

UNITED STATES DISTRICT COURT  
DISTRICT OF IDAHO

UNITED STATES OF AMERICA,  
STATE OF IDAHO,  
and SHOSHONE-BANNOCK TRIBES,

Plaintiffs,

Civil Action No. 4:25-cv-287

v.

NU-WEST MINING INC.  
and NU-WEST INDUSTRIES, INC.,

Defendants.

**EAST MILL DUMP SUB-OPERABLE UNIT REMEDIAL DESIGN/REMEDIAL  
ACTION**

**CONSENT DECREE**

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## I. BACKGROUND

1. The United States of America (“United States”), on behalf of the United States Department of Agriculture Forest Service (the “Forest Service”), and the State of Idaho (“State”) filed a complaint in this matter under sections 106 of the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”). The State also included claims under CERCLA 107, Idaho’s Environmental Protection & Health Act, Idaho Code §§ 39-101 to 39-130, the Hazardous Waste Management Act of 1983, Idaho Code §§ 39-4401 to 39-4432, Idaho’s Water Quality Act, Idaho Code §§ 39-3601, et seq., and the rules and standards promulgated pursuant thereto. The Shoshone-Bannock Tribes (the “Tribes”) have joined the complaint alleging that the defendants are liable to the Tribes under section 107 of CERCLA.

2. The United States and the State in their complaint seek, *inter alia*: performance by the defendants of a response action at the East Mill Operable Unit, East Mill Dump Sub-Operable Unit (“EMDSOU”) at the North Maybe Mine (“Site”) located in Caribou County, Idaho consistent with the National Contingency Plan, 40 C.F.R. part 300 (“NCP”). The Tribes and the State also seek reimbursement of costs incurred by the State and Tribes for their response actions at the EMDSOU.

3. In, accordance with the NCP and section 121(f)(1)(F) of CERCLA, the Forest Service notified the State and the Tribes on October 7, 2024, of negotiations with potentially responsible parties (“PRPs”) regarding the implementation of the remedial design and remedial action (“RD/RA”) for the EMDSOU, and the Forest Service has provided the State and the Tribes with an opportunity to participate in such negotiations and to be parties to this Consent Decree (“Decree”).

4. The defendants that have entered into this Decree (“Settling Defendants”) do not admit any liability to Plaintiffs arising out of the transactions or occurrences alleged in the complaint, nor do they acknowledge that the release or threatened release of hazardous substance(s) at or from the Site constitutes an imminent and substantial endangerment to the public health or welfare or the environment.

5. On March 6, 2013, the United States District Court for the District of Idaho entered a Consent Decree between the United States and Settling Defendants to resolve their claims and counter-claims against each other in *Nu-West Mining Inc. v. United States of America*, Case No. 09-431-E-BLW (“2013 Consent Decree”), which, *inter alia*, allocates responsibility between Settling Defendants and United States for future response costs associated with several Mine Sites, defined in the 2013 Consent Decree to include this Site. Attached as Appendix A. This Consent Decree did not address performance of the Work.

6. On March 14, 2013, the United States and the Settling Defendants entered into an Environmental Remediation Trust Agreement (“ERTA”), pursuant to which the United States and the Settling Defendants make annual contributions to a Mine Sites Trust (as defined in the ERTA) based on their allocated shares of projected response costs for the Site and the other sites covered by the 2013 Consent Decree.

7. The purpose of the Mine Sites Trust is to collect and disburse funds for the implementation of, and to serve as financial assurance for, response actions at the Site and the other sites covered by the 2013 Consent Decree.

8. On January 22, 2013, Nu-West Mining, Inc. and Nu-West Industries, Inc., the Forest Service, the Idaho Department of Environmental Quality (“IDEQ”), and the Tribes, entered into an Administrative Settlement Agreement and Order on Consent/Consent Order for Performance of Remedial Investigations and Focused Feasibility Studies for the EMDSOU (“ASAOC”). Attached as Appendix B.

9. Pursuant to the ASAOC and in accordance with 40 C.F.R. § 300.430, Settling Defendants completed a Remedial Investigation and Focused Feasibility Study for the EMDSOU on April 5, 2021.

10. Pursuant to the ASAOC and in accordance with section 117 of CERCLA and 40 C.F.R. § 300.430(f), the Forest Service published notice of the completion of the Focused Feasibility Study and of the proposed plan for remedial action on July 1, 2021, in a major local newspaper of general circulation. The Forest Service provided an opportunity for written and oral comments from the public on the proposed plan for remedial action. A copy of the transcript of the public meeting and comments received are available to the public as part of the administrative record upon which the Forest Service based the selection of the response action.

11. The Forest Service selected a remedial action to be implemented at the EMDSOU, which is embodied in an Interim Record of Decision (“Record of Decision”), executed on September 1, 2022, attached as Appendix C. The Record of Decision includes a summary of responses to the public comments. Notice of the final plan was published in accordance with section 117(b) of CERCLA.

12. Based on the information currently available, the Forest Service has determined that the Work will be properly and promptly conducted by Settling Defendants if conducted in accordance with this Decree.

13. The Parties recognize, and the Court by entering this Decree finds, that this Decree has been negotiated by the Parties in good faith, that implementation of this Decree will expedite the cleanup of the Site and will avoid prolonged and complicated litigation between the Parties, and that this Decree is fair, reasonable, in the public interest, and consistent with CERCLA.

NOW, THEREFORE, it is hereby **ORDERED** and **DECREED** as follows:

## **II. JURISDICTION AND VENUE**

14. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331, 1367 and 1345, and sections 106, 107 and 113(b) of CERCLA, and personal jurisdiction over the Parties. Venue lies in this District under section 113(b) of CERCLA and 28 U.S.C. §§ 1391(b), and 1395(a), because the Site is located in this judicial district. This Court retains jurisdiction over the subject matter of this action and over the Parties for the purpose of resolving disputes arising under this Decree, entering orders modifying this Decree, or



effectuating or enforcing compliance with this Decree. Settling Defendants may not challenge the terms of this Decree or this Court's jurisdiction to enter and enforce this Decree.

