approval. The Respondents shall refer to Figures 4-4 and 4-5 in the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA," OSWER Directive 9355.3-01, October 1988 for examples of figures that may be used to summarize the initial screening of technologies and process options and the evaluation of process options. The Respondents shall submit the technical memorandum that documents the tasks described in Sections 7.1 and 7.2 of this SOW to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and in accordance with the schedule contained in Section 11 of this SOW.

7.3 Assemble and Document Alternatives

The Respondents shall assemble selected representative technologies into alternatives that represent a range of alternatives that will address the RAOs for OU2. The Respondent shall specify the reasons for eliminating alternatives during the preliminary screening process.

7.4 Alternative Screening and Selection of Alternatives for Detailed Analysis

The Respondents shall perform a screening of each remedial alternative based on effectiveness, implementability, and cost. As appropriate, the screening will preserve the range of alternatives initially developed. The range of remaining alternatives will include options that use treatment technologies and permanent solutions including isolation and containment of Waste Material to the maximum extent practicable.

7.5 Development and Screening of Alternatives Technical Memorandum

The Respondents shall prepare a technical memorandum summarizing the Work performed in the development and screening of alternatives and the results of each subtask described in this section (Development and Screening of Alternatives Technical Memorandum) including:

- A description of the general response actions and the areas or volumes of contaminated media to which they apply;
- A description of the remedial technology types and process options applicable to each general response action;
- The results of the initial screening of remedial technology types and process options,
- A description of the remedial alternatives;
- The results of the screening of alternatives based on effectiveness, implementability, and cost; and
- A description of the alternatives that remain after screening and the proposed action specific State and federal ARARs and TBCs for each alternative.

The Respondents shall submit the Development and Screening of Alternatives Technical Memorandum to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and in accordance with the schedule contained in Section 11 of this SOW.

8. TREATABILITY STUDIES

EPA may require the Respondents to perform treatability studies, in addition to the NBS Area treatability studies described in Section 3.1 of this SOW, to provide sufficient data to allow treatment alternatives to be fully developed and evaluated during the feasibility study and/or to reduce the cost and performance uncertainties for treatment alternatives to levels sufficient to allow EPA to select a remedy for OU2. EPA may also allow Respondents to rely on the results of treatability studies from other similar sites that were conducted under EPA oversight.

8.1 Treatability Studies Letter Report

The Respondents shall identify a range of candidate technologies for treatability studies, in addition to the NBS Area treatability studies described in Section 3.1 of this SOW, based on the RAOs and the list of potential State and federal ARARs and TBCs and taking into consideration the final results of the development and screening of alternatives. The Respondents shall describe the candidate technologies in a Treatability Studies Letter Report submitted to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in Section 11 of this SOW. Within the letter report, the Respondents shall present information on performance, relative costs, removal efficiencies, operation and maintenance requirements, and implementability of the identified candidate technologies. If the existing data on the Site and the available information on candidate technologies are not sufficient to evaluate alternatives in the detailed analysis of alternatives, EPA may require treatability studies to be performed by the Respondents.

8.2 Treatability Study Work Plan

Where EPA has determined that treatability studies are required, and unless the Respondents can demonstrate to EPA's satisfaction that they are not needed, the Respondents shall submit a draft Treatability Study Work Plan (conforming to the DQO SAP- QAPP requirements of the UFP-QAPP format) to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in Section of 11 of this SOW. The Treatability Study Work Plan shall describe the type of treatability study to be performed (e.g., bench scale or pilot scale) and shall include:

- A discussion of background information;
- A list of key personnel and responsibilities;
- A description of the remedial technologies to be tested;
- DQOs for each test including measurements of performance;
- The experimental procedures for each test;
- A SAP which describes the samples to be collected, sample collection procedures, sampling handling and tracking procedures, a QAPP, and analytical methods;

- A data management plan;
- A health and safety plan;
- A plan for management of waste generated during the treatability tests; and
- A schedule.

8.3 Treatability Study Report

Upon EPA approval of the Treatability Study Work Plan, the Respondents shall implement the work plan. Following completion of the treatability study, the Respondents shall analyze and interpret the study results in a technical report (Treatability Study Report) submitted to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the Settlement and the schedule contained in the final EPA-approved Treatability Study Work Plan. In the Treatability Study Report, the Respondents shall evaluate the effectiveness, implementability, and cost of each technology and compare test results with predicted results. The Respondents shall also evaluate full-scale application of the technology including a sensitivity analysis identifying key parameters affecting full-scale operation.

