UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 9

IN THE MATTER OF: Black Jack and Mac Mine Sites, New Mexico

Homestake Mining Company of California,

Respondent

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR INTERIM REMOVAL ACTION

U.S. EPA Region 9 CERCLA Docket No. 2014-06

Proceeding Under Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622

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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 Homestake Mining Company of California ("Respondent"). This Settlement Agreement provides for Respondent's performance of an interim removal action, including removal site evaluation, and other actions as provided herein, as well as Respondent's payment of Future Response Costs to be incurred by the United States at or in connection with the Black Jack Nos.1 and 2 and Mac Nos. 1 and 2 mine areas (the "Sites") generally located in the Smith Lake and Mariano Lake areas of the Navajo Nation, in McKinley County, New Mexico. A map of the Sites and the Sites vicinity is attached as Attachments 1-6 to the Scope of Work ("SOW") (Appendix A). The Sites lie within Navajo tribal allotted and/or trust lands administered by the Bureau of Indian Affairs ("BIA") on behalf of the Navajo Nation.
- 2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended ("CERCLA").
- 3. EPA has notified the Environment Department and the Mining and Minerals Division of the State of New Mexico (the "State") and the Navajo Nation of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- 4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Paragraph 7 and Sections IV and V of this Settlement Agreement. By signing this Settlement agreement, Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms in proceedings initiated by the United States to implement or enforce this Settlement Agreement. Respondent does not admit any liability to any third party arising out of this Settlement Agreement.
- 5. Under this Settlement Agreement, Respondent will perform a removal site evaluation ("RSE") and interim removal action, as provided herein and described in the SOW. EPA will evaluate the results of the evaluation and, after consultation with the Navajo Nation, EPA will make a response action decision for the Sites. The Parties may then discuss the terms of one or more subsequent Settlement Agreements which, if executed, may provide for Respondent's execution of the selected response action and for payment of past response costs and other costs for the Sites.

II. PARTIES BOUND

- 6. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement Agreement.
- 7. In accordance with an Agreement between United Nuclear Corporation and Respondent, dated February 25, 1981, Respondent intends to honor its agreement with United Nuclear and assume the liabilities of United Nuclear, if any, under CERCLA concerning the Sites.
- 8. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.
- 9. EPA intends to consult with and coordinate with the Navajo Nation throughout the performance of the Work and implementation of this Settlement Agreement, and to take the Navajo Nation's comments and concerns into consideration. EPA's failure to do so, however will not affect Respondent's rights or obligations under this Settlement Agreement.

III. <u>DEFINITIONS</u>

- 10. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement which 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:
- a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.
- b. "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. "Working Day" shall mean a Day other than a Saturday, Sunday, or Federal holiday. Unless specifically provided otherwise, calendar days shall be used to compute due dates in this Settlement Agreement.
- c. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXX.
- d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- e. "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 of this Settlement

Agreement, in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraph 27 (costs and attorney's fees and any monies paid to secure access, including the amount of just compensation), Paragraph 38 (emergency response), and Paragraph 63 (Work takeover)." Future Response Costs shall also include all Interim Response Costs.

- f. "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.
- g. "Interim Removal Action" shall mean the response actions required in this AOC and SOW, provided as Appendix A.
- h. "Interim Response Costs" shall mean all costs, including direct and indirect costs, a) paid by the United States in connection with the Sites between February 18, 2014 and the Effective Date, or b) incurred prior to the Effective Date, but paid after that date.
- i. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- j. "Navajo Nation EPA" or "NNEPA" shall mean the Navajo Nation Environmental Protection Agency.
- k. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.
 - 1. "Parties" shall mean EPA and Respondent.
- m. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, et seq. (also known as the Resource Conservation and Recovery Act).
 - n. "Respondent" shall mean Homestake Mining Company of California.
- o. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.
- p. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent for Interim Removal Action and the SOW, provided as Appendix A. In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

- q. "Sites" shall mean and include the Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2 Mine Areas, including the areas depicted in Appendix A, and other areas where hazardous substances associated with the Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2 Mine Areas have been deposited, stored, disposed of, placed, or otherwise came to be located. "Sites" shall mean, collectively, Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2.
 - r. "State" shall mean the State of New Mexico.
- s. "Scope of Work" or "SOW" shall mean the statement of Work for implementation of the removal action, as set forth in Appendix A to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.
- t. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).
- u. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement.

IV. FINDINGS OF FACT

EPA hereby finds the following facts, which Respondent neither admits nor denies:

- Black Jack No.1 mine area is a closed underground uranium mine located in Section 12, Township 15 North, Range 13 West, about 2 miles northwest of Smith Lake on allotment land. Black Jack No. 1 covers a mine lease surface area of approximately 100,038.51 square meters (24 acres) with approximately 226,840 square meters (56 acres) of underground workings. The mine was operated from approximately 1959 through 1967 with additional deliveries from stockpiles of ore until approximately 1971. Black Jack No. 1 mine area was initially operated by Lance Corporation and Homestake Mining Company. Lance Corporation was a subsidiary of Sabre-Pinon Corporation. Sabre-Pinon Corporation was a predecessor of United Nuclear Corporation. The mines were then operated by a partnership between Sabre-Pinon and Homestake Mining Company. The partnership was originally named Homestake-Sapin and later changed its name to United Nuclear-Homestake Partners.
- 12. Black Jack No. 2 mine area is a closed underground uranium mine located in Section 18, Township 15 North, Range 13 West, about 8 miles west of Smith Lake on allotment land. Black Jack No. 2 covers a mine lease surface area of approximately 55,538.51 square meters (14 acres) with approximately 114,893 square meters (26 acres) of underground workings. Black Jack No. 2 was operated by the same entities that operated Black Jack No. 1, and was operated from approximately 1960 through 1964 with additional deliveries from stockpiles of ore until approximately 1970.
- 13. Mac No. 1 mine area is a closed underground uranium mine located in Section 12, Township 15 North, Range 14 West on allotment land. Mac No. 1 covers a mine lease surface

area of approximately 132,240.87 square meters (33 acres) with approximately 33,583.74 square meters (8 acres) of underground workings. Mac Mine No. 1 was operated by the same partnership between Homestake Mining Company and Sabre-Pinon Corporation/United Nuclear Corporation, described above, from approximately 1968 through 1971, with additional deliveries from stockpiles of ore until approximately 1980.

- 14. Mac No. 2 mine area is a closed underground uranium mine located in Section 18 Township 15 North, Range 13 West on allotment land. Mac No. 2 covers a mine lease surface area of approximately 26,136.47 square meters (6 acres) with approximately 40,577 square meters (10 acres) of underground workings. The mine was operated by the same partnership between Homestake-Sapin/United Nuclear-Homestake, described above, from approximately 1968 through 1970.
- 15. Under a 1991 Memorandum of Agreement between the Navajo Nation and EPA Regions 6, 8, and 9, EPA Region 9 has the lead on any EPA response action on lands within the Navajo Nation.
- 16. In May 2009, EPA's contractor, Weston Solutions Inc., issued Navajo Abandoned Uranium Mine Site Screen Reports for Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2. These reports showed elevated readings of Radium-226 at each of the Sites. Radium-226 is a known human carcinogen, and exposure may be a precursor to bone, liver and breast cancers and other health conditions. Radium-226 is a "hazardous substance" as defined by Section 101(14) of CERCLA.
- 17. This removal action, as further described in the attached SOW, will include background studies, gamma scans of surface soils, soil sampling of surface and subsurface soils and sediments related to historic mining and processing operations, assessing radiation exposure inside the mine operations buildings, mitigating physical hazards and other response actions as detailed herein, at each of the Sites.
- 18. This Settlement Agreement reserves and does not address investigation and cleanup of groundwater or any other response actions not required by this Settlement Agreement.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

- 19. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:
- a. Each of the Sites is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. The contamination found at each of the Sites, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

- c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response action and for response costs incurred and to be incurred at the Sites. Respondent Homestake Mining Company of California's corporate predecessor, Homestake Mining Company, was an "operator" of each of the facilities at the time of disposal of hazardous substances at the facilities, 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).
- e. The conditions described in the Findings of Fact above for each of the Sites constitute an actual or threatened "release" of a hazardous substance from a facility as defined by Section 101(22) of CERCLA, 42 U.S.C.§ 9601(22).
- f. The Interim Removal Action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.
- g. The Interim Removal Action required by this Settlement Agreement meets the criteria for a removal action under Section 300.415(b) of the NCP.

