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ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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IN THE MATTER OF:
ACM Smelter and Refinery Site
Great Falls, Cascade County, Montana

Operable Unit 1

Atlantic Richfield Company
ARCO Environmental Remediation, L.L.C.

Respondents

ADMINISTRATIVE SETTLEMENT
AGREEMENT AND ORDER ON
CONSENT FOR OPERABLE UNIT 1
REMEDIAL INVESTIGATION/
FEASIBILITY STUDY

U.S. EPA Region 8
CERCLA Docket No. **CERCLA-08-2011-0017**

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

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

Operable Unit No. 1

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Atlantic Richfield Company and ARCO Environmental Remediation, L.L.C., ("Respondents"). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") for "Operable Unit 1", also known as the "Community Soils" operable unit, comprising residential and other soils and waste materials and related contaminant migration pathways in and near the unincorporated community of Black Eagle and other areas surrounding the former smelter and refinery facility, at or in connection with the ACM Smelter and Refinery Site, located generally on the north bank of the Missouri River, near Great Falls, Cascade County, Montana ("Site") and payment of Future Response Costs incurred by EPA in connection with the RI/FS as well as Past Response Costs incurred in connection with the Site.

2. This Settlement Agreement 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, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D. This authority was further re-delegated by the Regional Administrator of EPA Region 8 to the undersigned officials.

3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the relevant Federal (Department of Interior) and State of Montana (Montana Department of Justice, Natural Resources Damage Program) natural resource trustees on May 20, 2011, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal and/or State trusteeship.

4. EPA and Respondents recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement Agreement do not constitute an admission of any legal or factual matter set forth in this Settlement Agreement. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact in Section V and the conclusions of law and

determinations in Section VI. By signing this Settlement Agreement, 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, and Respondents agree to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms in any proceeding to implement or enforce this Settlement Agreement.

II. PARTIES BOUND

5. Notwithstanding the definition of "Respondent" in this Settlement Agreement, this Settlement Agreement applies to and 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 Agreement.

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

7. Respondents shall ensure that their contractors, subcontractors and representatives performing Work receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondents shall be responsible for any noncompliance with this Settlement Agreement.

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

III. STATEMENT OF PURPOSE

9. In entering into this Settlement Agreement, the objectives of EPA and Respondents are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants to, at or from Operable Unit 1 of the Site, by conducting a Remedial Investigation for Operable Unit 1 as more specifically set forth in the Statement of Work for Operable Unit 1 ("SOW") attached as Appendix A to this Settlement Agreement; (b) to identify and evaluate remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants or contaminants to, at or from Operable Unit 1 of the Site, by conducting a Feasibility Study for Operable Unit 1 as more specifically set forth in the SOW in Appendix A to this Settlement Agreement; and (c) to recover response and oversight costs incurred by EPA with respect to this Settlement Agreement, as well as Past Response Costs.

10. The Work conducted under this Settlement Agreement is subject to approval by EPA. EPA, in consultation with DEQ, will review and EPA will approve Work as set forth in this Settlement Agreement. The Work shall provide all appropriate and necessary information to assess Site conditions for Operable Unit 1 (excluding the Black Eagle Railroad Beds area, as depicted on Appendix B) and evaluate alternatives to the extent necessary to select a remedy for Operable Unit 1 that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondents shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidances, policies and procedures.

IV. DEFINITIONS

11. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement 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 Agreement or in the appendices attached hereto and incorporated hereunder, 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. The Site (except possible impacted portions of the Missouri River) is depicted generally on the map attached as Appendix C.

"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).

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.

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

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

“Effective Date” shall be the effective date of this Settlement Agreement as provided in Section XXXI.

“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.

“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.

“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 plans, reports and other deliverables pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry (“ATSDR”) costs, the costs incurred pursuant to Paragraph 53 (including, but not limited to, costs and attorneys fees and any monies paid to secure access, including, but not limited to, the amount of just compensation), Paragraph 39 (Emergency Response) and Paragraph 84 (Work Takeover). Future Response Costs shall also include all Interim Response Costs.

“Institutional Controls” shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements and well drilling prohibitions.

“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.

“Interim Response Costs” shall mean all costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between December 31, 2010 and the Effective Date, or (b) incurred prior to the Effective Date, but paid after that date.

“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.

“Operable Unit 1” shall mean the “Community Soils Operable Unit,” comprising the residential and other soils and waste materials and related contaminant migration pathways, in and near the unincorporated community of Black Eagle, Montana, and other outlying areas surrounding the former smelter and refinery facility, at or in connection with the ACM Smelter and Refinery Site. The area of Operable Unit 1, including the Community Soils Area and Outlying Areas, is generally depicted on the map attached as Appendix B. For purposes of this Settlement Agreement, the Work to be performed for Operable Unit 1 does not include any RI/FS activities or other response actions at the Black Eagle Railroad Beds area, as depicted on Appendix B (denoted as “Excluded Area” on Appendix B).

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

“Parties” shall mean EPA and Respondents.

“Past Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through December 31, 2010.

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

“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 Operable Unit 1 of the ACM Smelter and Refinery 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 Agreement identified by a Roman numeral.

“Settlement Agreement” shall mean this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

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

“Statement of Work” or “SOW” shall mean the Statement of Work for Operable Unit 1 for development of a Remedial Investigation and Feasibility Study, as set forth in Appendix A to this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.

“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 or deleterious substance” under Section 75-10-701(8), MCA.

“Work” shall mean all activities Respondents are required to perform under this Settlement Agreement, except those required by Section XIV (Retention of Records). Work shall not include any response actions or activities at any portions of the Site other than Operable Unit 1. Work shall not include any response actions or activities at the Black Eagle Railroad Beds area, as generally depicted on the map attached as Appendix B.

V. FINDINGS OF FACT

12. a. The ACM Smelter and Refinery 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, after operations at the plant shifted to more exclusive emphasis on metal refining, as the Great Falls Refinery (hereafter, historic plant operations are collectively referred to as the “former smelter facility” or “plant”.) The unincorporated town of Black Eagle is located immediately to the west and northwest of the former smelter facility. The former smelter facility property 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 stack, down several terraces descending to the north bank of the Missouri River. Elevations at the Site range from approximately 3250 to 3550 feet above sea level.

b. The community of Black Eagle includes approximately 400 - 500 homes, community features such as playgrounds and parks, additional commercial properties, and some areas of vacant or unimproved land. Between the former smelter facility property and the

residential areas of Black Eagle lie a municipal golf course, the Black Eagle Civic Center facility, and a property owned by the Moose Lodge. Between the Black Eagle residential areas and the Missouri River lies a former railroad track (or tracks) and right-of-way that was used to bring ore to the former plant. Additional commercial property and vacant land borders the Missouri River along the south edge of the Black Eagle community. Agricultural, residential, recreational and ranching uses predominate on lands to the east and north of the former smelter facility, except for one adjacent parcel used as a metal recycling business, and another small commercial property used for off-road and other vehicle racing-related sport activities.

c. The former smelter facility was sited in proximity to the Black Eagle dam, constructed at Black Eagle falls in 1890, on the Missouri River. The dam was outfitted to generate hydroelectric power that was used in the plant operations. The Missouri River also served as a source of process water for the plant. Other than the Missouri River, there is no surface water flow at the Site except after storm events.