### III. PARTIES BOUND

15. This Decree is binding upon the United States, the State and the Tribes and upon Settling Defendants and their successors. Unless the United States otherwise consents, (a) any change in ownership or corporate or other legal status of any Settling Defendant, including any transfer of assets, or (b) any Transfer of the Site or any portion thereof, does not alter any of Settling Defendants' obligations under this Decree. Settling Defendants' responsibilities under this Decree cannot be assigned except under a modification executed in accordance with ¶ 81.

16. In any action to enforce this Decree, Settling Defendants may not raise as a defense the failure of any of their officers, directors, employees, agents, contractors, subcontractors, or any person representing Settling Defendants to take any action necessary to comply with this Decree. Settling Defendants shall provide notice of this Decree to each person representing Settling Defendants with respect to the EMDSOU or the Work. Settling Defendants shall provide notice of this Decree to each contractor performing any Work and shall ensure that notice of the Decree is provided to each subcontractor performing any Work.

### IV. DEFINITIONS

17. Subject to the next sentence, terms used in this Decree that are defined in CERCLA or the regulations promulgated under CERCLA have the meanings assigned to them in CERCLA and the regulations promulgated under CERCLA. Whenever the terms set forth below are used in this Decree, the following definitions apply:

"2013 Consent Decree" means the Consent Decree filed on March 6, 2013 in the United States District Court for the District of Idaho in *Nu-West Mining Inc. v. United States of America*, Case No. 09-431-E-BLW, attached as Appendix A.

"ASAOC" means the Administrative Settlement Agreement and Order on Consent/Consent Order for Performance of Remedial Investigations and Focused Feasibility Studies for the EMDSOU, dated January 22, 2013, attached as Appendix B.

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

"Consent Decree" or "Decree" means this consent decree, all appendixes attached hereto (listed in Section XX), and all deliverables incorporated into the Decree under ¶ 7.6(c) of the SOW. If there is a conflict between a provision in Sections I through XXV and a provision in any appendix or deliverable, the provision in Sections I through XXV controls.

"Day" or "day" means a calendar day. In computing any period under this Decree, the day of the event that triggers the period is not counted and, where the last day is not a working day, the period runs until the close of business of the next working day. "Working day" means any day other than a Saturday, Sunday, or federal or State holiday.

“DOJ” means the United States Department of Justice.

“Effective Date” means the date upon which the Court’s approval of this Decree is recorded on its docket.

“EMDSOU” means the East Mill Dump Sub-Operable Unit at the Site.

“EPA” means the United States Environmental Protection Agency.

“ERTA” means the Environmental Remediation Trust Agreement between the United States and the Settling Defendants, dated March 14, 2013.

“Forest Service” means the United States Department of Agriculture Forest Service and its successor departments, agencies or instrumentalities.

“Forest Service Response Costs” means all costs (including direct, indirect, payroll, contractor, travel, and laboratory costs) that the Forest Service pays after the Effective Date in implementing, overseeing, or enforcing this Decree, including: (i) in developing, reviewing and approving deliverables generated under this Decree; (ii) in overseeing Settling Defendants’ performance of the Work; (iii) in assisting or taking action to obtain access or use restrictions under ¶ 25; (iv) in securing, implementing, monitoring, maintaining, or enforcing Institutional Controls, including any compensation paid; (v) in taking action under ¶ 33 (Access to Financial Assurance); (vi) in taking response action described in ¶ 65 because of Settling Defendants’ failure to take emergency action under ¶ 5.5 of the SOW; (vii) in implementing a Work Takeover under ¶ 24; (viii) in implementing community involvement activities including the cost of any technical assistance grant provided under section 117(e) of CERCLA; (ix) in enforcing this Decree, including all costs paid under Section XIII and all litigation costs; and (x) in conducting periodic reviews in accordance with section 121(c) of CERCLA.

“Fund” means the Hazardous Substance Superfund established under section 9507 of the Internal Revenue Code, 26 I.R.C. § 9507.

“FWS” means the United States Fish and Wildlife Service and its successor departments, agencies or instrumentalities.

“FWS Response Costs” means all costs (including direct, indirect, payroll, contractor, travel, and laboratory costs) that FWS pays after the Effective Date in connection with the FWS’s role as a Support Agency for the Site.

“IDEQ” means the Idaho Department of Environmental Quality.

“Including” or “including” means “including but not limited to.”

“Institutional Controls” means proprietary controls (*i.e.*, easements or covenants running with the land that (i) limit land, water, or other resource use, provide access rights, or both and (ii) are created under common law or statutory law by an instrument that is recorded, or for which notice is recorded, in the appropriate land records office) and state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices that:

(a) limit land, water, or other resource use to minimize the potential for human exposure to Waste Material at or in connection with the EMDSOU; (b) limit land, water, or other resource use to implement, ensure noninterference with, or ensure the protectiveness of the Remedial Action; (c) provide information intended to modify or guide human behavior at or in connection with the EMDSOU; or (d) any combination thereof.

“Interest” means interest at the rate specified for interest on investments of the Fund, as provided under section 107(a) of CERCLA, compounded annually on October 1 of each year. The applicable rate of interest will 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. As of the date of lodging of this Decree, rates are available online at <https://www.epa.gov/superfund/superfund-interest-rates>.

“Lead Agency” means the Forest Service.

“Mine Sites Trust” shall have the meaning set forth in the ERTA.

“National Contingency Plan” or “NCP” means the National Oil and Hazardous Substances Pollution Contingency Plan promulgated under section 105 of CERCLA, codified at 40 C.F.R. part 300, and any amendments thereto.

“Paragraph” or “¶” means a portion of this Decree identified by an Arabic numeral or an upper- or lower-case letter.

“Parties” means the United States, the State, the Tribes, and Settling Defendants.

“Performance Standards” means the cleanup levels and other measures of achievement of the remedial action objectives, as set forth in the Record of Decision.

“Plaintiffs” means the United States, the State, and the Tribes.