VI. <u>SETTLEMENT AGREEMENT AND ORDER</u>

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

VII. <u>DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR</u>

- 21. Respondent has retained, and EPA has approved, Environmental Restoration Group, Inc., ("ERG") in Albuquerque, New Mexico, to implement the Scope of Work for the Sites. EPA accepts and acknowledges that ERG has demonstrated compliance with ANSI/ASQC E-4-2004, "Quality Systems for Environmental Data and Technology Programs: Requirements with Guidance for Use" (American National Standard) and that ERG has a Quality Management Plan ("QMP") acceptable to EPA.
- 22. Respondent designates Bill Ferdinand, Director of Environment with Barrick North America, as Project Coordinator to be responsible for administration of all actions by Respondent required by this Settlement Agreement and Mike Schierman, Senior Health Physicist with ERG, as Assistant Project Coordinator. To the greatest extent possible, the Project

Coordinator or Assistant Project Coordinator shall be present on Site or readily available during Site Work. Following is contact information for Mr. Ferdinand and Mr. Schierman:

Project Coordinator

Bill Ferdinand
Barrick North America
460 West 50 North, Suite 500
Salt Lake City, Utah 84101
Telephone: 801-990-3746
Email: bferdinand@barrick.com

Assistant Project Coordinator

Mike Schierman
Environmental Restoration Group
8809 Washington Street NE, Suite 150
Albuquerque, New Mexico 87113
Telephone: 505-298-4224
Email: mikeschierman@ergoffice.com

23. EPA has designated Mark Ripperda, Remedial Project Manager in the Region 9 Superfund Division, as its On-Scene Coordinator ("OSC"). Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the OSC, with a copy to the Navajo Nation, by U.S. Mail, overnight mail, facsimile, or email:

OSC

Mark Ripperda U.S. EPA, Mail Code SFD-6-2 75 Hawthorne St. San Francisco, CA 94105 Telephone: 415-972-3028 Facsimile: 415-947-3518

Email: Ripperda.Mark@epa.gov

Navajo Nation

Harrison Karr Navajo Nation Department of Justice P.O. Drawer 2010 Window Rock, AZ 86515 Telephone: 928-871-6932 Facsimile: 928-871-6932

Email: hkarr@nndoj.org

Stanley Edison Navajo Nation Environmental Protection Agency P.O. Box 2946 Window Rock, AZ 86515 Telephone: (928) 871-7820

Facsimile: (928) 971-7333

Email: stanleyedison@navajo-nsn.gov

24. EPA and Respondent shall have the right, subject to the requirements of this Section, to change their respective designated OSC or Project Coordinator. Respondent shall notify EPA at least fifteen (15) Days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

25. Respondent shall perform, at a minimum, all actions necessary to implement the Interim Removal Action, as described in and required by the attached SOW, Appendix A. The actions to be implemented generally include, but are not limited to, the following: Determining background concentrations and gamma radiation levels of contaminants of potential concern, conducting a thorough investigation, including gamma scanning and soil sampling of the contamination on the Sites and Site-related contamination in the vicinity; preparing a RSE that documents the findings of the investigation; posting hazard signs around the Sites; and identifying and addressing physical hazards at the Sites.

a. Work Plans and Implementation.

- i. All Work plans described in the SOW shall be submitted to EPA for approval. A copy of all Work plans described in the SOW shall be submitted to the Navajo Nation Department of Justice and the Navajo Nation Environmental Protection Agency.
- ii. EPA may approve, disapprove, require revisions to, or modify any draft Work plan in whole or in part. If EPA requires revisions, Respondent shall submit a revised draft Work plan within fifteen (15) Days of receipt of EPA's notification of the required revisions. Respondent shall implement each Work plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement Agreement.
- iii. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement and SOW. Respondent shall not commence implementation of the Work plans developed hereunder and in the SOW until receiving written EPA approval pursuant to Paragraph 25(a)(ii).

b. Reporting.

- i. Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Settlement Agreement every month after the date of receipt of EPA's approval of the Work Plan until termination of this Settlement Agreement, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.
- ii. Respondent shall submit three copies of all plans, reports or other submissions required by this Settlement Agreement and the Statement of Work, or any approved Work Plan. Upon request by EPA, Respondent shall submit such documents in electronic form.
- iii. If Respondent owns or controls real property at any of the Sites, Respondent shall, at least thirty (30) days prior to the conveyance of any interest in real property at the Sites, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to EPA of the proposed conveyance, including the name and address of the transferee. If Respondent owns or controls property at the Sites, Respondent also agrees to require its successors to comply with the immediately preceding sentence and Sections IX (Site Access) and X (Access to Information). Respondent represents that it does not currently own or control any property, including real property, at the Sites.
- c. <u>Final Report</u>. Within ninety (90) Days after completion of all Work required by this Settlement Agreement and receipt by Respondent of all validated laboratory data, Respondent shall submit for EPA review and approval a final report (the RSE Report) summarizing the actions taken to comply with this Settlement Agreement. The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement.

The final report shall include the following certification signed by a person who supervised or directed the preparation of that report:

"Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

IX. SITE ACCESS

26. If the Sites, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by Respondent, Respondent shall, commencing on the Effective Date: (1) provide EPA, and their representatives, including contractors, with access at all reasonable times to the Sites, or such other property, for the purpose of conducting any activity related to this Settlement Agreement, and (2) provide the NNEPA and its designated representatives, including contractors, with access at all reasonable times to the Sites, or such

other property, for the purposes of overseeing, observing, monitoring, and taking split samples, during any EPA activities related to this agreement.

- 27. Where any action under this Settlement Agreement is to be performed on lands allotted to individual members of the Navajo Nation, Respondent shall use its best efforts to work with NNEPA and the individual members, as necessary, to identify and obtain all necessary access agreements, and gain access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, in consultation with NNEPA, as appropriate. For purposes of this paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access and the hiring of a local member of the community to facilitate access. Respondent 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 XV (Payment of Response Costs). NNEPA has provided Respondent with Navajo Nation's authorization to access Navajo lands in the form of an appropriately executed authorization letter.
- 28. Commencing on the Effective Date of this Settlement Agreement, Respondent shall refrain from using the Sites in any manner that would interfere with or adversely affect the implementation, integrity, or protectiveness of the response measures to be implemented pursuant to this Settlement Agreement. Restricted or prohibited activities include, but are not limited to, excavation and disturbance of any soils in any manner that might cause a release of wastes, except as needed for implementation of this Settlement Agreement.
- 29. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

- 30. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Sites 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. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.
- 31. Respondent 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 they are submitted to EPA, or if EPA has notified Respondent 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 and the Navajo Nation may be given access to such documents or information without further notice to Respondent.