13. a. The Site was the location of a copper smelter and metal refinery starting in the 1890s. In 1891, the Boston and Montana Consolidated Copper & Silver Mining Company ("Boston and Montana") began construction of a copper reduction facility at the Site. The copper reduction works was built to concentrate and smelt copper ores, primarily ores shipped in by rail from Boston and Montana mines near Butte, Montana.

b. Under Boston and Montana ownership, the original plant at the Site processed unconcentrated ore in a concentrating mill. Later the concentrated ore was smelted to produce matte copper. A copper refinery was built at the Site in 1892 and was in operation until May 1917, when it was dismantled and replaced by a refinery built by Anaconda Copper Mining Company ("ACM"). In 1905, the smelter produced 1,257,375 pounds of copper, 59,454 ounces of silver and 81.6 ounces of gold. By 1918, ACM had largely eliminated smelting operations at the plant and focused on refining. Under ACM, the plant became known as the Great Falls Refinery.

c. Under the ownership of ACM, new facilities and operations were added. In 1916, electrolytic copper and zinc refineries were added. In 1918, the Rolling Mills department began production of copper rod and wire. This operation was later expanded in connection with an ACM subsidiary, Anaconda Wire & Cable Company. 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. Coal power was replaced by natural gas at the plant in the 1930s. After World War I, the facility added a zinc refining plant (1919) 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. Concentration, smelting and processing of zinc ore containing cadmium and lead continued on site into the 1970s. Other processes included experimental recovery of germanium.

d. Demolition of some of the 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. There are no records of regulatory agencies overseeing the shut-down activities. 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 certain 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. a. A solid waste inventory was conducted in 1981, identifying 27 areas of concern at the Site. In 1983, a screening site investigation was conducted by Respondents or their predecessors documenting both on-site and off-site groundwater and surface water contamination. In 2002, contaminated Missouri River sediments were collected by DEQ at a site 30 miles downstream from the Site. EPA investigated the Site several times between 2003 and 2009.

b. Contaminants of concern at the Site include antimony, arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc. These and other metals are contained in wastes and by-products 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. Wastes have migrated from the former smelter area in several ways.

c. 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. An estimated 27,500,000 to 31,000,000 cubic yards of such waste were disposed of in the River during this period. After cessation of the practice of dumping waste into the River, waste materials generated in refining and other operations were disposed of on-site in landfill areas. Metal contamination from the Site also enters the river from Site runoff.

d. In a study performed in 2002, DEQ collected Missouri River sediment samples from the Fort Benton area, 34 miles downstream from the Site. The DEQ samples showed elevated concentrations of arsenic, copper, lead, zinc and other metals. The Missouri River is a fishery for area residents. An EPA Expanded Site Inspection in 2003 that included source samples and sediment samples from the Missouri River also showed elevated concentrations of arsenic, cadmium, copper, lead, mercury, zinc and other metals in most of the samples taken, as compared to three-times background levels, as a result of plant operations starting in the 1890s. A 2009 EPA study confirmed additional metal contamination in the Missouri River from the plant operations.

e. In a 1982 Screening Study, Respondent Atlantic Richfield Company's samples showed that groundwater at the Site contained concentrations of various metals, including certain of the metals listed above in subparagraph a of this Paragraph. The groundwater contained such metals in concentrations above the human health criteria listed in Circular DEQ-7: Montana Numeric Water Quality Standards ("DEQ-7") for one or more of the metals listed above.

f. The nature of surface and shallow subsurface soil contamination at the former smelter facility is associated with or derived from site raw materials, products, by-products, process solutions, and waste materials from plant operations. In the 2003 EPA Expanded Site Inspection, EPA soil samples from the former smelter facility area showed widespread contamination by metals at concentrations greater than three-times background concentration, indicating a potential risk to human and environmental receptors. Some samples were taken from areas where no cover existed.

g. The plant's stacks were designed to emit or discharge flue dust and other waste products of smelter and refinery operations. The stack constructed in 1892 operated until approximately 1908-09. Operations at the facility later employed a 500-foot-tall stack, installed in 1908-09 to replace the original stack. Stack particulate emissions contained lead, arsenic, cadmium, copper, zinc and other metals. Soils in a wide area surrounding the smelter and refinery stack were contaminated by the airborne stack emissions containing such metals. The stack was designed to eject a sufficient volume and rate to entrain and remove from the smelter all the gasses and dust from the smelting process. It operated until 1972 to emit such contaminated gasses and dust and to distribute the waste metals over a broad area. Company data from 1904-05 documented that over 40 pounds of arsenic trioxide had been deposited per acre at a distance of over 6 miles from the smelter. In 1951, an ACM memorandum stated that approximately 15 pounds of arsenic passed out of the stack every 24 hours. During portions of the year, on average, at least 20% of the prevailing winds in the area are from the smelter and directed toward the community of Black Eagle.

15. a. Previous investigations of the Black Eagle residential area have focused almost exclusively on the residential soils, including associated residential recreational and school areas. The 2003 EPA Expanded Site Inspection included six residential soil samples, analyzed for arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel, vanadium and zinc.

Eleven of the metals measured were detected at three times background concentrations or greater in at least one of the residential or recreational exposure assessment samples. All of the samples exceeded three-times background levels for at least one of the metals listed above.

b. In 2007 and 2008, EPA Site Assessment studies of residential yards in Black Eagle found approximately 45% of the sampled yards had elevated levels of lead, arsenic and cadmium. Aerial deposition from the smelter stack between 1893 and 1972 resulted in residential yard contamination over a 78 acre area, encompassing 375 homes with lead and arsenic over EPA screening levels. In addition, some residents reported that their housing was constructed, in part, using materials from the Site. Two playground samples showed in excess of three-times background concentrations for cadmium, copper, lead and zinc.

c. In addition to earlier studies of outlying areas, EPA samples from 2003 of outlying areas, including properties to the north of the former smelter facility, showed elevated metal contamination at levels at or in excess of three-times background concentration. An irrigation well is operated on property north of the former smelter facility, generally for dust suppression, possibly utilizing or impacting contaminated groundwater.

16. a. Potential pathways for exposure to contamination from smelting and refining operations at the Site include residential soils, structures, surface water drainage, fugitive dust, and other features; the former smelter site, including airborne fugitive dust and stack emissions, buried waste, soils and surface water; areas along the railroad bed; groundwater on- and off-site; and Missouri River sediments and surface water. Humans and wildlife are at risk from exposure to the waste materials in the Site area. In particular, residents of Black Eagle and Great Falls as well as recreational users of the area may be exposed to waste materials and contamination in soils and interior dust containing arsenic, cadmium, copper, lead and zinc and other metals cited above via direct contact and inhalation and ingestion pathways. Residents may be exposed through inadvertent ingestion of contaminated dust and through eating contaminated vegetables grown in contaminated soils. Terrestrial organisms and plant communities may also suffer adverse effects from exposure to these waste materials. Run-off and direct historical deposition of contaminated materials into the Missouri River may negatively impact recreational fisheries and organisms comprising the aquatic ecosystem. Humans eating fish that may be contaminated may be at risk. Use of contaminated groundwater may present a threat as well.

b. The main contaminated media at the Site are solid wastes, soils, groundwater, including groundwater leading to the Missouri River, surface water and surface water sediments. The main sources of contamination at the Site include former smelter facilities, including buried waste materials, surface drainage to the Missouri River and soils contaminated from smelter operations, including aerial deposition from the stack emissions. The tailings material and other smelting/refining waste may have been a source of airborne contaminants in the past. Tailings materials may have been transported to areas off the actual smelter property, including Black Eagle, for construction and/or fill purposes.