“RCRA” means the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992k, (also known as the Resource Conservation and Recovery Act).

“Record of Decision” means the Forest Service decision document that memorializes the selection of the remedial action relating to the EMDSOU signed on September 1, 2022 by the Forest Service, and all attachments thereto. The Record of Decision is attached as Appendix C.

“Remedial Action” means the remedial action selected in the Record of Decision.

“Remedial Design” means those activities to be undertaken by Settling Defendants to develop plans and specifications for implementing the Remedial Action as set forth in the SOW.

“Scope of the Remedy” means the scope of the remedy set forth in the SOW.

“Section” means a portion of this Decree identified by a Roman numeral.

“Settling Defendants” means Nu-West Mining Inc. and Nu-West Industries, Inc. As used in this Decree, this definition means all settling defendants, collectively, and each settling

defendant, individually.

“Site” means the North Maybe Mine located on Dry Ridge in Caribou County, Idaho, approximately 26 road miles from Soda Springs, Idaho, and depicted generally on the map attached as Appendix D.

“State” means the State of Idaho, including IDEQ.

“State Response Costs” means all costs (including direct, indirect, payroll, contractor, travel, and laboratory costs) that the State pays after the Effective Date in connection with IDEQ’s role as a Support Agency for the Site.

“Statement of Work” or “SOW” means the document attached as Appendix E, which describes the activities Settling Defendants must perform to implement and maintain the effectiveness of the Remedial Action.

“Support Agency” means an agency that provides a support agency coordinator or project manager to furnish necessary data to the Lead Agency, and/or that reviews response data and documents, and/or provides other assistance requested by the Remedial Project Manager, as provided in the NCP. These include FWS, IDEQ and Tribes.

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

“Tribes” means the Shoshone-Bannock Tribes.

“Tribal Response Costs” means all costs (including direct, indirect, payroll, contractor, travel, and laboratory costs) consistent with the Tribes’ role as Support Agency that the Tribes pay after the Effective Date in connection with negotiating, implementing, and enforcing this Decree or at the Site, including but not limited to: reasonable time and travel costs associated with review of the Work performed under the SOW; meetings, conference calls, and community involvement; contractor costs; compliance monitoring; Site visits; review of deliverables; dispute resolution under this Decree; and attorney’s fees in connection with these activities.

“United States” means the United States of America and each department, agency, and instrumentality of the United States, including the Forest Service and FWS.

“Waste Material” means (a) any “hazardous substance” under Section 101(14) of CERCLA; (b) any pollutant or contaminant under section 101(33) of CERCLA; (c) any “solid waste” under section 1004(27) of RCRA; (d) any “hazardous waste” under Section 39-4403 of the Idaho Code; (e) any “pollutant” under Section 39-3602 of the Idaho Code (f) any substances defined under Idaho Code § 39-7203(3); (g) any “pollutants” as defined by Idaho Administrative Procedures Act (IDAPA) § 58.01.02.003.87; (h) any “deleterious materials” as defined by IDAPA §58.01.02.003.22; and (i) any “hazardous material” as defined by IDAPA § 58.01.02.003.48.

“Work” means all obligations of Settling Defendants under Sections VI (Performance of

the Work) through IX (Indemnification and Insurance).

“Work Takeover” means the Forest Service’s assumption of the performance of any of the Work in accordance with ¶ 24.

## **V. OBJECTIVES**

18. The objectives of the Parties in entering into this Decree are to protect public health, welfare, and the environment through the design, implementation, and maintenance of a response action at the EMDSOU by Settling Defendants, to pay, subject to the 2013 Consent Decree, response costs of FWS, the State and Tribes, and to resolve and settle the claims of Plaintiffs against Settling Defendants and the claims of the State and Settling Defendants that were or could have been asserted against the United States with regard to the performance of the Work as provided in this Decree.

## **VI. PERFORMANCE OF THE WORK**

19. Settling Defendants shall finance, develop, implement, operate, maintain, and monitor the effectiveness of the Remedial Action all in accordance with the SOW, any modified SOW and all Forest Service-approved, conditionally approved, or modified deliverables as required by the SOW or modified SOW.

20. Nothing in this Decree and no Forest Service approval of any deliverable required under this Decree constitutes a warranty or representation by the Forest Service, the State, or the Tribes that completion of the Work will achieve the Performance Standards.

21. Settling Defendants’ obligations to finance and perform the Work and to pay amounts due under this Decree are joint and several. In the event of the insolvency of any Settling Defendant or the failure by any Settling Defendant to participate in the implementation of the Decree, the remaining Settling Defendants shall complete the Work and make the payments.

### **22. Modifications to the Remedial Action and Further Response Actions**

a. Nothing in this Decree limits the Forest Service’s authority, after consultation with the State and the Tribes, to modify the Remedial Action or to select further response actions for the EMDSOU in accordance with the requirements of CERCLA and the NCP. Nothing in this Decree limits Settling Defendants’ rights, under sections 113(k)(2) or 117 of CERCLA, to comment on any modified or further response actions proposed by the Forest Service.

b. If the Forest Service modifies the Remedial Action in order to achieve or maintain the Performance Standards, or both, or to carry out and maintain the effectiveness of the Remedial Action, and such modification is consistent with the Scope of the Remedy, then Settling Defendants shall implement the modification as provided in ¶ 22.c.

c. Upon receipt of notice from the Forest Service that it has modified the Remedial Action as provided in ¶ 22.b and requesting that Settling Defendants implement the

modified Remedial Action, Settling Defendants shall implement the modification, subject to their right to initiate dispute resolution under Section XIII within 30 days after receipt of the Forest Service's notice. Settling Defendants shall modify the SOW, or related work plans, or both in accordance with the Remedial Action modification or, if Settling Defendants invoke dispute resolution, in accordance with the final resolution of the dispute. The Remedial Action modification, the approved modified SOW, and any related work plans will be deemed to be incorporated into and enforceable under this Decree.