- 32. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA and the Navajo Nation with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. 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.
- 33. 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 Sites.

XI. RECORD RETENTION

- 34. Until ten (10) years after Respondent's receipt of EPA's notification pursuant to Section XXVIII (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which 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 Sites, regardless of any corporate retention policy to the contrary. Until ten (10) years after Respondent's receipt of EPA's notification pursuant to Section XXVIII (Notice of Completion of Work), Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.
- 35. At the conclusion of this document retention period, Respondent shall notify EPA and the Navajo Nation at least ninety (90) Days prior to the destruction of any such records or documents, and, upon request by EPA or the Navajo Nation, Respondent shall deliver any such records or documents to EPA or the Navajo Nation. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA or the Navajo Nation with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondent. EPA may challenge Respondent's privilege claim by notice to Respondent within sixty (60) Days following EPA's receipt of such information from Respondent. Respondent shall not destroy any records or documents subject to the privilege claim unless and until allowed by final resolution of EPA's challenge to the claim or EPA's

failure to challenge the claim within the time allowed. 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.

36. Respondent hereby certifies 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 Sites since notification of potential liability by EPA or the filing of suit against it regarding the Sites.

XII. COMPLIANCE WITH OTHER LAWS

37. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable local, state, tribal and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j).

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

- 38. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from any of the Sites that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent 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. Respondent shall also immediately notify the OSC or, in the event of the OSC's unavailability, Claire Trombadore of the Region 9 Superfund Division, (415) 972-3013, and the Navajo Nation Department of Emergency Management at (928) 871-6892, of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).
- 39. In addition, in the event of any release of a hazardous substance from any of the Sites, Respondent shall immediately notify the OSC at (415) 972-3028, or in the event of the OSC's unavailability, Claire Trombadore of the Region 9 Superfund Division (415) 972-3013, the Region 9 Spill Response Center at (415) 947-4400, the National Response Center at (800) 424-8802, and the Navajo Nation Department of Emergency Management at (928) 871-6892. Respondent shall submit a written report to EPA within seven (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.

XIV. AUTHORITY OF ON-SCENE COORDINATOR

40. The OSC, in consultation with NNEPA, shall be responsible for overseeing Respondent's implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Sites. Absence of the OSC from the Sites shall not be cause for stoppage of Work unless specifically directed by the OSC.

XV. PAYMENT OF RESPONSE COSTS

41. Payments for Future Response Costs.

- a. Within thirty (30) Days of the Effective Date, Respondent shall pay EPA \$75,000 in prepayment of Future Response Costs. The total amount paid shall be deposited by EPA in the Mac and Black Jack Mines Special Account ("Mine Sites Special Account"), within the EPA Hazardous Substance Superfund. These funds will be used by EPA to conduct or finance future response action. Any amounts received under this subparagraph will be credited to Respondent in the final accounting pursuant to subparagraph 41.c.
- b. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a cost summary listing the direct and indirect costs incurred by EPA and its contractors. Respondent shall make all payments within thirty (30) Days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 43 of this Settlement Agreement. The total amount paid will be deposited by EPA in the Mine Sites Special Account, within the EPA Hazardous Substance Superfund. These funds will be retained and used by EPA to conduct or finance future response actions in connection with the Sites.
- c. After EPA issues its written Certification of Completion of Work and EPA has performed a final accounting of Future Response Costs, EPA shall, at EPA's election, offset the final bill for Future Response Costs by the unused amount paid by the Respondent pursuant to subparagraph 41.a or apply any unused amount paid by Respondent pursuant to subparagraph 41.a to any other unreimbursed response costs or response actions remaining at the Sites for which Respondent is liable, or remit and return to Respondent any unused amount of the funds paid by Respondent pursuant to subparagraph 41.a.
- d. Respondent shall make all payments required by this Paragraph by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondent by EPA Region 9, and shall be accompanied by a statement identifying the name and address of the party making payment, the Site name (Mac and Black Jack Mines Special Account), the EPA Region and Sites/Spill ID Number (A954) and the EPA docket number for this action (CERCLA Docket No. 2014-06).
- e. At the time of payment, Respondent shall send notice that payment has been made to both:

Mark Ripperda, Mail Code SFD-6-2 U.S. Environmental Protection Agency, Region 9 75 Hawthorne Street San Francisco, CA 94105

and

EPA Cincinnati Finance Center 26 Martin Luther King Drive Cincinnati, Ohio 45268

- 42. In the event that any payment required under this Section is not made within thirty (30) Days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance. The Interest shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.
- 43. Respondent may dispute payment of any Future Response Costs billed under this Settlement Agreement, if Respondent determines that EPA has made a mathematical error or if it believes EPA incurred Future Response Costs or excess Future Response Costs that were inconsistent with the NCP. Such objection shall be made in writing within thirty (30) Days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as agreed by the Parties. In the event of an objection, Respondent shall within the thirty (30) -Day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 41. Simultaneously, Respondent shall establish an interest-bearing escrow account in a federally-insured bank duly chartered within the Navajo Nation or a state and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA OSC 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 establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XVI (Dispute Resolution). If EPA prevails in the dispute, within five (5) Days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 41. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in Paragraph 41. Respondent shall be disbursed any balance of the escrow account (plus associated accrued Interest) within thirty (30) days after the dispute is resolved. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set

forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XVI. DISPUTE RESOLUTION

- 44. 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.
- 45. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA in writing of its objection(s) within thirty (30) Days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have thirty (30) Days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA.
- 46. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by both 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 management official at the Division Director 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. Respondent's 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, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

XVII. FORCE MAJEURE

- 47. Respondent agrees 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, a *force majeure* is defined as any event arising from causes beyond the control of Respondent, or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work, or increased cost of performance.
- 48. 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, Respondent shall notify EPA orally within forty-eight (48) hours of when Respondent first knew that the event might cause a delay. Within seven (7) Days thereafter, Respondent shall provide to EPA in writing 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 or the effect of the

delay; Respondent's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, 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 Respondent 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.

49. 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 Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. STIPULATED PENALTIES

50. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 51 and 52 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of all payments and activities under this Settlement Agreement or any 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.

51. Stipulated Penalty Amounts - Major.

a. The following stipulated penalties shall accrue per violation per Day for any noncompliance identified in Paragraph 51(b):

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

b. Compliance Milestones

- i. Failure to timely submit a final report meeting the requirements of Section VIII (Work to Be Performed and the SOW); or
 - ii. Failure to make a payment when due.
- 52. <u>Stipulated Penalty Amounts Other</u>. The following stipulated penalties shall accrue per violation per Day for failure to submit timely or adequate reports or other written documents, failure to timely perform actions pursuant to this Settlement Agreement, or other noncompliance other than those specified in the preceding Paragraph:

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

- 53. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 63 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of \$125,000.
- 54. 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: 1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the thirty-first (31st) Day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and 2) with respect to a decision by the EPA Management Official at the Division Director level or higher, under Paragraph 46 of Section XVI (Dispute Resolution), during the period, if any, beginning on the twenty-first (21st) Day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.
- 55. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.
- 56. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) Days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to US EPA Fines and Penalties, Cincinnati Finance Center, PO Box 979077, St. Louis, MO 63197-900, shall

indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number A954, the EPA Docket Number 2014-06, and the name and address of the party(ies) making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to EPA as provided in Paragraph 41.