c. The Black Eagle residential area, including the play areas and schoolyard, include several potential secondary sources. Contaminant transport to the community of Black Eagle occurred via several pathways, including primarily airborne particulate contamination from the smelter stack, which settled on neighborhood soils, buildings and other surfaces. Airborne contamination from the smelter stack would travel through open windows and doors, settling on surfaces in homes. Smelter and refinery workers could have transported contamination from the plant to residential areas, by way of vehicles, clothing, shoes and on hair and skin. Indoor air and dust is a possible secondary source of contamination in the Black Eagle community, and in outlying areas. Fugitive dust generated at the former smelter facility by reclamation activities during the 1980s and 1990s could have been transported from the site to Black Eagle by wind. Subsurface soil contamination in Black Eagle may exist as a result of smelter workers transporting soils and other materials from the smelter plant to use as backfill for residential construction projects. Subsurface soil contamination may be the result of other human activities, or due to infiltration of water causing leaching of surface contamination to the subsurface. Precipitation has the potential to transport contamination from roofs, paved areas, and other surfaces and concentrate such contamination to areas where surface water collects, such as drip lines around homes. Surface water and/or run-off from parts of the former smelter facility may have transported contamination into the large drainage area running through the community. Contaminated groundwater has the potential to be in communication with the groundwater under the Black Eagle residential area.

d. Concentrations of arsenic, cadmium and lead at various locations in the Black Eagle community soils exceed EPA health-based screening levels and benchmarks.

17. The main contaminants of concern (COCs) associated with the above noted sources and exposure pathways at the Site are arsenic, cadmium, copper, lead and zinc. Arsenic, cadmium, copper, lead, zinc, and other hazardous substances and pollutants and contaminants are contained in the soils, waste materials, surface water and sediments, and groundwater at various areas at the Site, and in residential soils and other media in Operable Unit 1, in concentrations and quantities that may pose an imminent and substantial endangerment to the public health or welfare or the environment.

* Zinc. Zinc produces acute toxicity in freshwater organisms over a range of concentrations from 90 to 58,100 µg/liter, and appears to be less toxic in harder water. Acute toxicity is similar for freshwater fish and invertebrates. In many types of aquatic plants and animals, growth, survival, and reproduction can all be adversely affected by elevated zinc levels. A final acute-chronic ratio for freshwater species of 3.0 has been reported.

Zinc is an essential element necessary for maintaining good health, but high doses can be harmful to humans. Oral ingestion of large doses of zinc may cause stomach cramps, nausea, and vomiting. Continued ingestion of large doses may result in anemia, damage to the pancreas, and lower levels of high density lipoprotein cholesterol.

* Cadmium. At sufficient concentrations, cadmium has been shown to be a carcinogen in both animal studies and occupationally exposed groups of humans via the inhalation route of exposure. Laboratory experiments suggest that cadmium may have adverse effects on reproduction in fish at levels present in lightly to moderately polluted waters. At sufficient concentrations, exposure and duration, cadmium is highly toxic to wildlife; it is cancer-causing and teratogenic and potentially mutation-causing, with severe sublethal and lethal effects at low environmental concentrations. It bio-accumulates at all trophic levels, accumulating in the livers and kidneys of fish. Crustaceans appear to be more sensitive to cadmium than fish and mollusks. Cadmium can be toxic to plants at lower soil concentrations than other heavy metals and is more readily taken up than other metals.

* Copper. At sufficient concentrations, exposure and duration, copper produces acute toxicity in freshwater animals and data is available for species in 41 genera. At a hardness of 50 mg/L, the genera range in sensitivity from 16.74 µg/L for *Ptychocheilus* to 10,240 µg/L for *Acronuria*. Data for eight species indicates that acute toxicity also decreases with increases in alkalinity and total organic carbon. Chronic values are available for 15 freshwater species and range from 3.873 µg/L for brook trout to 60.36 µg/L for northern pike. Fish and invertebrate species seem to be about equally sensitive to the chronic toxicity of copper. At sufficient concentrations, exposure and duration, copper is highly toxic in aquatic environments and has effects in fish, invertebrates and amphibians. Copper will bio-concentrate in many different organs in fish (potential low, however) and mollusks. Copper sulfates and other copper compounds are algacides, with sensitive algae potentially affected by free copper at low ppb concentrations. Toxicity tests have been conducted on copper with a wide range of freshwater plants, and their sensitivities are similar to those of animals.

Copper is an essential element necessary for maintaining good health in humans, but high doses can be harmful. Oral ingestion of high amounts of copper may cause vomiting diarrhea, stomach cramps, and nausea. Chronic ingestion of high amounts of copper can cause liver and kidney damage.

* Arsenic. Excess exposure to arsenic is known to cause a variety of adverse health effects in humans. These effects may depend on concentration, form, exposure and duration. Arsenic is a known human carcinogen. Inhalation exposure is associated with increased risk of lung, gastrointestinal, renal or bladder cancer. Oral exposure to arsenic is associated with skin, liver, and bladder cancer. At very high doses, oral exposure to arsenic elicits nausea and vomiting. Lower doses over a chronic time period may elicit skin abnormalities, such as hyperkeratosis and kidney and liver toxicity.

* Lead. At high doses for sufficient duration, lead exposure is associated with adverse effects on reproduction and development, as well as inhibition of heme synthesis. At lower doses with sufficient duration, impairment of the nervous system in young children is considered to be of greatest concern. Younger children are more susceptible to lead exposure because they absorb lead from their gastrointestinal tracts at a greater rate than adults do, their neurological

systems are still rapidly developing, and they have more direct contact with soil and indoor dust than adults do. These neurological effects manifest as decreased I.Q., shortened attention span, and decreased hand and eye coordination. EPA classifies lead as a B2 carcinogen. Studies in animals show an increased incidence of kidney tumors in association with very high levels of lead exposure.

18. The ACM Smelter and Refinery 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.

19. a. In the 1880s, the Anaconda Gold and Silver Mining Company, which owned and operated various mines near Butte, Montana, built and operated a smelter in the new town of Anaconda, Montana. In 1891, the company incorporated as Anaconda Mining Company and over the succeeding years acted to consolidate control over services and sources of raw materials. In 1895, the company again reorganized as the Anaconda Copper Mining Company ("ACM"), a Montana corporation.

b. In 1899, the Amalgamated Copper Company was formed with the purpose of unifying the Butte area mining and smelting operations under one holding company. Amalgamated Copper Company acquired the stock of ACM and its subsidiaries.

c. In 1889, Boston and Montana obtained the property at the Site where the smelter operations would be located. The company was incorporated in Montana in 1887. In 1891-2, Boston and Montana built the original copper ore concentrating, smelting and refining facility at the Site. Boston and Montana operated the facility independently until 1899 when the company was also acquired by the Amalgamated Copper Company. Boston and Montana operated the smelter under this arrangement until 1910, when ACM acquired control and assumed management of Boston and Montana.

d. In 1910, Boston and Montana deeded the smelter property to ACM. One result of the 1910 reorganization was to allow ACM to coordinate operations at the two smelting facilities at Anaconda and Great Falls. After this time, the smelter located in Anaconda, Montana, continued to handle most concentrating and smelting, while the Great Falls facility gradually phased out smelting and specialized in refining. The original refinery plant was in operation until 1917, when it was dismantled and replaced by a refinery built by AMC. By 1918, smelting operations at the Site were eliminated and the plant focused on refining. In 1915, Amalgamated Copper Mining Company was dissolved.