23. Compliance with Applicable Law. Nothing in this Decree affects Settling Defendants' obligations to comply with all applicable federal and state laws and regulations. Settling Defendants must also comply with all applicable or relevant and appropriate requirements of all federal and state environmental laws as set forth in the Record of Decision and the SOW. The activities conducted in accordance with this Decree, if approved by the Forest Service, will be deemed to be consistent with the NCP as provided under section 300.700(c)(3)(ii).

#### 24. Work Takeover

a. If the Forest Service determines that Settling Defendants (i) have ceased to perform any of the Work required under this Section; (ii) are seriously or repeatedly deficient or late in performing the Work required under this Section; or (iii) are performing the Work required under this Section in a manner that may cause an endangerment to public health or welfare or the environment, the Forest Service may issue a notice of Work Takeover to Settling Defendants, including a description of the grounds for the notice and a period of time ("Remedy Period") within which Settling Defendants must remedy the circumstances giving rise to the notice. The Remedy Period will be 30 days, unless the Forest Service determines in its unreviewable discretion that there may be an endangerment to public health or welfare or the environment, in which case the Remedy Period will be 20 days.

b. If, by the end of the Remedy Period, Settling Defendants do not remedy to the Forest Service's satisfaction the circumstances giving rise to the notice of Work Takeover, the Forest Service may notify Settling Defendants and, as it deems necessary, commence a Work Takeover.

c. The Forest Service may conduct the Work Takeover during the pendency of any dispute under Section XIII but shall terminate the Work Takeover if and when: (i) Settling Defendants remedy, to the Forest Service's satisfaction, the circumstances giving rise to the notice of Work Takeover; or (ii) upon the issuance of a final determination under Section XIII that the Forest Service is required to terminate the Work Takeover.

### **VII. PROPERTY REQUIREMENTS**

#### 25. Agreements Regarding Access and Noninterference

a. As used in this Section, "Affected Property" means any real property, including the EMDSOU, where the Forest Service determines, at any time, that access; land, water, or other resource use restrictions; Institutional Controls; or any combination thereof, are needed to implement the Remedial Action.



b. The Forest Service shall provide FWS, State, Tribes, and Settling Defendants, and their respective representatives, contractors, and subcontractors, with access at all reasonable times to Forest Service-administered lands within and in close proximity to the EMDSOU to conduct activities included in the SOW. Provided, however, that Settling Defendants shall provide notice and reasonable opportunity to participate in a pre-meeting to Forest Service at least 14 days before any ground- or surface-disturbing activities are scheduled to take place on Forest Service-administered lands. This notice shall identify the location(s) of such activities, and if any such access is subject to any public closure or similar orders issued by the Forest Service.

c. Settling Defendants shall use best efforts to secure from the owner(s) of all Affected Property that is not owned by the United States, an agreement, enforceable by Settling Defendants and by Plaintiff, requiring such owner to provide Plaintiff and Settling Defendants, and their respective representatives, contractors, and subcontractors with access at all reasonable times to such owner's property to conduct any activity regarding the Decree, including the following:

- (1) implementing the Work and overseeing compliance with the Decree;
- (2) obtaining samples and conducting investigations of contamination at or near the EMDSOU;
- (3) verifying any data or information submitted to the Plaintiffs;
- (4) assessing the need for, planning, or implementing additional response actions at or near the EMDSOU;
- (5) determining whether the EMDSOU is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Decree; and
- (6) implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions and Institutional Controls.

d. Further, each agreement required under ¶ 25.c must commit the owner to refrain from using its property in any manner that the Forest Service determines will pose an unacceptable risk to public health or welfare or the environment as a result of exposure to Waste Material, or will interfere with or adversely affect the implementation, integrity, or protectiveness of the Remedial Action.

e. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Settling Defendants would use to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements.

f. Settling Defendants shall provide to the Forest Service a copy of each agreement required under ¶ 25.c. If Settling Defendants cannot accomplish what is required through best efforts in a timely manner, they shall notify the Forest Service, and include a

description of the steps taken to achieve the requirements. If the United States deems it appropriate, it may assist Settling Defendants, or take independent action, to obtain such access or use restrictions.

26. If the Forest Service determines in a decision document prepared in accordance with the NCP that Institutional Controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices are appropriate, Settling Defendants shall cooperate with the Forest Service's efforts to secure and ensure compliance with such Institutional Controls.

27. Notwithstanding any provision of the Decree, the Forest Service retains all of its access authorities and rights, as well as all of its rights to require land, water, or other resource use restrictions and Institutional Controls, including related enforcement authorities, under CERCLA, RCRA, and any other applicable statute or regulations.

### **VIII. FINANCIAL ASSURANCE**

28. To ensure completion of the Work required under Section VI, Settling Defendants shall secure financial assurance, initially in the amount of \$9,848,062 ("Settling Defendants' Share of the Estimated Cost of the Work"), for the benefit of the Forest Service. The financial assurance must be one or more of the mechanisms listed below in a form substantially identical to the relevant sample documents available from EPA, and satisfactory to the Forest Service available at (<https://cfpub.epa.gov/compliance/models/>):

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

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

c. a trust fund established for the benefit of the Forest Service that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency, including any funds in the Mines Sites Trust set aside for remediation at the EMDSOU; or

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

e. a guarantee to fund or perform the Work based on Settling Defendant's Share of the Estimated Cost of the Work executed in favor of Forest Service by a company: (1) that is a direct or indirect parent company of a Settling Defendant or has a "substantial business relationship" (as defined in 40 C.F.R. § 264.141(h)) and (2) demonstrates to Forest Service's satisfaction that it meets the financial test criteria of ¶ 29.