- 57. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.
- 58. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until fifteen (15) Days after the dispute is resolved by agreement or by receipt of EPA's decision.
- 59. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 56. 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 Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 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 106(b) or 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 Section, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 63 (Work Takeover). 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.

XIX. COVENANT NOT TO SUE BY EPA

60. In consideration of the actions that will be performed and the payments that will be made by Respondent 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 Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV. This covenant not to sue extends only to Respondent and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

61. 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 Sites. 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 Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

- 62. 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 Respondent with respect to all other matters, including, but not limited to:
- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
 - b. liability for costs not included within the definition of Future Response Costs;
 - c. liability for performance of response action other than the Work;
 - d. criminal liability;
- e. liability for violations of federal or state law that occur during or after implementation of the Work;
- f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Sites; and
- h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Sites.
- 63. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which 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. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XV (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.

- a. In the event EPA determines that Respondent (i) has ceased implementation of any portion of the Work, or (ii) is seriously or repeatedly deficient or late in its performance of the Work, or (iii) is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may issue a written notice "Work Takeover Notice" to the Respondent. Any Work Takeover Notice issued by EPA will specify the grounds upon which such notice was issued and will provide Respondent a period of twenty-one (21) Days within which to remedy the circumstances giving rise to EPA's issuance of such notice.
- b. If, after expiration of the twenty-one (21) Day notice period specified in subparagraph 63.a, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portions of the Work as EPA deems necessary ("Work Takeover"). EPA shall notify Respondent in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this subparagraph 63.b.
- c. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution), Paragraph 45, to dispute EPA's implementation of a Work Takeover under subparagraph 63.b. However, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under subparagraph 63.b until the earlier of (i) the date that Respondent remedies, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice or (ii) the date that a final decision is rendered in accordance with Section XVI (Dispute Resolution), Paragraph 46, requiring EPA to terminate such Work Takeover.
- d. After commencement and for the duration of any Work Takeover, EPA shall have immediate access to and benefit of any financial assurance(s) provided pursuant to Section XXVI of this Settlement Agreement in accordance with the provisions of Paragraph 81 of that Section. If and to the extent that EPA is unable to secure the resources guaranteed under any such performance guarantee(s) and the Respondent fails to remit a cash amount up to but not exceeding the estimated cost of the remaining Work to be performed, all in accordance with the provisions of Paragraph 81, any unreimbursed costs incurred by EPA in performing Work under the Work Takeover shall be considered Future Response Costs that Respondent shall pay pursuant to Section XV (Payment of Response Costs).

XXI. COVENANT NOT TO SUE BY RESPONDENT

- 64. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:
- a. any direct or indirect claim for reimbursement from the 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 response actions at or in connection with the Sites, including any claim under the United States Constitution, the New Mexico State Constitution, the Navajo Nation Code or the common law of the Navajo Nation, 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; or
- c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613 relating to the Work or Future Response Costs.
- d. any direct or indirect claim for return of unused amounts in the Mine Sites Special Account, except for unused amounts that EPA determines shall be returned to Respondent in accordance with Paragraph 41.c.

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 Paragraphs 62 (b), (c), and (e) - (h), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

Notwithstanding the foregoing, Respondent makes no covenant not to sue relating to, and nothing in this Settlement Agreement shall be interpreted as waiving, abrogating, or resolving (1) any claims that Respondent has or may have based upon any alleged liability that the United States, including any department thereof, including, without limitation, the United States Department of Energy and the United States Department of the Interior, or any agency branch or division thereof, including, without limitation, the United States Nuclear Regulatory Commission, or any predecessor or successor agency, has or may have relating to the Sites pursuant to CERCLA Section 107 or 113, 42 U.S.C. §§ 9607 or 9613; or the Price-Anderson Act of 1957, 42 U.S.C. §§2014, 2210 or 2282a, which amended the Atomic Energy Act, 42 U.S.C. § 2011 et seq.; or (2) any claims with respect to the Work, Future Response Costs, or this Settlement Agreement that Respondent may have against the United States pursuant to any contract between Respondent and the United States.

65. 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).

XXII. OTHER CLAIMS

- 66. 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 Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.
- 67. Except as expressly provided in Section XXI (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 Respondent 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.

68. 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. CONTRIBUTION

- 69. 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 Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may otherwise be provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs.
- 70. The Parties 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 Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Future Response Costs.
- 71. Nothing in this Settlement Agreement shall be constructed to create rights in, or grant any cause of action to, any person not a party to this Settlement Agreement. Except as provided in Section XXII (Covenants by Respondent), 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 Sites 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).

XXIV. <u>INDEMNIFICATION</u>

72. Respondent 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 Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorney's 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 Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its 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 Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

- 73. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 74. Respondent waives 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 Respondent and any person for performance of Work on or relating to the Sites, including, but not limited to, claims on account of construction delays. In addition, Respondent 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 Respondent and any person for performance of Work on or relating to the Sites, including, but not limited to, claims on account of construction delays.

XXV. INSURANCE

75. At least seven (7) Days prior to commencing any on-Site Work under this Settlement Agreement, Respondent or its contractor shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of one million dollars (\$1,000,000), combined single limit, naming EPA as an additional insured. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of this Settlement Agreement, Respondent shall satisfy, or shall ensure that its 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 Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates 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 Respondent needs to provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

- 76. Within thirty (30) Days after the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of \$500,000 (hereinafter "Estimated Cost of Work") in one or more of the following forms, which must be satisfactory in form and substance to EPA, in order to secure the full and final completion of Work by Respondent:
- 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);
 - c. a trust fund administered by a trustee;
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;
- e. a written guarantee to pay for or perform the Work provided by one or more direct or indirect parent companies of Respondent, or by one or more unrelated companies that have a substantial business relationship with Respondent; including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or
- f. a demonstration of sufficient financial resources to pay for the Work made by Respondent, which shall consist of a demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).
- 77. 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, Respondent shall, within thirty (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 76, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within thirty (30) Days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.
- 78. If Respondent seeks to ensure completion of the Work through a guarantee pursuant to Subparagraph 76(e) or (f) of this Settlement Agreement, Respondent shall (i) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (ii) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date or such other date as agreed by EPA, to EPA. Respondent seeks to ensure completion of the Work through Subparagraph 76 (f). For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the dollar amount to be used in the relevant financial test calculations shall be the current cost estimate of \$ 500,000 for the Work at the Sites plus any other RCRA, CERCLA, TSCA, or other federal environmental obligations financially assured by the Respondent or guarantor to EPA by means of passing a financial test.

- 79. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 76 of this Section, Respondent may, on any anniversary date of the Effective Date, 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. Respondent 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, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.
- 80. Respondent 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, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.
- 81. The commencement of any Work Takeover pursuant to Paragraph 63 of this Settlement Agreement shall trigger EPA's right to receive the benefit of any Performance Guarantee(s) provided pursuant to subparagraph 76.a, 76.b., 76c., 76.d, or 76.f. and at such time EPA shall have immediate access to resources guaranteed under any such Performance Guarantee(s), whether in cash or in kind, as needed to continue and complete the Work assumed by EPA under the Work Takeover. If for any reason EPA is unable to promptly secure the resources guaranteed under any such Performance Guarantee or the Performance Guarantee involves a demonstration of satisfaction of the financial test criteria pursuant to subparagraph 76.e, Respondent shall immediately upon written demand from EPA deposit into an account specified by EPA, in immediately available funds and without setoff, counterclaim, or condition of any kind, a cash amount up to but not exceeding the estimated cost of the remaining Work to be performed as of such date, as determined by EPA.