e. Over the next 50 - 60 years, ACM expanded operations at the Site, at what became known as the Great Falls Refinery and production increased and continued at a steady rate. In 1955, ACM changed its corporate name to The Anaconda Company, retaining incorporation in Montana.

f. 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 Atlantic Richfield Company, a Delaware corporation. Atlantic Richfield Company assumed all liability of The Anaconda Company and ACM.

g. In 2000, through various stock transfers and purchases, Atlantic Richfield Company became a wholly-owned subsidiary of BP America Inc.

h. From 1889 to 1910, the smelter/refinery facility property at the Site was owned by Boston and Montana, followed by ownership by its successor in interest, ACM, and ACM's successor, The Anaconda Company, and other related entities, from 1910 to 1977. In 1977, the plant property was conveyed to Atlantic Richfield Company who owned most of the facility property until 1996. In 1982, Atlantic Richfield Company conveyed certain parcels on the western edge of the smelter facility to the City of Great Falls, Montana, which currently operates the property as a municipal golf course; and in the same year (correction deed filed in the following year) conveyed another parcel containing the facility clubhouse to Black Eagle Civic Club, Inc. In 1985, Atlantic Richfield Company conveyed an additional facility parcel to Cascade County. In 1986, Atlantic Richfield Company conveyed a former smelter facility parcel to Pacific Hide and Fur Depot (MT), which later sold its interest to the current owner, PHF Development Corporation. Additional parcels were transferred to the City of Great Falls in 1988.

i. In 1996, Respondent ARCO Environmental Remediation, L.L.C. ("AERL") was organized as a Delaware corporation. AERL is currently listed as a corporation in good standing in the State of Montana. AERL is an affiliate of Atlantic Richfield Company. On December 27, 1996, Atlantic Richfield Company conveyed its interest in most of the property at the former smelter/refinery facility to CH-Twenty, Inc. (DE). On the same day, CH-Twenty, Inc., conveyed its interest in the same parcels to the current owner, AERL.

j. Respondent Atlantic Richfield Company is a corporation doing business in the State of Montana, organized under the laws of State of Delaware.

k. Respondent Atlantic Richfield Company and its predecessors in interest owned and/or operated the facilities at the Site, including but not limited to the smelting, concentrating, refining, production, transportation, waste storage and disposal facilities, from 1891 to 1996, and Atlantic Richfield Company remains a current operator at the Site. Respondent ARCO Environmental Remediation, L.L.C., currently owns and operates the Site facilities.

20. Past Activities by Site Owners/Operators. Large-scale demolition of the former plant was begun in 1981. Backfilling and certain capping was mostly completed by 1987. In 1998 and 1999, during ownership by Respondent ARCO Environmental Remediation,

LLC, further reclamation efforts were performed. These activities were not carried out under EPA or State oversight or approval.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on EPA's Findings of Fact set forth in Section V, EPA has determined that:

21. The ACM Smelter and Refinery Site, Operable Unit 1, waste and buried waste, contaminated soils, contaminated surface and groundwater and sediments at Operable Unit 1 of the Site are individually and collectively a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

22. The contamination, including but not limited to lead, cadmium, zinc, copper and arsenic, found at Operable Unit 1 of the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), or constitutes "any pollutant or contaminant" 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).

23. The conditions described in Paragraphs 13-17 of the Findings of Fact in Section V above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

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

25. Respondents are each responsible parties under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622, and are jointly and severally liable for performance of response actions and for response costs incurred and to be incurred at Operable Unit 1 of the Site.

a. Respondents Atlantic Richfield Company and ARCO Environmental Remediation, L.L.C., are each the "owner" and/or "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 or was the "owner" and/or "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).

c. Respondent Atlantic Richfield Company arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

26. a. In response to the release or threatened release of hazardous substances at or from the Site, EPA undertook response actions at the Site pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604.

b. In performing response actions, EPA has incurred response costs at or in connection with the Site.

c. The actions required by this Settlement Agreement 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) and 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

27. 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 Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

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

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

29. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within 30 days of the Effective Date, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), 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, March 2001; 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 that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondents'

demonstration to EPA's satisfaction that Respondents are qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, Respondents shall notify EPA of the identity and qualifications of the replacements within 30 days of the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondents. During the course of the RI/FS, Respondents shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

30. Respondents have designated, and EPA has not disapproved, the following individual as Project Coordinator: Lindy Hanson, 317 Anaconda Road, Butte, MT 59701, (406) 723-1838, lindy.hanson@bp.com. Respondents' Project Coordinator shall be responsible for administration of all actions by Respondents required by this Settlement Agreement. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within ten (10) days following EPA's disapproval. Respondents shall have the right to change their Project Coordinator, subject to EPA's right to disapprove. Respondents shall notify EPA seven (7) days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondents.

31. a. EPA has designated Charles Coleman of the EPA Region 8 Montana Office, Superfund Branch, as its Remedial Project Manager. EPA will notify Respondents of a change of its designated Remedial Project Manager. Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to the EPA Remedial Project Manager at U.S. EPA Region 8, Montana Office, Federal Building, 10 West 15th Street, Suite 3200, Helena, MT 59626. Delivery of reports, notices and other documents required pursuant to this Settlement Agreement shall be in electronic form, by overnight delivery or by certified Mail.

b. DEQ has designated Richard Sloan of the DEQ Mine Waste Cleanup Bureau, Federal Superfund Section, as its State Project Officer. DEQ will notify Respondents of any change of its designated State Project Officer. Except as otherwise provided in this Settlement Agreement, Respondents shall direct a copy of all submissions to EPA required by this Settlement Agreement to the State Project Officer at DEQ Remediation Division, P.O. Box 200901, Helena, Montana 59620-0901. Delivery of reports, notices and other documents required pursuant to this Settlement Agreement shall be in electronic form or by U.S. Mail.

32. EPA's Remedial Project Manager shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's Remedial Project Manager shall have the authority consistent with the NCP to halt any Work required by this Settlement Agreement and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Remedial Project Manager from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

33. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS Work Plan.

IX. WORK TO BE PERFORMED

34. Respondents shall conduct the RI/FS in accordance with the provisions of this Settlement Agreement, the 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" (OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), "Guidance for Data Useability in Risk Assessment" (OSWER Directive #9285.7-05, October 1990 or subsequently issued guidance), and guidance referenced therein, and guidances referenced in the SOW, as may be amended or modified by EPA. The Remedial Investigation ("RI") shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from Operable Unit 1 at 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. The Feasibility Study ("FS") 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 Operable Unit 1 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, 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 Section 300.430(e) of the NCP, 40 C.F.R. § 300.430(e). All Work performed under this Settlement Agreement shall be in accordance with the schedules herein or established in the SOW, and in full accordance with the standards, specifications, and other requirements of the SOW as initially approved, prepared or modified by EPA, and as may be amended by EPA from time to time. In accordance with the schedules established in this Settlement Agreement or in the SOW, Respondents shall submit to EPA, with a copy to DEQ, electronically, by overnight delivery, or by certified mail all portions of any plan, report or other deliverable Respondents are

required to submit pursuant to provisions of this Settlement Agreement. All plans, reports and other deliverables will be reviewed and approved by EPA pursuant to Section X (EPA Approval of Plans and Other Submissions).