29. Settling Defendants seeking to provide the form of financial assurance by means of a guarantee under ¶ 28.e must, by March 31, 2025:

- a. demonstrate that:
  - (1) the affected guarantor has:
    - i. two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
    - ii. net working capital and tangible net worth each at least six times the sum of Settling Defendants' share of the Estimated Cost of the Work (*i.e.*, \$9,848,062) and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
    - iii. tangible net worth of at least \$10 million; and
    - iv. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of Settling Defendants' share of the Estimated Cost of the Work of (*i.e.*, \$9,848,062) and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; or
  - (2) the affected guarantor has:
    - i. a current rating for its senior unsecured debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and
    - ii. tangible net worth at least six times the sum of Settling Defendants' share of the Estimated Cost of the Work (*i.e.*, \$9,848,062) and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and
    - iii. tangible net worth of at least \$10 million; and
    - iv. assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of Settling Defendants' share of the Estimated Cost of the Work (*i.e.*, \$9,848,062) and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee; and

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

30. Settling Defendants providing financial assurance by means of a demonstration or guarantee under ¶28.e must also:

a. annually resubmit the documents described in ¶ 29.b within 90 days after the close of the affected Settling Defendant's or guarantor's fiscal year;

b. notify Forest Service within 30 days after the affected Settling Defendant or guarantor determines that it no longer satisfies the relevant financial test criteria and requirements set forth in this Section; and

c. provide to Forest Service, within 30 days of Forest Service's request, reports of the financial condition of the affected guarantor in addition to those specified in ¶ 29 b; Forest Service may make such a request at any time based on a belief that the affected guarantor may no longer meet the financial test requirements of this Section.

31. Settling Defendants have selected as the form of financial assurance, and the Forest Service has found satisfactory as an initial form of financial assurance, a combination of (i) the funds in the Mine Sites Trust set aside for remediation at the EMDSOU and (2) a parent guarantee and financial test (updated annually to reflect Settling Defendants' share of the remaining Estimated Cost of the Work) in substantially the same form as Appendix F. By March 31, 2025, Settling Defendants will submit the documentation required above and updated to include the amounts required under Paragraphs 28-29.

32. Settling Defendants shall diligently monitor the adequacy of the financial assurance. If any Settling Defendant becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, such Settling Defendant shall notify the Forest Service of such information within 15 days. If the Forest Service determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, the Forest Service will notify the affected Settling Defendant of such determination. Settling Defendants shall, within 45 days after notifying the Forest Service or receiving notice from the Forest Service under this Paragraph, secure and submit to the Forest Service for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. The Forest Service may extend this deadline for such time as is reasonably necessary for the affected Settling Defendant, in the exercise of due diligence, to secure and submit to the Forest Service a proposal for a revised or alternative financial assurance mechanism, not to exceed 90 days. Within 30 days after receipt of the Forest Service's approval of the revised or alternative financial assurance mechanism, Settling Defendants shall obtain all

executed or otherwise finalized documents and submit the same to the Forest Service. Settling Defendants' inability to secure financial assurance in accordance with this Section does not excuse performance of any other requirement of this Decree.

### 33. Access to Financial Assurance

a. If the Forest Service issues a notice of a Work Takeover under ¶ 24.b, then, in accordance with any applicable financial assurance mechanism, the Forest Service may require that any funds guaranteed be paid in accordance with ¶ 33.d.

b. If the Forest Service is notified that the issuer of a financial assurance mechanism intends to cancel the mechanism, and the affected Settling Defendant fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with ¶ 33.d.

c. If, upon issuance of a notice of a Work Takeover under ¶ 24.b, the Forest Service is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism, whether in cash or in kind, to continue and complete the Work, then the Forest Service is entitled to demand an amount, as determined by the Forest Service, sufficient to cover the cost of the remaining Work to be performed. Settling Defendants shall, within days after such demand, pay the amount demanded as directed by the Forest Service.

d. Any amounts required to be paid under this ¶ 33 must be, as directed by the Forest Service: (i) paid to the Forest Service in order to facilitate the completion of the Work by the Forest Service or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. Any amounts retained by the Forest Service shall be deposited by Forest Service in each site-specific special account to be retained and used to conduct or finance response actions at or in connection with each Site.

34. Modification of Amount, Form, or Terms of Financial Assurance. If, after the Effective Date, Settling Defendants can show that the estimated cost remaining to complete the Work has diminished below the initial Settling Defendants' Share of the Estimated Cost of the Work, Settling Defendants 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 assurance to the estimated cost of the remaining Work to be performed. Beginning after the first anniversary of the Effective Date, and no more than once per calendar year, Settling Defendants may also submit a request to change the form or terms of the financial assurance mechanism. Any such request to reduce the amount or modify the form or terms of the financial assurance must be submitted to the Forest Service and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. The Forest Service will notify Settling Defendants of its decision regarding the request. Settling Defendants may initiate dispute resolution under Section XIII regarding the Forest Service's decision by the earlier of 30 days after receipt of the Forest Service's decision or 180 days after the Forest Service's receipt of the request. Settling

Defendants may modify the form, terms, or amount of the financial assurance mechanism only: (a) in accordance with the Forest Service's approval; or (b) in accordance with any resolution of a dispute under Section XIII. Settling Defendants shall submit to the Forest Service, within 30 days after receipt of the Forest Service's approval or consistent with the terms of the resolution of the dispute, documentation of the change to the form, terms, or amount of the financial assurance instrument.

35. Release, Cancellation, or Discontinuation of Financial Assurance. Settling Defendants may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if the Forest Service issues a Certification of Work Completion under ¶ 5.9 of the SOW; (b) in accordance with the Forest Service's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation or discontinuance of any financial assurance, in accordance with the agreement, final administrative decision, or final judicial decision resolving such dispute under Section XIII.

## **IX. INDEMNIFICATION AND INSURANCE**

### 36. Indemnification

a. Plaintiffs do not assume any liability by entering into this Decree or by virtue of any designation of Settling Defendants as the Plaintiffs' authorized representative under section 104(e)(1) of CERCLA. Settling Defendants shall indemnify and save and hold harmless Plaintiffs and their officials, agents, employees, contractors, subcontractors, and representatives for or from any claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Settling Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on Settling Defendants' behalf or under their control, in carrying out activities under this Decree, including any claims arising from any designation of Settling Defendants as the Plaintiffs' authorized representatives under section 104(e)(1) of CERCLA. Further, Settling Defendants agree to pay Plaintiffs all costs they incur including attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against Plaintiffs based on negligent or other wrongful acts or omissions of Settling Defendants, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control in carrying out activities under with this Decree. Plaintiffs may not be held out as parties to any contract entered into by or on behalf of Settling Defendants in carrying out activities under this Decree. The Settling Defendants and any such contractor may not be considered an agent of Plaintiffs.

b. Plaintiffs shall give Settling Defendants notice of any claim for which Plaintiffs plan to seek indemnification in accordance with this ¶ 36, and shall consult with Settling Defendants prior to settling such claim.