XXVII. MODIFICATIONS

- 82. This Settlement Agreement may be amended by mutual agreement of EPA and Respondent. Amendments shall be made in writing and shall be effective when signed by EPA. The OSC may make modifications to any plan or schedule or Scope of Work in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly and provided to Respondent and NNEPA, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the Parties.
- 83. If Respondent seeks permission to deviate from any approved Work plan or schedule or Scope of Work, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 82.

84. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its 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.

XXVIII. NOTICE OF COMPLETION OF WORK

85. When EPA determines, after consultation with the NNEPA, and after EPA's review of the Final Report, 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, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXIX. SEVERABILITY/INTEGRATION/APPENDICES

- 86. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondent has sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondent shall remain bound to comply with all the provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.
- 87. This Settlement Agreement and its appendices 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 appendix is attached to and incorporated into this Settlement Agreement: Scope of Work.

XXX. EFFECTIVE DATE

88. This Settlement Agreement shall be effective upon signature by the Assistant Director of the Superfund Division, U.S. EPA Region 9 or his delegatee.

Agreed this 13 day of August, 2014.

The undersigned representative(s) of Respondent certify(ies) that it (they) is (are) fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party(ies) it (they) represent(s) to this document.

For Respondent, Homestake Company of By:	California
Print/Type Name): Rick Baker	
_{Title:} President	
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The undersigned representative(s) of Respondent certify(ies) that it (they) is (are) fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party(ies) it (they) represent(s) to this document.

For Respondent Homestake Company of California
By: EMLAAOM
Diales Massaure
Print/Type Name): Blake Measom
Title: Chief Financial Officer

Agreed this 13 day of August, 2014.

Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2 Mine Sites

It is so ORDERED and Agreed this 27 day of Agent, 2014.
BY: /// DATE: 8/27/14 Clandy Tenley
Clancy Tenley
Assistant Director, Superfund Division Partnerships, Land Revitalization and Cleanup Branch
Partnerships, Land Revitalization and Cleanup Branch
U.S. Environmental Protection Agency, Region 9
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APPENDIX A

SCOPE OF WORK FOR ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR INTERIM REMOVAL ACTION FOR BLACK JACK MINES NUMBERS 1 AND 2 AND MAC MINES NUMBERS 1 AND 2

1.0 Introduction

The interim removal action for the Black Jack Mines Nos. 1 and 2 and Mac Mines Nos. 1 and 2 and associated areas ("Sites") is a time-critical removal action to investigate and mitigate actual or threatened releases of hazardous substances. This Scope of Work ("SOW") specifies actions required to be completed by Homestake Mining Company of California ("Respondent") pursuant to the Administrative Settlement Agreement and Order on Consent ("AOC"), CERCLA Docket No. 2014-06, entered into voluntarily with the United States Environmental Protection Agency ("EPA"). All terms used in this SOW shall be interpreted in a manner consistent with the definitions provided in the AOC. In the event of any conflict between this SOW and the AOC, the AOC shall control.

2.0 Areas To Be Addressed

The Sites and associated areas are shown in Attachments 1 thru 6 to this SOW. The areas to be addressed by this SOW include:

- Black Jack Nos. 1 and 2 mines as shown on Attachments 1 and 2,
- Mac Nos. 1 and 2 mines as shown on Attachments 3 and 4,
- Potential mine haul roads as shown on Attachments 5 and 6, along with their shoulders,
- Known vent holes related to the Sites,
- Washes at the Sites, and
- Known exploratory holes within the Sites.

The mine lease surface areas are approximately 33 acres for Mac No. 1, approximately 6 acres for Mac No. 2, approximately 24 acres for Black Jack No. 1, and approximately 14 acres for Black Jack No. 2.

In addition, Respondent may be required to characterize additional areas in the vicinity of the Sites (i.e., step out areas) in the field, if EPA determines that mine-related materials extend beyond the margins of the areas described above, or if additional areas of mine-related materials are identified in proximity and are attributable to the Sites. These additional areas, if any, will be identified during Phase 1 of the Work as described in Section 4.1 and set forth in the Summary Report described in Section 6.8 and will be addressed in Phase 3.

3.0 General Requirements

3.1 Priority Media: Priority media at the Sites include soils, sediments, groundwater and dust.

- **3.2 Potential Contaminants of Concern**: The primary Potential Contaminant of Concern ("PCOC") is radium 226 ("226Ra"). 226Ra and its associated gamma emission is the primary risk driver associated with uranium ore extraction. Gamma radiation levels that potentially exceed background levels have been detected at the Sites. In addition to 226Ra, Respondent shall analyze soil and sediment samples from selected locations for additional PCOCs frequently associated with mining activities. The contaminants for these analyses shall include 226Ra, uranium, arsenic, molybdenum, selenium and vanadium. In addition, if former or existing underground or aboveground storage tanks are identified during the review of historical records or onsite field investigation activities, then samples shall be collected for total petroleum hydrocarbons.
- **3.3 Investigation Level**: For the purposes of this Removal Site Evaluation ("RSE"), the investigation level for ²²⁶Ra is 1.24 pCi/g above background. This investigation level is based on EPA's preliminary remediation goal ("PRG") for ²²⁶Ra plus daughters and represents the 10⁻⁴ risk level for residential exposure. Scanning measurements must meet a scan minimum detectable concentration ("MDC") of 50% of the investigation level. Investigation levels for other potential contaminants of concern shall be taken from the EPA Region 9 Regional Screening Level ("RSL") tables, available at http://www.epa.gov/region9/superfund/prg.
- **3.4 Multi-Agency Radiation Survey & Site Investigation Manual ("MARSSIM")**: The activities conducted as part of this interim removal action shall be conducted in a manner consistent with MARSSIM specifications to facilitate implementation of a final status survey at the completion of all mitigation activities.
- **3.5 Notice of Fieldwork and Sampling**: Respondent shall notify EPA and Navajo Nation EPA (collectively "the Agencies") not less than seven (7) days in advance of any sample collection activity, unless shorter notice is agreed to by EPA.
- 3.6 Quality Assurance and Sampling: All sampling and analyses performed shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 2004, "Quality Systems for Environmental Data and Technology Programs: Requirements with Guidance for Use" (American National Standard), and "EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.

Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2 Mine Sites Scope of Work for Interim Removal Action AOC

- **3.7 Split Samples**: Upon request from EPA, Respondent shall provide 10% splits to EPA to be analyzed by EPA's laboratory for corroboration analysis. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent's implementation of the Work.
- **3.8 Data Reports**: Respondent shall provide all data in both electronic form and hard copy. Electronic data shall be provided as described in the Data Management Plan (Section 5.6). Maps should be provided as ArcGIS shape files.
- **3.9 Cultural Resources Survey**: Respondent shall perform a Cultural Resources Survey and shall submit a Cultural Resources Survey Report for review and approval to the Navajo Nation Historic Preservation Department. A copy of the final report and the approval from Navajo Nation Historic Preservation Department shall be submitted to EPA. Unless required for completion of the Cultural Resources Survey, no intrusive work on the Sites shall be performed prior to Navajo Nation approval of this Report.
- 3.10Biological Clearance: Respondent shall, pursuant to the Biological Resource Land Use Clearance Policies and Procedures ("RCP"), RCS-44-08 (approved September 10, 2008), request information on biological resources specific to the Sites ("Data Request"), from the Navajo Natural Heritage Program ('NNHP"). If the NNHP provides a Data Response that states there are no known or potential species of concern for the Sites, then a biological evaluation need not be prepared and Respondent can receive a biological clearance by requesting concurrence from the Navajo Nation Department of Fish & Wildlife ("NNDFW") that the Work will not affect species of concern. If NNHP identifies known or potential species of concern at the Sites, Respondent will pursue, if applicable, the process and procedures to obtain a biological clearance as set forth in the RCP for Area 3 (Less Sensitive Area) projects, before it commences Work at the Sites.