35. 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 the EPA Remedial Project Manager within thirty (30) days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into plans, reports, and other deliverables.

b. In the event of unanticipated or changed circumstances at or in connection with Operable Unit 1 of the Site, Respondents shall notify the EPA Remedial Project Manager 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 or amend the RI/FS Work Plan in writing accordingly. Respondents shall perform the RI/FS Work Plan as modified or amended, subject to Respondents' right to invoke the procedures set forth in Section XV (Dispute Resolution).

c. EPA may determine that in addition to tasks defined in the initially approved RI/FS Work Plan, other additional Work for Operable Unit 1, other than those response actions and activities specifically excluded from the definition of Work, may be necessary to accomplish the objectives of the RI/FS. Respondents agree to perform these response actions for Operable Unit 1 in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete RI/FS.

d. Respondents shall confirm their willingness to perform the additional Work in writing to EPA within 7 days of 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 XV (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 Operable Unit 1 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 Work itself at any point, to seek reimbursement from Respondents, 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.

36. Off-Site Shipment of Waste Material. Respondents shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to EPA's Designated Project Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

a. Respondents shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

b. The identity of the receiving facility and state for any off-Site shipments of Waste Material that may be required will be determined by Respondents following the award of the contract for such removal. Respondents shall provide the information required by Paragraph 36.a and 36.c as soon as practicable after the award of the contract and before any such Waste Material is actually shipped.

c. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondents shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that EPA certifies as operating in compliance with the requirements of the statutory provision and regulation cited in the preceding sentence.

37. Meetings. Respondents shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion 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 DEQ to attend any such meeting.

38. Progress Reports. In addition to the plans, reports, and other deliverables set forth in this Settlement Agreement, Respondents shall provide to EPA, with a copy to DEQ, monthly progress reports 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 Agreement during that month, (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 and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

39. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during performance of the Work that causes or threatens a release of Waste Material to, at or from Operable Unit 1 of the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the EPA Remedial Project Manager (or, in the event of his/her unavailability, the Alternate EPA Remedial Project Manager), the Regional Duty Officer, Emergency Response Unit, EPA Region 8, at (303) 293-1788, and the National Response Center at (800) 424-8802 of the incident or Site conditions. Respondents shall also promptly notify the State Project Officer. 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 all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance to, at or from Operable Unit 1 of the Site, Respondents shall immediately notify the EPA Remedial Project Manager (or in the event of his/her unavailability, the Alternate EPA Remedial Project Manager), the Regional Duty Officer, Emergency Response Unit, EPA Region 8, at (303) 293-1788, and the National Response Center at (800) 424-8802. Respondents shall submit a written report to EPA, with a copy to DEQ, within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. 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, et seq.

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

40. Respondents are responsible for preparing deliverables acceptable to EPA. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondents, EPA, after reasonable opportunity for review and comment by DEQ, shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondents at least one notice of deficiency and an opportunity to cure

within ten (10) days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

41. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 40.a, b, c, or e, Respondents shall proceed to take any action required by the plan, report, or other deliverable, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondents shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 40.c and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

42. Resubmission.

a. Upon receipt of a notice of disapproval, Respondents shall, within twenty-one (21) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the 21-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 43 and 44, respectively.

b. 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. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for stipulated penalties under Section XVI (Stipulated Penalties).

c. 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 and Sampling and Analysis Plan(s), Draft Remedial Investigation Report, Treatability Testing Work Plan and 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 Agreement.

d. For all remaining deliverables not listed above in Paragraph 42.c., Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval on 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 RI/FS.

43. If EPA disapproves a resubmitted plan, report, or other deliverable, or portion thereof, EPA may again direct Respondents to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report, or other deliverable. Respondents shall implement any such plan, report, or deliverable as corrected, modified, or developed by EPA, subject only to Respondents' right to invoke the procedures set forth in Section XV (Dispute Resolution).

44. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondents shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified, or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

45. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into the final reports.

46. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

47. 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.

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

48. Quality Assurance. Respondents shall assure that Work performed, samples taken, and analyses conducted conform to the requirements of the SOW, the Quality Assurance Project Plan ("QAPP"), and guidances identified therein. Respondents will assure that field personnel used by Respondents are properly trained in the use of field equipment and in chain of custody procedures. Respondents shall only use laboratories that have a documented quality system that complies with "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.

49. Sampling.

a. All results of sampling, tests, modeling, or other validated data generated by Respondents, or on Respondents' behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA in the next monthly progress report as described in Paragraph 38. EPA will make available to Respondents validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation. Notwithstanding any provision of this Settlement Agreement, EPA and the State retain all of their authorities and rights for access to information, including but not limited to the right to require submittal of raw data at any time, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

b. Respondents shall verbally notify EPA and DEQ at least three (3) days prior to conducting significant field events as described in the SOW, RI/FS Work Plan, or Sampling and Analysis Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondents shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) or DEQ (or its authorized representatives) of any samples collected in implementing this Settlement Agreement. All split samples of Respondents shall be analyzed by the methods identified in the QAPP, as approved by EPA.

50. Access to Information.

a. Respondents shall provide to EPA and DEQ, upon request, copies of all non-privileged documents and information within their possession or control or that of their contractors or agents relating to activities and performance of Work at Operable Unit 1 of the Site or to the implementation of this Settlement Agreement, 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 related to the Work. Subject to their rights under the United States Constitution, Respondents shall also encourage their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work to cooperate with EPA for purposes of investigation, information gathering, or testimony.

b. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement 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). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to EPA, or if EPA has notified Respondents that the documents or information 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 documents or information without further notice to Respondents. Respondents shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondents assert business confidentiality claims.

c. Respondents may assert that certain documents, records, and other information are privileged under the attorney-client privilege, the work-product doctrine, or any other privilege recognized by federal law. If the Respondents assert such a privilege in lieu of providing documents, they shall provide EPA with the following: (i) the title of the document, record, or information; (ii) the date of the document, record, or information; (iii) the name and title of the author of the document, record, or information; (iv) the name and title of each addressee and recipient; (v) a description of the contents of the document, record, or information; and (vi) the privilege asserted by Respondents. However, no documents, reports, or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

51. In entering into this Settlement Agreement, Respondents waive any objections to any data gathered, generated, or evaluated by EPA 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 Agreement 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 thirty (30) days of the monthly progress report containing the data.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS

52. If areas within Operable Unit 1 of the Site, or any other property where access is needed to implement this Settlement Agreement, are owned or controlled by any of Respondents, such Respondents shall, commencing on the Effective Date, provide EPA, DEQ, and their representatives, including contractors, with access at all reasonable times to such areas of Operable Unit 1 of the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

53. a. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within ninety (90) days after the Effective Date,

or as otherwise specified in writing by the EPA Remedial Project Manager. Respondents shall immediately notify EPA if after using their best efforts they are unable to obtain such agreements. Respondents shall describe in writing their efforts to obtain access. If Respondents cannot obtain access agreements, EPA may either (a) obtain access for Respondents or assist Respondents in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate; (b) perform those tasks or activities with EPA contractors; or (c) terminate the Settlement Agreement. Respondents shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondents shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondents shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports, and other deliverables.

b. If areas within Operable Unit 1 of the Site, or any other real property where land/water use restrictions are needed, as determined by EPA, are owned or controlled by persons other than Respondents, Respondents shall use best efforts to secure from such persons an agreement, enforceable by Respondents and EPA, to refrain from using the Site, or such other real property, in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Materials.

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

XIII. COMPLIANCE WITH OTHER LAWS

55. Respondents shall comply with all applicable state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and 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. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

56. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, each Respondent shall

preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information 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 or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary.

57. Until 10 years after commencement of construction of any remedial action, Respondents shall also instruct their contractors and agents to preserve all documents records, and other information of whatever kind, nature, or description relating to performance of the Work.