9. DETAILED ANALYSIS OF ALTERNATIVES

Upon EPA approval of the Development and Screening of Alternatives Technical Memorandum, the Respondents shall perform a detailed analysis of the remaining OU2 remedial alternatives. The detailed analysis shall be sufficient to allow EPA to adequately compare the alternatives, select a remedial action for OU2, and demonstrate satisfaction of the CERCLA statutory remedy selection requirements (§121(b)(1)(A) of the CERCLA).

The Respondents shall assess each alternative against the following seven of the nine evaluation criteria contained in the NCP (40 CFR Part 300.430(e) (9) (iii)):

1. Overall protection of human health and the environment
2. Compliance with ARARs
3. Long term effectiveness and permanence
4. Reduction of toxicity, mobility, or volume through treatment
5. Short-term effectiveness
6. Implementability
7. Cost

The Respondents shall conduct the detailed analysis of alternatives by evaluating each alternative against the seven evaluation criteria above and then performing a comparative analysis between remedial alternatives. That is, each alternative shall be compared against the others using the evaluation criteria as a basis of comparison.

10. FEASIBILITY STUDY REPORT

The Respondents shall prepare a draft FS Report that summarizes the development and screening of remedial alternatives and the detailed analysis of alternatives. Identification and selection of the preferred alternative for OU2 are reserved by EPA, in consultation with MDEQ. In identifying and selecting the preferred alternative for OU2, EPA will accept and consider input and comments from Respondents. The Respondents shall refer to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (OSWER Directive 9355.3-01, October 1988) for an outline of the FS Report and the required report content. The Respondents shall submit the draft FS Report to EPA, with a copy to MDEQ, for review and EPA approval in accordance with Section IX of the AOC and the schedule contained in Section 11 of this SOW.

11. SCHEDULE OF DELIVERABLES

The Respondents shall deliver documents and perform activities described in this SOW in accordance with the following schedule:

SOW REFERENCE	DOCUMENT OR ACTIVITY	DELIVERY DATE
Section 3.1	Draft NBS Area Focused Investigation and Treatability Study Work Plan	30 days after Effective Date of Settlement
Section 3.1	Final NBS Area Focused Investigation and Treatability Study Work Plan	30 days after receipt of EPA comments on Draft NBS Area Focused Investigation and Treatability Study Work Plan
Section 3.2	Conduct field visit	Not later than 45 days after Effective Date of Settlement
Section 3.2	Notification of field visit	2 weeks prior to field visit
Section 4	Community relations support	As requested by EPA
Section 5	Draft RI/FS Work Plan	90 days after Effective Date of Settlement
Section 5	Final RI/FS Work Plan	30 days after receipt of EPA comments on Draft RI/FS Work Plan
Section 6	Progress Reports	Monthly
Section 6.1	Draft Quality Assurance Project Plan (QAPP)/Sampling and Analysis Plan (SAPs) for each phase of the RI	45 days prior to the start of fieldwork for each phase of the RI

SOW REFERENCE	DOCUMENT OR ACTIVITY	DELIVERY DATE
Section 6.1	Final QAPP/SAP for each phase of the RI	30 days after receiving EPA comments on Draft QAPP/SAP for each phase of the RI
Section 6.1	Health and Safety Plan	2 weeks prior to field visit
Section 6.1	Health and Safety Plan updates necessary for QAPP/SAP implementation for each phase of the RI	30 days prior to start of field work for each phase of the RI
Section 6.1	Written description of data security System	30 days prior to start of field work for RI Phase I SAP
Section 6.2	Summary Reports for each phase of RI sampling	In accordance with the schedule specified in EPA approved final SAP for each phase of the RI
Section 6.3, 6.4 and 6.5	Draft OU2 RI Report including BHHRA and BERA	180 days after field work is complete for final phase of RI sampling
Section 6.3, 6.4 and 6.5	Final OU2 RI Report including BHHRA and BERA	60 days after receiving EPA comments on draft RI Report
Section 7.2, 7.5 and 8.1	Draft Technology and Process Option Screening Memo, Development and Screening of Alternatives Technical Memo, and Treatability Studies Letter Report (if needed)	90 days after receiving final RAOs from EPA
Section 7.2, 7.5 and 8.1	Final Technology and Process Option Screening Memo, Development and Screening of Alternatives Technical Memo, and Treatability Studies Letter Report (if needed)	45 days after receiving EPA comments on draft Technology and Process Option Screening Memo, Development and Screening of Alternatives Technical Memo, and Treatability Studies Letter Report (if needed)
Section 8.2	Draft Treatability Study Work Plan (if needed)	30 days after receiving notice from EPA that treatability studies are required
Section 8.2	Final Treatability Study Work Plan (if needed)	30 days after receiving EPA comments on draft Treatability Study Work Plan