4.0 Requirements for the Work

Each phase of Work shall be performed pursuant to approved Work plans and may overlap to some degree. Requirements for the Work plan(s), which shall include but not be limited to the tasks specified in Sections 4.1, 4.2 and 4.3, are described in Section 5.

4.1 Phase 1 – Transect Gamma Scan, Geomorphologic Survey and Background Study

- **4.1.1 Transect Gamma Scan**: Respondent shall conduct gamma scans of the Sites and areas described in Section 2, above. The gamma scan should be designed to identify the areal extent of mine-related material attributable to the Sites, including areas beyond the boundaries described in Section 2, if any.
- **4.1.2 Geomorphologic Survey:** Respondent shall conduct a geomorphologic survey to characterize the existing terrain features and geomorphological stability of the Sites to evaluate active and potential erosion processes as well as existing and potential pathways for erosion of mine-related material to support closure options analysis in the future.

- **4.1.3 Background Study:** Respondent shall conduct a background study consistent with MARSSIM. Respondent shall propose at least two reference areas based on geologically similar soils, upgradient and upwind as determined by available topographical maps and regional meteorological data, of the Sites in areas undisturbed by uranium mining. A gamma scan of the background area(s) will be performed, in addition to collection and testing of surface soil for ²²⁶Ra activity, total uranium, and arsenic, molybdenum, selenium, and vanadium.
- **4.1.4 Sampling for Gamma Scan/Soil Concentration Correlation**: Respondent shall develop a site-specific statistical correlation between gamma scan instrument responses and ²²⁶Ra concentrations in soil. Respondent shall collect sufficient gamma scan data and surface soil samples in areas with elevated gamma scan results to calculate a correlation between gamma scan counts and soil concentrations of ²²⁶Ra.
- **4.1.5** Radiation Measurements in Buildings: Radon measurements shall be taken in buildings at the Mac No. 1 Mine Site using activated charcoal adsorption devices. The measurement time will be 48 hours with the buildings closed and undisturbed during the measurement. Location(s) of the radon measurements will be determined in the Phase 1 Work Plan.
- **4.1.6 Open Hole at Black Jack No.1**: Respondent shall backfill and grade the open hole area at the Black Jack No 1 Mine Site.
- 4.2 Phase 2 Filling and Closing Holes, Vent Holes and other Surface Features; Site Signage
 - 4.2.1 Open Hole Closure: Respondents shall assess the Sites to locate any vent holes, openings related to the mine, and other surface features that pose a physical threat to humans or animals. If any such hazards exist, Respondent shall backfill and grade such hazards, or as temporary mitigation, install fencing and signage in Phase 2 and then plug or backfill and grade in Phase 3 such hazards to remove the threat. Vent holes that are currently capped with steel plates or cement are sufficiently secured for the purposes of this this AOC. The open vent hole at Black Jack No. 1 shall be plugged or capped.
 - **4.2.2 Site Signage**: Respondent shall install bilingual (English and Navajo) signs on 200-ft spacing around the Sites. The template for the signs will be provided by EPA.
- 4.3 Phase 3 Removal Site Evaluation ("RSE")
 - **4.3.1** Characterization of Surface, Subsurface Soils and Sediments: Subject to any restrictions based on the approved Cultural Resources Survey, the filing of a Data Request with the NNHP and obtaining, if necessary, a biological

clearance at the Sites as set forth in paragraphs 3.10 and 6.3 herein, Respondent shall sample and analyze surface and subsurface soils for ²²⁶Ra in the areas described in Section 2 of this SOW, as amended by the results of the Phase 1 Work. Sampling in all mine process areas and the step out areas shall include surface sampling and subsurface sampling at appropriate intervals to a depth that confirms the vertical and lateral extent of mine-related material, as determined by a field gamma meter and confirmatory soil sampling.

- **4.3.2 Screening for Additional Analytes at Mine Areas**: Respondent shall sample and analyze surface and subsurface soil samples from a minimum of sixteen locations, four from each of the Sites, for the metals referenced in paragraph 3.2, above. Final locations shall be selected by EPA in its approval of the Phase 3 Work Plan.
- **4.3.3 Groundwater Sampling**: Respondent shall identify and sample any accessible wells used in mine operations for uranium, ²²⁶Ra, total dissolved solids, anions (carbonate, bicarbonate and sulfate), cations (sodium, calcium and manganese), arsenic, molybdenum, selenium and vanadium, provided sampling is not precluded by casing obstruction or absence of groundwater,.
- **4.3.4 Geotechnical Sampling**: Respondent shall determine the location and characteristics of suitable soil and erosion control material for use to stabilize mine related material, if needed. The volumes of suitable materials will also be determined.
- **4.3.5** Radiation Measurements in Buildings: Respondent shall collect alpha wipe samples over 100 cm² areas in mining operation buildings on the Sites. The spacing of measurement locations shall be determined in the Phase 3 Work Plan. In addition, direct measurements with a scintillation detector, capable of simultaneous measurement of alpha and beta radiation, shall be collected within the building interiors at common locations but prior to collection of the alpha wipe samples. Specifically, the Mac No. 1 Mine Site buildings with radon concentrations greater than 4 pCi/L, as determined by Phase 1 measurements, will be measured with track etch type detectors over a 90 day period during Phase 3 of the Work.
- **4.3.6 Open Hole Closure:** Respondent shall plug or backfill and grade hazard areas identified in Section 4.2.1 that were not backfilled and graded in 2014.
- **4.3.7 Testing of Solid Waste:** Respondent shall test or gamma scan solid waste, such as old fencing materials, old piping, concrete debris, etc., at the Sites. The volume of such solid waste shall be estimated at each of the Sites until a final determination is made following issuance of the Final Report as to the manner of disposal of such material. The material inside the buildings at Mac No. 1 shall remain locked inside the buildings and not be disposed of.

5.0 Work Plans

Respondent is required to develop the following work plans and to submit them for EPA review and approval, in consultation with Navajo Nation, or approval with modifications, consistent with the AOC.

- **5.1 Removal Action Work Plan**: This plan shall cover the overall SOW. The Overall Removal Work Plan may be broken into individual work plans for Phases 1, 2, and 3 with each submitted separately or together.
 - 5.1.1 Quality Assurance Project Plan (QAPP): This plan shall document the planning, implementation, and assessment procedures for a particular project, as well as any specific quality assurance and quality control activities. This plan shall be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998).
 - **5.1.2** Field Sampling Plan/Quality Assurance Sampling and Analysis Plan (FSP/QASP): This plan shall address vertical and lateral characterization and verification sampling. Respondent shall utilize an appropriate statistical approach and a sufficient radiological scanning approach to develop this plan. The FSP/QASP will be provided in the Overall Removal Work Plan (Work Plan). In addition, Respondent should use an approach consistent with MARSSIM. Respondent can use Visual Sampling Plan software to properly document that soil sampling approach is statistically representative.
 - **5.1.3 Construction Work Plan**: This plan shall specify how all construction activities will be implemented, including adit and vent hole closures. This plan is not required if EPA determines that no construction is necessary.
 - **5.1.4 Data Management Plan:** This plan shall present a framework for the generation, validation, and distribution of the removal assessment data deliverables. At a minimum, the Data Management Plan will address the following topics: (1) a description of the data management process, including the data management team and management of new, historical and monitoring data; (2) a description of the data management system, including databases, software and specification of electronic data deliverable (EDD); and (3) a description of the management and administration of the data management system, including access, security and data backup.

Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2 Mine Sites Scope of Work for Interim Removal Action AOC

5.2 In addition to the above Work Plan elements, Respondent shall also prepare and submit a Health and Safety Plan. This plan shall identify all hazards and include both directives and specific operating procedures that will be used to mitigate those hazards to ensure the protection of the public health and safety during performance of on-Site work under the AOC and this SOW. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92963414, June 1992). In addition, this plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, this plan shall also include contingency planning.

6.0 Schedule

The Work to be performed pursuant to the AOC and this SOW shall be performed in compliance with the following schedule, unless otherwise agreed by the parties or excused by a Force Majeure. The parties understand and acknowledge that any delays in obtaining access to any of the Sites on lands allotted to individual members of the Navajo Nation or from the Bureau of Indian Affairs – Crownpoint Realty Office or on lands subject to grazing permits, or in obtaining a biological clearance at the Sites may affect the remainder of the schedule and deliverables under this SOW.

- **6.1 Access Approvals** Use best efforts to work with the Navajo Nation to obtain property access approvals within fifteen (15) days of the effective date of the AOC.
- **6.2 Cultural Resources** Hire a Cultural Resource Survey contractor approved by the Navajo Nation within 14 days from the effective date of the AOC. Any field work for the Survey shall begin within 7 days of obtaining property access approvals. Submit the Survey Report to the Navajo Nation Department of Historic Preservation with a copy to EPA within 45 days from obtaining property access approvals.
- **6.3 Natural Resources** –File a Data Request with the NNHP concerning the proposed Work at the Sites within 14 days from the effective date of the AOC. If NNHP determines that there are known or potential species of concern at the Sites, within 14 days of such determination, Respondent shall begin the process to obtain a biological clearance.
- **6.4 Work Plan for Phase 1** Submit a draft Work Plan for Phase 1 within 45 days of the effective date of the AOC. Respondent will require access to the Sites to prepare the Work Plan.
- **6.5 Work Plan for Phase 2** Submit a draft Work Plan for Phase 2 within 45 days from approval of Phase 1 Summary Report. Respondent will require access to the Sites to prepare the Work Plan.
- **6.6 Work Plan for Phase 3** Submit a draft Work Plan for Phase 3 within 60 days from approval by EPA of the Phase 2 Summary Report. Respondent will require access to the Sites to prepare the Work Plan.

- **6.7 Health & Safety Plan** Submit a draft Health & Safety Plan within 45 days of the effective date of the AOC.
- **6.8 Field Work for Phase 1 (Gamma Scanning and Background Data Collection)** Subject to final approval of the Cultural Resources Survey Report by the Navajo Nation Historic Preservation Department, the filing of a Data Request with the NNHP and obtaining, if necessary, a biological clearance at the Sites as set forth in paragraphs 3.10 and 6.3 above concerning the proposed Work at the Sites, begin field work for Phase 1 within 30 days from approval of the Work Plan for Phase 1, provided property access approvals to enter the Sites have been deemed sufficient by the Navajo Nation.
- **6.9 Phase 1 Summary** Report Submit Phase 1 Summary Report within 60 days from completion of field work for Phase 1 and receipt of all validated laboratory data for Phase 1.
- **6.10 Field Work for Phase 2** Subject to final approval of the Cultural Resources Survey Report by the Navajo Nation Historic Preservation Department, the filing of a Data Request with the NNHP and obtaining, if necessary, a biological clearance at the Sites as set forth in in paragraphs 3.10 and 6.3 above concerning the proposed Work at the Sites, begin field work to address physical hazards for Phase 2 within 30 days from EPA's approval of the Work Plan for Phase 2, provided property access approvals to enter the Sites have been deemed sufficient by the Navajo Nation. Install signs within 30 days from EPA's approval of the Work Plan for Phase 2.
- **6.11 Phase 2 Summary Report** Submit Phase 2 Summary Report within 60 days from the completion of the field work for Phase 2.
- 6.12 Work for Phase 3 (RSE) Subject to the prior final approval of the Cultural Resources Survey Report by the Navajo Nation Historic Preservation Department, the filing of a Data Request with the NNHP and obtaining, if necessary, a biological clearance at the Sites as set forth in paragraphs 3.10 and 6.3 above concerning the proposed Work at the Sites, begin field work for Phase 3 within 45 days from approval of the Work Plan or by May 15, 2015 if the Work Plan approval is more than 45 days before May 15, 2015, provided property access approvals to enter the Sites have been deemed sufficient by the Navajo Nation.
- **6.13 Final Report (includes RSE Report)** Submit the Final Report within 90 days of completion of all field work and receipt of all validated analytical data. The Final Report shall include all the data collected during the investigations, an estimate of the total volume of contaminated soil, a report on all construction work completed, and a summary of the cost of the work.

7.0 Reporting

7.1 Weekly Technical Calls: Respondent shall, as needed, participate in weekly technical conference calls with EPA's project manager, EPA's consultants and Navajo Nation representatives. On the weekly call, Respondent's representatives shall provide updates

Black Jack Nos. 1 and 2 and Mac Nos. 1 and 2 Mine Sites Scope of Work for Interim Removal Action AOC

on all tasks and raise issues that may need to be resolved in order to expedite completion of the Work.

- **7.2 Monthly Reporting:** Respondent shall provide a Monthly Report to the OSC/RPM and Navajo Nation representatives via email, no later than the last day of the first full month following the Effective Date of the AOC, and include in each report a complete update on all field, analytic and planning activities.
- **7.3 Laboratory Results:** A copy of all laboratory results shall be provided to EPA within 5 days of Respondent's, or Respondents' consultants, receipt of such results. Laboratory results need not be validated for this submittal.
- **7.4 Final Report:** The Final Report shall integrate all data used and collected into a single coherent characterization report deliverable. This report shall be provided as specified in the AOC.
- 7.5 Potential Engineering Evaluation/Cost Analysis: Upon approval of the Final Report, EPA shall determine whether to direct Respondent to develop and write an Engineering Evaluation/Cost Analysis (EE/CA). The EE/CA shall be based on the Final Report and evaluate response action alternatives for mine related materials at the Sites determined to require management, disposal or both. The EE/CA shall be consistent with the National Contingency Plan, 40 C.F.R. Part 300 and EPA's "Guidance on Conducting Non-Critical Removal Actions Under CERCLA" (Aug. 1993). Within 120 days of any direction by EPA to write an EE/CA, Respondent shall submit a work plan providing the general outline of the EE/CA including a list of proposed alternatives for analysis and proposed approach for conducting the risk assessment to determine removal action goals. Respondent shall submit a draft EE/CA for review to EPA within 90 days of EPA's approval of the work plan. Within 30 days of receiving EPA's comments, Respondent shall respond to comments and issue a new draft. This process will repeat until EPA approves a final EE/CA.