58. At the conclusion of this document retention period, Respondents shall notify EPA at least 90 days prior to the destruction of any such documents, records, or other information and, upon request by EPA, Respondents shall deliver any such documents, records or other information to EPA. Respondents may assert that certain documents, records, and other information are privileged under the attorney-client privilege, the work-product doctrine, or any other privilege recognized by federal law. If Respondents assert such a privilege, they shall provide EPA with the following: (a) the title of the document, record, or other information; (b) the date of the document, record, or other information; (c) the name and title of the author of the document, record, or other information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or other information; and (f) the privilege asserted by Respondents. However, no documents, records or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

59. Each Respondent hereby 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, documents or other information (other than identical copies) relating to its potential liability regarding the Site since the earlier of notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information 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.

XV. DISPUTE RESOLUTION

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

61. If Respondents object to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify EPA in writing, with a copy to DEQ, of their objection(s) within fourteen (14) days of such action, unless the

objection(s) has/have been resolved informally. EPA and Respondents shall have twenty-one (21) days from EPA's receipt of Respondents' written objection(s) to resolve the dispute (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.

62. 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 Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA Region 8 management official at the Assistant Regional Administrator level or higher, will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondents' obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, 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, and regardless of whether Respondents agree with the decision.

XVI. STIPULATED PENALTIES

63. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 64 and 65 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondents shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RI/FS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement, including any extensions thereof approved by EPA pursuant to this Settlement Agreement.

64. Stipulated Penalty Amounts - Work (Including Payments).

a. The following stipulated penalties shall accrue per day for any noncompliance identified in Paragraph 64.b:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$500	1 st through 14 th day
\$2,500	15 th through 30 th day
\$12,000.00	31 st day and beyond

b. Compliance Milestones

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

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

(iii) Payment of Past Response Costs by the payment dates set forth pursuant to Paragraph 77.

(iv) Payment of Future Response Costs within sixty (60) days of receipt of a bill from EPA, pursuant to Paragraph 78.

(v) Timely and adequate establishment of an escrow account for any dispute under Section XV of this Settlement Agreement.

(vi) Timely and adequate establishment of Financial Assurance, pursuant to Section XXVI of this Settlement Agreement.

65. Stipulated Penalty Amounts - Reports.

The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate progress reports to EPA, and all other reports and deliverables to EPA, other than those specifically cited in Paragraph 64.b. above, in accordance with this Settlement Agreement:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500.00	1 st through 14 th day
\$ 1,000.00	15 th through 30 th day
\$ 2,500	31 st day and beyond

66. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 84 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of \$150,000.00.

67. 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. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section X (EPA Approval of

Plans and Other Submissions), during the period, if any, beginning on the 21st day after EPA's receipt of such submission until 3 business days after the date that EPA notifies Respondents of any deficiency; and (b) with respect to a decision by the EPA management official designated in Paragraph 62 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until 3 business days after the date that the EPA management official issues and delivers to Respondents a final written decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

68. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement Agreement, EPA may give Respondents written notification of the same 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.

69. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures under Section XV (Dispute Resolution). Respondents shall make all payments to EPA under this Section by Fedwire Electronic Funds Transfer ("EFT"). Payment shall be made to in accordance with current EFT procedures to be provided to Respondent by EPA Region 8, and shall be accompanied by a statement identifying the name and address of the party making payment, the Site name, EPA Region 8, and Site/Spill ID # 08-19, and the EPA docket number for this action. Wire transfers must be sent directly to the Federal Reserve Bank in New York City with the following information:

ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045

The Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

At the time of payment, Respondents shall send notice that payment has been made, by email to acctsreceivable.cinwd@epa.gov, and by mail to:

David Sturn
Enforcement Specialist - ACM Smelter and Refinery Site
U.S. EPA Region 8, Montana Office (8MO)
Federal Building
10 West 15th Street, Suite 3200
Helena, MT 59626

and

U.S. Environmental Protection Agency, Region 8
Martha Walker, FMO -- 8TMS-FMP
1595 Wynkoop Street
Denver, CO 80202-1129

and

Dana Sherrer, NWD
EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

70. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work, including but not limited to, making payments, required under this Settlement Agreement.

71. Penalties shall continue to accrue as provided in Paragraph 67 during any dispute resolution period, but need not be paid until thirty (30) days after the dispute is resolved by agreement or by receipt of EPA's decision.

72. If Respondents fail to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 68.

73. Nothing in this Settlement Agreement 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 Agreement or of the statutes and regulations upon which it is based, including, but not limited to, enforcement action pursuant to Section 122(h)(3) of CERCLA, 42 U.S.C. § 9622(h)(3), 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 to 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 Agreement, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 84. 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 Agreement.

XVII. FORCE MAJEURE

74. Respondents agree to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a force majeure. For purposes of this Settlement Agreement, force majeure is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondents' best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the Work or increased cost of performance.

75. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a force majeure event, Respondents shall notify EPA orally within three (3) days of when Respondents first knew that the event might cause a delay. Respondents shall also provide timely notice to the State Project Officer. Within seven (7) days thereafter, Respondents shall provide to EPA in writing, with a copy to DEQ, 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 event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Failure to comply with the above requirements shall preclude Respondents from asserting any claim of force majeure for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

76. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event 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 event 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 event, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

XVIII. PAYMENT OF RESPONSE COSTS

77. Payment of Past Response Costs.

a. On or before January 18, 2012, Respondents shall pay to EPA \$1,050,000.00 for Past Response Costs. Payment shall be made to EPA by Fedwire Electronic Funds Transfer

("EFT"), by Automatic Clearinghouse ("ACH"), or online. For EFT, payments by Respondents shall be made 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, payments by Respondents shall be made 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
CTX Format

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

For online payment, payments by Respondents shall be made 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 the EPA personnel and addresses specified above in Paragraph 69, and to the EPA Cincinnati Finance Office by email at acctsreceivable.cinwd@epa.gov. Such notice shall reference Site/Spill ID Number #08-19 and the EPA docket number for this action.

c. The total amount to be paid by Respondents pursuant to Paragraph 77.a shall be deposited by EPA in the ACM Smelter and Refinery Site Special Account to be retained and used to conduct or finance United States' response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

78. Payments of Future Response Costs.

a. Respondents shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondents a bill requiring payment that includes a standard Regionally-prepared cost summary, which includes direct and indirect costs incurred by EPA and its contractors. Respondents shall make all payments within sixty (60) days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 80 of this Settlement Agreement. Payment shall be made to EPA by Fedwire Electronic Funds Transfer (“EFT”), by Automatic Clearinghouse (“ACH”), or online. For EFT, payments by Respondents shall be made 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, payments by Respondents shall be made 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
CTX Format

and shall reference Site/Spill ID Number #08-19 and the EPA docket number for this action. For online payment, payments by Respondents shall be made 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 the EPA personnel and addresses specified above in Paragraph 69, and to the EPA Cincinnati Finance Office by email at acctreceivable.cinwd@epa.gov. Such notice shall reference Site/Spill ID Number #08-19 and the EPA docket number for this action.

c. The total amount to be paid by Respondents pursuant to Paragraph 78.a 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.

79. Interest. If Respondents do not pay Past Response Costs within the time period set forth in Paragraph 77, or do not pay Future Response Costs within sixty (60) days of Respondents' receipt of a bill, Respondents shall pay Interest on the unpaid balance. The Interest on unpaid Past Response Costs shall begin to accrue on the Effective Date and shall continue to accrue until the date of payment. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. 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, payments of stipulated penalties pursuant to Section XVI. Respondents shall make all payments required by this Paragraph in the manner described in Paragraph 78.