SOW REFERENCE	DOCUMENT OR ACTIVITY	DELIVERY DATE
Section 8.3	Draft Treatability Study Technical Report (if needed)	As specified in EPA approved final Treatability Study Work Plan
Section 8.3	Final Treatability Study Technical Report (if needed)	30 days after receiving EPA comments on draft Technical Report
Section 10	Draft OU2 FS Report	120 days after EPA approval of final Development and Screening of Alternatives Technical Memorandum or final Treatability Study Technical Report, whichever occurs later
Section 10	Final OU2 FS Report	60 days after receiving EPA comments on draft FS Report

ATTACHMENT A

List of Guidance Documents

EPA Requirements for Quality Assurance Project Plans (QA/R-5)

Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA. OSWER Directive 9355.3-01

Risk Assessment Guidance for superfund, Volume I, Huma Health Evaluation Manual (Part A). EPA/540/1-89/002

Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments. OSWER 9285.7-25

Guidance for Data Usability in Risk Assessment, (OSWER Directive #9285.7-05, October 1990), or subsequently issued guidance.

Uniform Federal Policy for Implementing Quality Systems, EPA-505-F-03-001, March 2005), or subsequently issued guidance.

A Guide to Developing and Documenting Cost Estimates during the Feasibility Study. EPA 540-R-D0-002, OSWER No. 9355.0-75

CERCLA Compliance with Other Laws Manual. Part I. Interim Final EPA 540/G - 89/006, OSWER No. 9234.1-01

CERCLA Compliance with Other Laws Manual: CERCLA Compliance with the CWA and SDWA. OSWER No. 9234.2-06/FS

APPENDIX C: APPROVED FORM OF FINANCIAL ASSURANCE

[Letterhead of Bond Issuer]

PAYMENT BOND

Surety's Payment Bond Number:	**[insert number]**
Date of Execution of Payment Bond:	**[insert date]**
Effective Date of Payment Bond:	**[insert date]**
Total Dollar Amount of Payment Bond:	$2,000,000.00

PRINCIPAL:	
Legal Name:	Atlantic Richfield Company
Address:	501 Westlake Park Boulevard, Houston, TX 77079
Contact Person(s)/Information:	**[insert name and contact information (phone, email)]**
SURETY:	
Legal Name:	Westchester Fire Insurance Company
Address:	**[insert address]**
Contact Person(s)/Information:	**[insert name and contact information (phone, email)]**
BENEFICIARY:	
Legal Name:	U.S. Environmental Protection Agency Region 8 c/o **[insert appropriate Regional official such as "Superfund Division Director"]**
Address/Contact Information:	**[insert address and contact information (phone, email)]**
SITE INFORMATION:	
Name and Location of Site:	ACM Smelter and Refinery Site Great Falls, Cascade County, Montana Operable Unit 2 ("Site")
EPA Identification Number:	MTD093291599
Agreement Governing Site Work:	That certain Administrative Settlement Agreement and Order on Consent for Operable Unit 2 Remedial Investigation/Feasibility Study, dated **[insert date]**, **[CERCLA Docket No. __]**, between the United States of America and Atlantic Richfield Company and ARCO Environmental Remediation, L.L.C. (the "Agreement")

KNOW ALL PERSONS BY THESE PRESENTS, THAT:

WHEREAS, said Principal is required, under the Agreement entered pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601-9675, to perform the "Work" as defined in such Agreement (hereinafter, the "Work") and to fulfill its other obligations as set forth therein; and

WHEREAS, said Principal is required by the Agreement to provide financial assurance to ensure completion of the Work.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration the receipt of which is hereby acknowledged, the parties hereto agree as follows:

1. The Principal and Surety hereto are firmly bound to the United States Environmental Protection Agency (EPA or Beneficiary), in the above Total Dollar Amount of this Payment Bond, for the payment of which we, the Principal and Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, subject to and in accordance with the terms and conditions hereof.

2. The conditions of the Surety's obligation hereunder are such that if the Principal shall promptly, faithfully, fully, and finally complete the Work in accordance with the terms of the Agreement, the Surety's obligation hereunder shall be null and void; otherwise it is to remain in full force and effect.