8.0 List of Attachments

Attachment 1 – Site Boundary Map of Black Jack No. 1 Mine

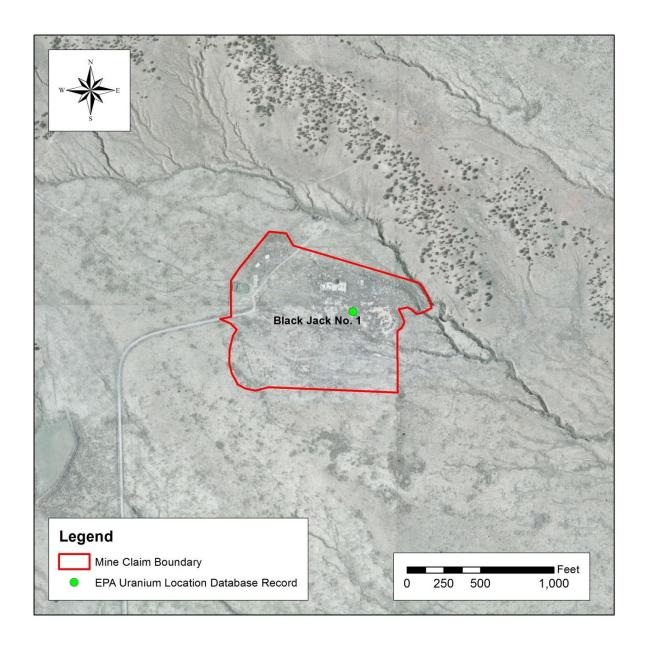
Attachment 2 – Site Boundary Map of Black Jack No. 2 Mine

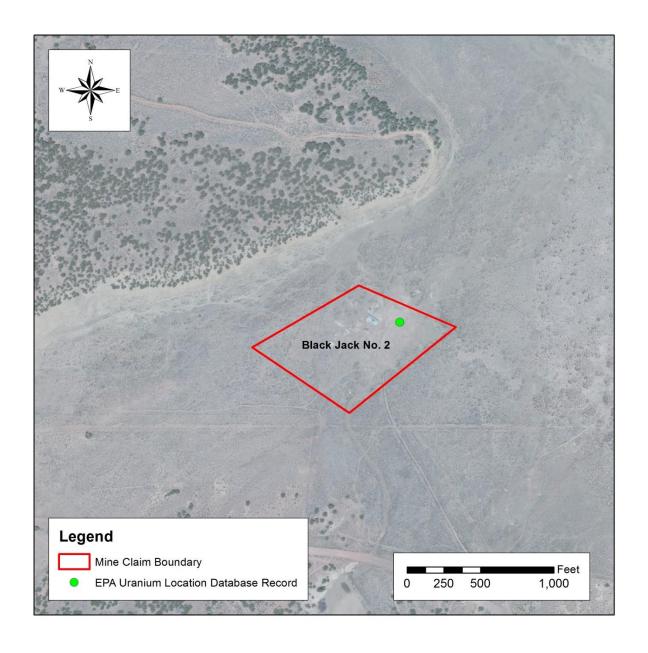
Attachment 3 – Site Boundary Map of Mac No. 1 Mine

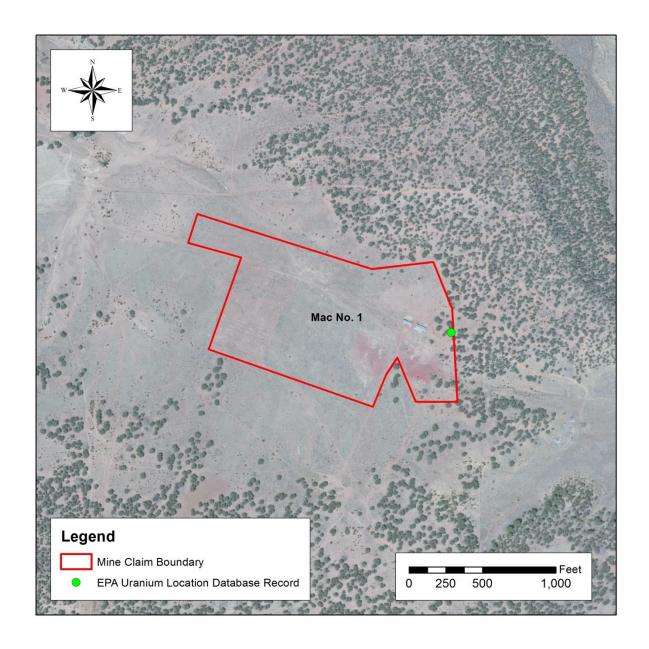
Attachment 4 – Site Boundary Map of Mac No. 2 Mine

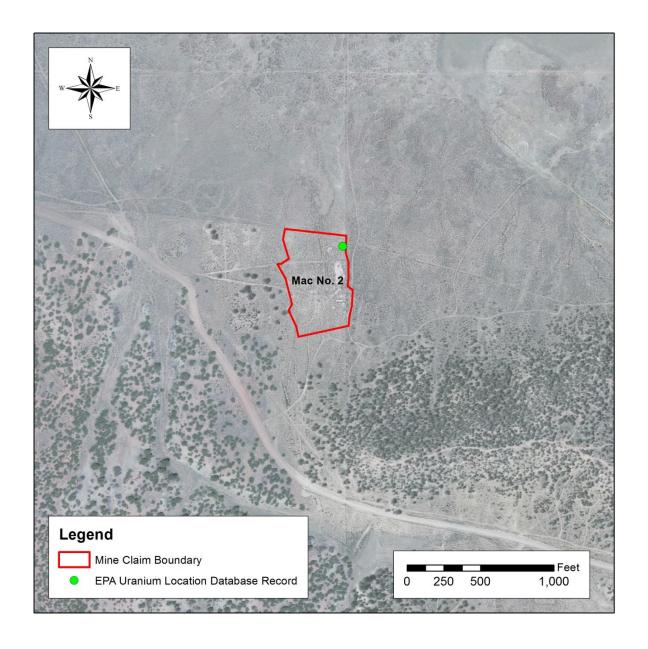
Attachment 5 – Map of Black Jack No.1 Mine and Associated Areas

Attachment 6 – Map of Black Jack No. 2 and Mac Nos. 1 and 2 Mines and Associated Areas

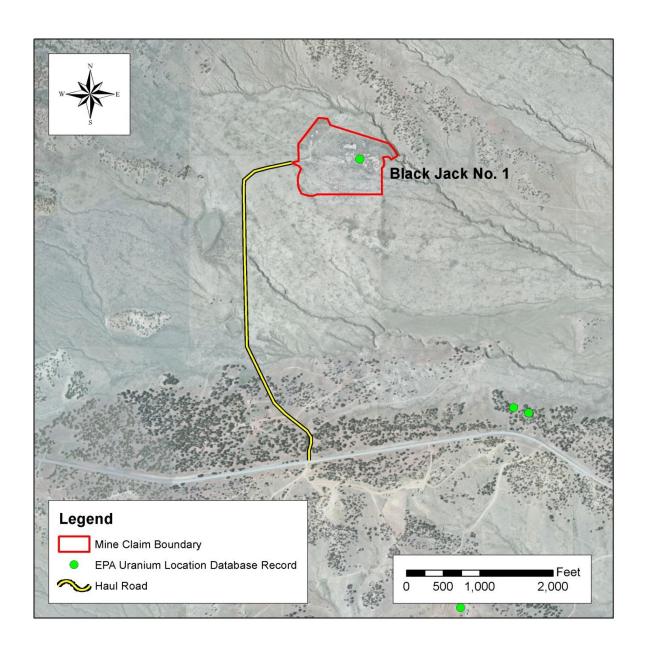








Attachment 5 – Map of Black Jack No.1 Mine and Associated Areas



Attachment 6 – Map of Black Jack No. 2 and Mac Nos. 1 and 2 Mines and Associated Areas