80. Respondents may contest payment of any Future Response Costs billed under Paragraph 78 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. Such objection shall be made in writing within sixty (60) days of receipt of the bill and must be sent to the EPA Remedial Project Manager. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondents shall within the 60- day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 78. Simultaneously, Respondents shall establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation, and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the EPA Remedial Project Manager 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. Simultaneously with funding of the escrow account, Respondents shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If EPA prevails in the dispute, within seven (7) days of the resolution of the dispute, Respondents shall ensure the escrow agent releases and pays the sums due (with accrued interest) to EPA in the manner described in Paragraph 78. If Respondents prevail concerning any aspect of the contested costs, Respondents shall ensure the escrow agent releases and pays that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 78. Any funds remaining in the escrow account upon

resolution of the dispute not due to EPA may be released to Respondents, as directed by Respondents in their sole discretion. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse EPA for its Future Response Costs.

XIX. COVENANT NOT TO SUE BY EPA

81. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, 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, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon receipt by EPA of the payment required by Paragraph 77 (Payment of Past Response Costs) and any Interest or Stipulated Penalties due thereon under Paragraph 79 (Interest) or Section XVI (Stipulated Penalties). This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Paragraph 78 (Payment of Future Response Costs). This covenant not to sue extends only to Respondents and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

82. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement 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 Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, 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.

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

a. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;

b. liability for costs not included within the definitions of Past Response Costs or Future Response Costs;

- c. liability for performance of response actions other than the Work;
- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. 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 Agreement.

84. Work Takeover. In the event EPA determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondents may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents shall pay pursuant to Section XVIII (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENTS

85. 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, Past Response Costs, Future Response Costs, or this Settlement Agreement, including, but not limited to:

- a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on 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 claim arising out of the Work or arising out of the response actions for which the Past Response Costs or Future Response Costs have or will be incurred, including any claim under the United States Constitution, the State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law;

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law relating to the Work or payment of Past Response Costs or Future Response Costs, 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 of CERCLA, 42 U.S.C. § 9607 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 of CERCLA, 42 U.S.C. §9607 based on the activities of the United States, other than EPA, at or in connection with the Site.

86. Except as expressly provided in Paragraphs 88 (Claims Against De Micromis Parties) and 90 (Claims Against De Minimis and Ability to Pay Parties), 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 XX (Reservations of Rights by EPA), other than in Paragraph 83.a (claims for failure to meet a requirement of the Settlement Agreement) or 83.d (criminal liability), 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.

87. 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).

88. Claims Against De Micromis Parties. 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) or 113 of CERCLA) that they may have for all matters relating to the Site against any person where the person's liability to Respondents with respect to 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.

89. The waiver in Paragraph 88 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against such Respondent. This

waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas 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. § 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

90. Claims Against De Minimis and Ability to Pay Parties. 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) or 113 of CERCLA) that they may have for response costs relating to the Site against any person that has entered or in the future enters into a final Section 122(g) de minimis settlement, or a final settlement based on limited ability to pay, with EPA with respect to Operable Unit 1 of the Site as of the Effective Date. This waiver shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person if such person asserts a claim or cause of action relating to the Site against such Respondent.

XXII. OTHER CLAIMS

91. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents.

92. Except as expressly provided in Paragraphs 88 (Claims Against De Minimis Parties), 90 (Claims Against De Minimis and Ability to Pay Parties), and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a Party to this Settlement Agreement, 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.

93. No action or decision by EPA pursuant to this Settlement Agreement 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).

XXIII. EFFECT OF SETTLEMENT/CONTRIBUTION

94. Except as provided in Paragraphs 88 (Claims Against De Micromis Parties) and 90 (Claims Against De Minimis and Ability to Pay Parties), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section XXI (Covenant Not to Sue 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 Agreement 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).

95. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that Respondents are 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, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work, Past Response Costs and Future Response Costs. The Parties further agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondents have, as of the Effective Date, resolved their liability to the United States for the Work, Past Response Costs, and Future Response Costs.

96. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement against any person not a party to this Settlement Agreement, notify EPA in writing no later than 30 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 Agreement, notify EPA in writing within 21 days of service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

97. 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, Settling Parties 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 XIX.

98. Effective upon signature of this Settlement Agreement by a Respondent, such Respondent agrees that the time period after the date of its signature shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the "matters addressed" as defined in Paragraph 95 and that, in any action brought by the United States related to the "matters addressed," such Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time after its signature of this Settlement Agreement. If EPA gives notice to Respondents that it will not make this Settlement Agreement effective, the statute of limitations shall begin to run again commencing ninety (90) days after the date such notice is sent by EPA.

XXIV. INDEMNIFICATION

99. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives 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, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondents agree to pay the United States all costs incurred by the United States, 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 Agreement. 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 Agreement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

100. 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.

101. Respondents waive all claims 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 Operable Unit 1 of the Site. 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 Operable Unit 1 of the Site.

XXV. INSURANCE

102. At least five (5) days prior to commencing any on-site Work under this Settlement Agreement, Respondents shall secure, and shall maintain for the duration of the Work performed under this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of one million dollars (\$1,000,000.00), combined single limit, naming EPA as an additional insured. Within the same period, Respondents shall provide EPA with certificates of such insurance. Respondents shall submit such certificates each year on the anniversary of the Effective Date. In addition, for so long as Respondents are performing Work under this Settlement Agreement, 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 the Work on behalf of Respondents in furtherance of this Settlement Agreement. 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 an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

103. Within thirty (30) days of the Effective Date, Respondents shall establish and maintain financial security for the benefit of EPA in the amount of \$1,500,000 in one or more of the following forms, in order to secure the full and final completion of Work by Respondents:

- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;
- c. a trust fund in the amount totaling the estimated cost of the Work, administered by a trustee acceptable in all respects to EPA;
- d. a policy of insurance acceptable to EPA that (i) provides EPA with rights as a beneficiary thereof; and (ii) is issued by an insurance carrier (a) that has the authority to issue insurance policies in the applicable jurisdiction(s) and (b) whose insurance operations are regulated and examined by a federal or state agency;
- e. any financial assurance demonstration allowed in regulations promulgated pursuant to section 108(b) of CERCLA, 42 U.S.C. 9608(b), when effective, that is applicable to the Site and which meets the specific regulatory requirements;

f. on or after the one-year anniversary date of the Effective Date of this Settlement Agreement:

i. A demonstration by Respondent Atlantic Richfield Company that it meets the financial test criteria of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Work (plus the amount(s) of any other federal or any state environmental obligations financially assured through the use of a financial test or guarantee), provided that all other requirements of 40 C.F.R. § 264.143(f) are met to EPA's satisfaction;

ii. A written guarantee to fund or perform the Work executed in favor of EPA by one or more of the following: (1) a direct or indirect parent company of Respondent Atlantic Richfield Company, or (2) a company that has a "substantial business relationship" (as defined in 40 C.F.R. § 264.141(h)) with Respondent Atlantic Richfield Company; provided, however, that any company providing such a guarantee must demonstrate to the satisfaction of EPA that it satisfies the financial test and reporting requirements for owners and operators set forth in subparagraphs (1) through (8) of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Work (plus the amount(s) of any other federal or any state environmental obligations financially assured through the use of a financial test or guarantee) that it proposes to guarantee hereunder.