37. Settling Defendants covenant not to sue and shall not assert any claim or cause of action against Plaintiffs for damages or reimbursement or for set-off of any payments made or to be made to Plaintiff, arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Defendants and any person for performance of Work or other activities on or relating to the EMDSOU, including claims on account of construction delays. In addition, Settling Defendants shall indemnify and save and hold Plaintiffs harmless

with respect to any claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Settling Defendants and any person for performance of work at or relating to the EMDSOU, including claims on account of construction delays.

38. Insurance. Settling Defendants shall secure, by no later than 15 days before commencing any on-site Work, the following insurance: (a) commercial general liability insurance with limits of liability of \$1 million per occurrence; (b) automobile liability insurance with limits of liability of \$1 million per accident; and (c) umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits. The insurance policy must name Plaintiffs as additional insureds with respect to all liability arising out of the activities performed by or on behalf of Settling Defendants under this Decree. Settling Defendants shall maintain this insurance until the first anniversary after issuance of the Forest Service's Certification of Remedial Action Completion under ¶ 5.7 of the SOW. In addition, for the duration of this Decree, Settling Defendants shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Settling Defendants in furtherance of this Decree. Prior to commencement of the Work, Settling Defendants shall provide to the Forest Service certificates of such insurance and a copy of each insurance policy. Settling Defendants shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. If Settling Defendants demonstrate by evidence satisfactory to the Forest Service that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Settling Defendants need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Settling Defendants shall ensure that all submittals to the Forest Service under this Paragraph identify the EMDSOU of the North Maybe Mine, Caribou County, Idaho, and the civil action number of this case.

## **X. PRIOR CONSENT DECREE**

39. The 2013 Consent Decree governs how Settling Defendants and the United States will allocate response costs associated with the Site, and all the provisions of the 2013 Consent Decree will continue to apply. The provisions in this Consent Decree address the performance of response actions in connection with the EMDSOU and payment of response costs for the Site for FWS, the State and the Tribes.

## **XI. PAYMENTS FOR RESPONSE COSTS**

40. The payment provisions in Paragraphs 42-44 are intended to replace and supplant all payments under the ASAOC.

### **41. Payment For Forest Service Response Costs**

a. Forest Service Response Costs shall be considered "Response Costs" within the meaning of the 2013 Consent Decree and shall be reimbursed pursuant thereto, and subject to the terms and conditions set forth therein.

42. **Payment For FWS Response Costs.** Settling Defendants shall pay up to \$20,000 per year to pay FWS Response Costs. FWS shall use such monies solely for its activities as a Support Agency associated with the Work or the Site. Within 30 days of the Effective Date of this Consent Decree, Settling Defendants shall pay to FWS \$20,000 in prepayment of FWS Response Costs to be deposited in an account established for this Site (“FWS Account Fund”). Within 365 days after the Effective Date and annually thereafter, FWS shall submit to Settling Defendants an estimated annual cost budget. Within thirty (30) days of receipt of this estimated annual cost budget, Settling Defendants shall deposit with FWS an amount equal to its estimated annual cost budget or \$20,000, whichever is less. Within 180 days of the Effective Date and on a periodic basis thereafter, but no less than annually, FWS shall provide Settling Defendants an accounting of its costs, including supporting cost summaries. Monies present in the FWS Account Fund at the time of submission of the FWS’s estimated annual cost budget (including, for purposes of the first annual accounting, any unexpended funds paid to FWS by Settling Defendants under the ASAOC) will be credited in the estimated annual budget under this Paragraph for the upcoming year, and the existence of unexpended funds paid pursuant to this Paragraph shall not affect the ability of FWS to request up to \$20,000 in any particular year.

a. Payments to FWS shall be made by electronic funds transfer through the Department of Treasury’s Automated Clearing House/Remittance Express Program. Payments should include the following information:

Receiver Name: DOI Central Hazardous Materials Fund  
ALC 1401001

Receiver Tax ID Number: 53-0196949

Receiver Address: Department of the Interior  
Interior Business Center  
Branch of Accounting Operations  
7401 West Mansfield Avenue  
Mailstop D-2777  
Lakewood, CO 80235  
ATTN: Collections Officer – Central  
Hazardous Materials Fund Payment

Receiver Bank: Federal Reserve Bank  
New York, NY  
ABA #051036706

Receiver ACH Account No.: 312024

Each payment shall reference: CHF Site Number 4IDPNMME73, ID Phosphates - North Maybe Mine Site-East Mill Consent Decree.

b. In addition, at the time of payment, Settling Defendants shall send notification of payment referencing the amount of payment, CHF Site Number 4IDPNMME73,



and the Site name (ID Phosphates North Maybe Mine-East Mill) to the FWS contact identified in Section XIX and to the following individual:

United States Department of the Interior  
Central Hazardous Materials Fund  
Fund Manager, Cindy Ries  
[cynthia\\_ries@ios.doi.gov](mailto:cynthia_ries@ios.doi.gov)

United States Department of the Interior  
Office of the Solicitor  
Nathalie Doherty  
[nathalie.doherty@sol.doi.gov](mailto:nathalie.doherty@sol.doi.gov)

United States Department of the Interior  
U.S. Fish and Wildlife Service  
Matthew Schenk  
[matthew\\_schenk@fws.gov](mailto:matthew_schenk@fws.gov)

e. Within 120 days after completion of FWS support activities under this Consent Decree, FWS shall provide Settling Defendants and the Forest Service with a final cost accounting. In the event that monies remain in the FWS Account Fund, FWS shall reimburse Settling Defendants within thirty (30) days of submission of the final cost accounting.