3. Pursuant to and in accordance with the terms of the Agreement, and except as specifically provided in Paragraph 5 below, the Surety shall become liable on the obligation evidenced hereby only upon the Principal's failure to perform all or any portion(s) of the Work, EPA's subsequent notice of a Work Takeover, and the Principal's failure to remedy to EPA's satisfaction the circumstances giving rise to EPA's issuance of such notice. At any time and from time to time upon notification by EPA (as specified in the Agreement) that a Work Takeover has commenced, the Surety shall promptly (and in any event within 15 days after receiving such notification) pay to EPA funds up to the Total Dollar Amount of this Payment Bond in such amounts and to such person(s), account(s), or otherwise as EPA may direct. If the Surety does not render such payment within the specified 15-day period, the Surety shall be deemed to be in default of this Payment Bond and EPA shall be entitled to enforce any remedy available to it at law, in equity, or otherwise.

4. The liability of the Surety shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the Total Dollar Amount of this Payment Bond, but in no event shall the aggregate obligation of the Surety hereunder exceed the amount of said sum.

5. The Surety may cancel this Payment Bond only by sending notice of cancellation to the Principal and to the Beneficiary, provided, however, that no such cancellation shall be effective during the 120-day period beginning on the date of receipt of the notice of cancellation by both the Principal and the Beneficiary, as evidenced by return receipts. If after 90 days of such 120-day period, the Principal has failed to provide alternative financial assurance to EPA in accordance with the terms of the Agreement, EPA shall have the right to draw upon the Total Dollar Amount of this Payment Bond.

6. The Principal may terminate this Payment Bond only by sending written notice of termination to the Surety and to the Beneficiary, provided, however, that no such termination shall become effective unless and until the Surety receives written authorization for termination of this Payment Bond by the Beneficiary.

7. Any modification, revision, or amendment that may be made to the terms of the Agreement or to the Work to be done thereunder, or any extension of the Agreement, or other forbearance on the part of either the Principal or Beneficiary to the other, shall not in any way release the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors, or assigns from liability hereunder. The Surety hereby expressly waives notice of any change, revision, or amendment to the Agreement or to any related obligations between the Principal and the Beneficiary.

8. The Surety will immediately notify the Beneficiary of any of the following events: (a) the filing by the Surety of a petition seeking to take advantage of any laws relating to bankruptcy, insolvency, reorganization, winding up or composition or adjustment of debts; (b) the Surety's consent to (or failure to contest in a timely manner) any petition filed against it in an involuntary case under such bankruptcy or other laws; (c) the Surety's application for (or consent to or failure to contest in a timely manner) the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator, or the like of itself or of all or a substantial part of its assets; (d) the Surety's making a general assignment for the benefit of creditors; or (e) the Surety's taking any corporate action for the purpose of effecting any of the foregoing.

9. Any provision in this Payment Bond that conflicts with CERCLA or any other applicable statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or legal requirement shall be deemed incorporated herein.

10. All notices, elections, consents, approvals, demands, and requests required or permitted hereunder shall be given in writing to (unless updated from time to time) the addressees shown on the first page of this Payment Bond, identify the Site, and provide a contact person (and contact information). All such correspondence shall be: (a) effective for all purposes if hand delivered or sent by (i) certified or registered United States mail, postage prepaid, return receipt requested or (ii) expedited prepaid delivery service, either commercial or United States Postal Service, with proof of attempted delivery, to the relevant address shown on the first page of this Payment Bond; and (b) effective and deemed received upon the earliest of (i) the actual receipt of the same by personal delivery or otherwise, (ii) one business day after being deposited with a nationally recognized overnight courier service as required above, or (iii) three business days after being deposited in the United States mail as required above. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given as herein required shall be deemed to be receipt of the notice, election, consent, approval, demand, or request sent.

11. The Surety hereby agrees that the obligations of the Surety under this Payment Bond shall be in no way impaired or affected by any winding up, insolvency, bankruptcy, or

reorganization of the Principal or by any other arrangement or rearrangement of the Principal for the benefit of creditors.

12. No right of action shall accrue on this Payment Bond to or for the use of any person other than the Beneficiary or the executors, administrators, successors or assigns of the Beneficiary.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Principal and Surety have executed this Payment Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby represent, warrant, and certify that they are authorized to execute this Payment Bond on behalf of the Principal and Surety, respectively.

FOR THE PRINCIPAL:

Date: ____________

By [signature]: ______________________
Printed name: ______________________
Title: ______________________

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of PRP/Settling Defendant's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of Atlantic Richfield Company, the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

____
[Signature of Notary Public]

FOR THE SURETY:

Date: ____________

By [signature]: ______________________
Printed name: ______________________
Title: ______________________

State of [**insert state**]
County of [**insert county**]

On this [**insert date**], before me personally came [**insert name of Surety's signatory**] to me known, who, being by me duly sworn, did depose and say that she/he is [**insert title**] of [**insert name of Surety**], the entity described in and which executed the above instrument; and that she/he signed her/his name thereto.

____
[Signature of Notary Public]