iii. If, after the one-year anniversary date of the Effective Date of this Settlement Agreement, Respondents seek to demonstrate financial assurance to complete the Work pursuant to Paragraph 103 through a demonstration or guarantee pursuant to Paragraphs 103.f(i) or 103.f(ii), Respondents shall also comply with the other relevant requirements of 40 C.F.R. § 264.143(f) relating to these mechanisms, including but not limited to:

(a) the initial submission of required financial reports and statements from the relevant entity's chief financial officer ("CFO") and independent certified public accountant ("CPA"), in the form prescribed by EPA in its financial test sample CFO letters and CPA reports available at: <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/fa-test-samples.pdf>;

(b) the annual resubmission of such reports and statements within 90 days after the close of such Respondent Atlantic Richfield Company's fiscal year; and

(c) the prompt notification of EPA after Respondent Atlantic Richfield Company determines that it, with regard to Paragraph 103.f(i), or that the company providing the guarantee under Paragraph 103.f(ii) no longer satisfies the financial test requirements set forth at 40 C.F.R. § 264.143(f)(1) and in any event within 90 days after the close of any fiscal year in which Respondent Atlantic Richfield Company or the company providing the guarantee no longer satisfies such financial test requirements. For purposes of the financial assurance mechanisms specified in this Section, references in 40 C.F.R. Part 264, Subpart H, to "closure," "post-closure," and "plugging and abandonment" shall be deemed to include the Work; the terms "current closure cost estimate," "current post-closure cost estimate," and "current plugging and

abandonment cost estimate” shall be deemed to include the Estimated Cost of the Work; the terms owner” and “operator” shall be deemed to refer to each Respondent making a demonstration under Paragraph 103.f(i); and the terms “facility” and “hazardous waste facility” shall be deemed to include Operable Unit 1 of the Site.

(d) Respondents have selected, as an initial financial assurance mechanism, a letter of credit executed in favor of EPA in the form attached hereto as Appendix D. EPA has determined the form attached hereto as Appendix D satisfies the requirements of Paragraph 103.b of this Settlement Agreement. Prior to thirty (30) days after the Effective Date, Respondents shall provide EPA a proposed letter of credit for review that shall be identical in wording and form to Appendix D. In the event and to the extent the text and content of the proposed letter of credit provided to EPA is not identical in wording and form to Appendix D, Respondents shall address EPA comments on the letter of credit and shall re-submit such revised letter of credit to EPA for review. Within thirty (30) days after the Effective Date, Respondents shall execute or otherwise finalize all instruments or other documents required in order to make the letter of credit legally binding. Within 45 days after the Effective Date, Respondents shall submit copies of all executed and/or otherwise finalized instruments or other documents required in order to make the selected performance guarantee(s) legally binding, to:

Daniela Golden, 8ENF-RC
EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

104. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA’s sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondents shall, within 30 days of receipt of notice of EPA’s determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 103, above. In addition, if at any time EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondents shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondents’ inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

105. If, after the Effective Date, Respondents can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 103 of this Section, Respondents may, on May 1 of any year that Respondents’ obligations under this Section continue, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondents shall submit a proposal for such reduction to EPA, in accordance with

the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondents may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

106. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondents may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. INTEGRATION/APPENDICES

107. This Settlement Agreement and its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

"Appendix A" is the SOW.

"Appendix B" is the map depicting Work areas of Operable Unit 1 at the Site.

"Appendix C" is the map depicting the Site.

"Appendix D" is the approved form of financial assurance described in Paragraph 103.

XXVIII. PUBLIC COMMENT

108. Final acceptance by EPA of Paragraph 77 of Section XVIII (Payment of Response Costs) of this Settlement Agreement shall be subject to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i), which requires EPA to publish notice of the proposed settlement in the Federal Register, to provide persons who are not parties to the proposed settlement an opportunity to comment, solely, on the cost recovery component of the settlement, and to consider comments filed in determining whether to consent to the proposed settlement. EPA may withdraw from, or seek to modify pursuant to the procedures for modification under Section XXXI (Effective Date and Subsequent Modification), all or part of Section XVIII of this Settlement Agreement if comments received disclose facts or considerations that indicate that Section XVIII of this Settlement Agreement is inappropriate, improper, or inadequate. Otherwise, Section XVIII shall

become effective when EPA issues notice to Respondents that public comments received, if any, do not require EPA to seek to modify Section XVIII or withdraw from this Settlement Agreement.

XXIX. ADMINISTRATIVE RECORD

109. 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 upon which selection of the response action may be based. From time to time, Respondents may submit other documents to EPA that Respondents believe contain information relevant to the RI/FS or selection of the response action for EPA's consideration and possible inclusion in the administrative record or Site file. 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. Upon request of EPA, Respondents shall additionally submit any previous studies conducted under state, local, or other federal authorities relating to selection of the response action, and all communications between Respondents and state, local, or other federal authorities concerning selection of the response action. At EPA's discretion, Respondents shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXX. ATTORNEY GENERAL APPROVAL

110. The Attorney General or her designee has approved the response cost settlement embodied in this Settlement Agreement in accordance with Section 122(h)(1) of CERCLA, 42 U.S.C. § 9622(h)(1).

XXXI. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

111. This Settlement Agreement shall be effective on the date it is signed by the Regional Administrator or his/her delegate, with the exception of Paragraph 77 of Section XVIII (Payment of Response Costs), which shall be effective when EPA issues notice to Respondents that public comments received, if any, do not require EPA to seek to modify Section XVIII or withdraw from this Settlement Agreement.

112. This Settlement Agreement may be amended by mutual agreement of EPA and Respondents. Amendments shall be in writing and shall be effective when signed by EPA. The EPA Remedial Project Manager does not have the authority to sign amendments to the Settlement Agreement.

113. No informal advice, guidance, suggestion, or comment by the EPA Remedial Project Manager or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to

obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXXII. NOTICE OF COMPLETION OF WORK

114. When EPA, after consultation with DEQ, determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to record retention, EPA will provide written notice to Respondents. If EPA, after consultation with DEQ, determines that any Work has not been completed in accordance with this Settlement Agreement, 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, in accordance with Paragraph 35 (Modification of the RI/FS Work Plan). Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement Agreement.

Agreed this 2 day of SEPT., 2011.

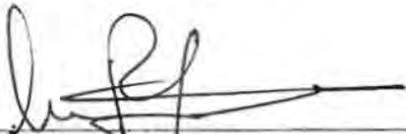
For Respondent Atlantic Richfield Company



Marcus R. Ferries, P.E.
Vice-President, Atlantic Richfield Company

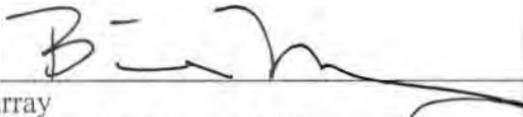
Agreed this 2 day of SEPT., 2011.

For Respondent ARCO Environmental Remediation, L.L.C.



Marcus R. Ferries, P.E.
Vice-President, ARCO Environmental Remediation, L.L.C.

It is so ORDERED AND AGREED this 8th day of September 2011.

BY:  DATE: 9/7/2011
Bill Murray
Director, Superfund Remedial Program
Office of Ecosystems Protection
and Remediation

BY:  DATE: 9/8/2011
Matthew Cohn
Supervisory Attorney
Legal Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice

BY:  DATE: 9/7/11
Kelcey Land
Director
Technical Enforcement Program
Office of Enforcement, Compliance
and Environmental Justice

EFFECTIVE DATE: September 8, 2011