f. Settling Defendants may dispute payment of any portion of FWS Response Costs, but only on the basis of accounting errors, the sufficiency of supporting documentation, or the inclusion of costs inconsistent with FWS role as a Support Agency under the NCP for the Site. Disputes regarding FWS Response Costs will be resolved using the dispute resolution procedures described in Section XIII of this Consent Decree. Any objection by Settling Defendants shall be made in writing to FWS within thirty (30) days of receipt of the billing statement and shall specifically identify the disputed FWS costs and the basis of the dispute. In any dispute resolution proceeding, Settling Defendants shall bear the burden of establishing an accounting error, the insufficiency of supporting documentation, or the inclusion of costs inconsistent with FWS's role as a Support Agency under the NCP for the Site. If FWS prevails in the dispute resolution proceeding, the disputed expenditures by the FWS shall be deemed FWS Response Costs and no adjustment to the balance of the FWS Account Fund shall be required. If Settling Defendants prevail in the dispute resolution proceeding, the disputed amount shall be credited to the balance of the FWS Account Fund by FWS and shall be available for subsequent use by FWS subject to the terms and conditions of this Section.

g. For purposes of this Section, Interest shall accrue at the rate established under Section 107(a) of CERCLA, 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 and is compounded. In the event that prepayment for FWS Response Costs is not made by the due dates specified in this Consent Decree, Settling Defendants shall pay Interest on the unpaid balance. Interest on FWS Response Costs paid in accordance with this Section shall begin to accrue on the prepayment due date 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 under this Settlement Agreement by virtue of Settling Defendants' failure to make timely payments under this Section.

**43. Payment For State Response Costs.** State Response Costs incurred by IDEQ shall be paid in the following manner:

a. IDEQ shall provide a quarterly accounting and invoice to Settling Defendants, with a copy to the Forest Service, of State Response Costs incurred by IDEQ in relation to this Settlement Agreement.

b. Within thirty (30) days of Settling Defendants' receipt of IDEQ's quarterly accounting invoice, Settling Defendants shall pay the State for all costs reflected in the accounting invoice.

c. The initial deposit will be returned to Settling Defendants within sixty (60) days of the date IDEQ incurs final State Response Costs.

d. All payments to IDEQ shall be made to:

Administrative Services-Accounts Receivable  
Idaho Department of Environmental Quality  
1410 N. Hilton  
Boise, ID 83706-1255

e. Settling Defendants or the Forest Service may dispute payment of any portion of IDEQ's submitted costs, but only on the basis of accounting errors or the sufficiency of supporting documentation, the inclusion of costs inconsistent with State regulations, the inclusion of costs inconsistent with IDEQ's role as a Support Agency under the NCP for the Site, or the inclusion of costs that have not been paid or approved for payment by IDEQ. Disputes regarding the State's Response Costs will be resolved using the dispute resolution procedures described in Section XIII. Any objection by Settling Defendants or the Forest Service shall be made in writing within thirty (30) days of receipt of the quarterly accounting invoice and shall specifically identify the disputed costs and the basis of the dispute. All undisputed costs shall be remitted by Settling Defendants in accordance with the provisions in the preceding Paragraphs of this Section. In any dispute resolution proceeding, Settling Defendants or the Forest Service shall bear the burden of establishing their contentions as to inappropriate costs. If IDEQ prevails in the dispute resolution proceeding, Settling Defendants shall remit the amount(s) in question, including Interest, within thirty (30) days after receipt of the final determination.

**44. Payment For Tribal Response Costs**

a. Settling Defendants hereby agree to pay the sum of up to \$20,000 per year for Tribal Response Costs incurred beginning on January 1, 2024. By November 1, 2024, and annually thereafter, the Tribes shall submit to Settling Defendants and the Forest Service an estimated annual cost budget for the following calendar year (January 1 through December 31) ("Annual Tribal Cost Budget"). Within thirty (30) days of receipt of the Annual Tribal Cost Budget, Settling Defendants shall deposit with the Tribes an amount equal to the estimated Annual Tribal Cost Budget or \$20,000, whichever is less.



b. The Tribes shall use such monies to establish, and shall deposit any monies received from Settling Defendants hereunder in, an interest bearing account (“Tribal Account Fund”) dedicated solely to the Tribes’ activities as a Support Agency at the Site. The Tribes shall provide Settling Defendants and the Forest Service with an annual accounting and invoice (“Tribal Cost Accounting”) of all costs incurred by the Tribes that the Tribes assert are the Tribal Response Costs. The Tribal Cost Accounting shall include detailed supporting summaries of such costs and shall be submitted no later than 30 days following December 31 of each year. Monies present in the Tribal Account Fund at the time of submission of the Annual Tribal Cost Budget (including, for purposes of the first annual accounting, any unexpended funds paid to the Tribes by Settling Defendants under the ASAOC) will be credited against Settling Defendants’ prepayment obligation under Paragraph 44a for the upcoming year.

c. Payments made by Settling Defendants to the Tribes for deposit into the Tribal Account Fund shall be made by certified or cashier's check made payable to the Shoshone-Bannock Tribes and mailed to:

Environmental Waste Management Program  
Shoshone-Bannock Tribes  
PO Box 306

Fort Hall, Idaho 83203

Each check shall reference: Site Name: Southeast Idaho Phosphate Mining –  
North Maybe Consent Decree 2024

d. Settling Defendants or the Forest Service may dispute payment of any portion of Tribal Response Costs, but only on the basis of accounting errors, the sufficiency of supporting documentation, or the inclusion of costs inconsistent with the Tribes’ role as a Support Agency under the NCP for the Site. Disputes regarding Tribal Response Costs will be resolved using the dispute resolution procedures described in Section XIII of this Decree. Any objection by Settling Defendants or the Forest Service shall be made in writing to the Tribes within thirty (30) days of receipt of the billing statement and shall specifically identify the disputed costs and the basis of the dispute. In any dispute resolution proceeding, Settling Defendants or the Forest Service shall bear the burden of establishing an accounting error, the insufficiency of supporting documentation, or the inclusion of costs inconsistent with the Tribes’ role as a Support Agency under the NCP for the Site. If Settling Defendants or the Forest Service submit a Notice of Dispute, Settling Defendants shall, within the 30-day period, pay all uncontested Tribal Response Costs to the Tribes. If the Tribes prevail in the dispute resolution proceeding, the disputed expenditures shall be deemed Tribal Response Costs and no adjustment to the balance of the Tribal Account Fund by the Tribes shall be required. If Settling Defendants or the Forest Service prevail in the dispute resolution proceeding, the disputed amount shall be credited to the balance of the Tribal Account Fund and shall be available for subsequent use by the Tribes subject to the terms and conditions of this Section.

e. Payment of Interest to the Tribes. For purposes of this Section, Interest shall accrue at the rate established under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). The applicable rate of Interest shall be the rate in effect at the time the Interest begins to accrue. The rate of Interest is subject to change on October 1 of each year and is compounded. If prepayment

for Tribal Response Costs is not made to the Tribes by the due dates specified in this Decree, Settling Defendants shall pay Interest on the unpaid balance. Interest on Tribal Response Costs required to be paid in accordance with this Section shall begin to accrue on the prepayment due date 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 Tribes under this Settlement Agreement by virtue of Settling Defendants' failure to make timely payments under this Section.

## **XII. FORCE MAJEURE**

45. “Force majeure,” for purposes of this Decree, means any event arising from causes beyond the control of Settling Defendants, of any entity controlled by Settling Defendants, or of Settling Defendants’ contractors that delays or prevents the performance of any obligation under this Decree despite Settling Defendants’ best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Settling Defendants exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. “Force majeure” does not include financial inability to complete the Work or a failure to achieve the Performance Standards.

46. If any event occurs for which Settling Defendants will or may claim a force majeure, Settling Defendants shall notify the Forest Service’s Project Coordinator by email. The deadline for the initial notice is 10 days after the date Settling Defendants first knew or should have known that the event would likely delay performance. Settling Defendants shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Settling Defendants knew or should have known. Within 15 days thereafter, Settling Defendants shall send a further notice to the Forest Service, State, and Tribes that includes: (i) a description of the event and its effect on Settling Defendants’ completion of the requirements of the Decree; (ii) a description of all actions taken or to be taken to prevent or minimize the adverse effects or delay; (iii) the proposed extension of time for Settling Defendants to complete the requirements of the Decree; (iv) a statement as to whether, in the opinion of Settling Defendants, such event may cause or contribute to an endangerment to public health or welfare, or the environment; and (v) all available proof supporting their claim of force majeure. Failure to comply with the notice requirements herein regarding an event precludes Settling Defendants from asserting any claim of force majeure regarding that event, provided, however, that if the Forest Service, despite late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under ¶ 45 and whether Settling Defendants have exercised their best efforts under ¶ 45, the Forest Service may, in its unreviewable discretion, excuse in writing Settling Defendants’ failure to submit timely or complete notices under this Paragraph.

47. The Forest Service, after a reasonable opportunity for review and comment by the State and Tribes, will notify Settling Defendants of its determination whether Settling Defendants are entitled to relief under ¶ 46, and, if so, the duration of the extension of time for performance of the obligations affected by the force majeure. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time

for performance of any other obligation. Settling Defendants may initiate dispute resolution under Section XIII regarding the Forest Service's determination within 15 days after receipt of the determination. In any such proceeding, Settling Defendants have the burden of proving that they are entitled to relief under ¶ 46 and that their proposed extension was or will be warranted under the circumstances.

48. The failure by the Forest Service to timely complete any activity under the Decree or the SOW is not a violation of the Decree, provided, however, that if such failure prevents Settling Defendants from timely completing a requirement of the Decree, Settling Defendants may seek relief under this Section.

### **XIII. DISPUTE RESOLUTION**

49. Unless otherwise provided in this Decree, Settling Defendants must use the dispute resolution procedures of this Section to resolve any dispute arising under this Decree. Settling Defendants shall not initiate a dispute challenging the Record of Decision. The United States may enforce any requirement of the Decree that is not the subject of a pending dispute under this Section.

50. A dispute will be considered to have arisen when one or more parties sends a notice of dispute ("Notice of Dispute") in accordance with ¶ 79. Disputes arising under this Decree must in the first instance be the subject of informal negotiations between the parties to the dispute. The period for informal negotiations may not exceed 20 days after the dispute arises, unless the parties to the dispute otherwise agree. If the parties cannot resolve the dispute by informal negotiations, the position advanced by the Forest Service, or the State or Tribes if the dispute arises under either ¶ 43, or ¶ 44, is binding unless Settling Defendants and/or the Forest Service for disputes under ¶ 43, or ¶ 44 initiate formal dispute resolution under ¶ 51. By agreement of the parties, mediation may be used during this informal negotiation period to assist the parties in reaching a voluntary resolution or narrowing of the matters in dispute.

#### **51. Formal Dispute Resolution**

a. **Statements of Position.** Settling Defendants may initiate formal dispute resolution by serving on the Forest Service, within 30 days after the conclusion of informal dispute resolution under ¶ 50, an initial Statement of Position regarding the matter in dispute. In the event there is a dispute with the State under ¶ 43, or the Tribes under ¶ 44, the Settling Defendant and/or Forest Service must serve an initial Statement of Position regarding the matter in dispute on the State or Tribes within 30 days after the conclusion of informal dispute resolution. Responsive Statements of Position are due within 30 days after receipt of the initial Statement of Position. All Statements of Position must include supporting factual data, analysis, opinion, and other documentation. A reply, if any, is due within 20 days after receipt of the response. If appropriate, the Forest Service may extend the deadlines for filing statements of position for up to 60 days and may allow the submission of supplemental statements of position.

b. **Formal Decision.** The Regional Forester, U.S. Forest Service Region 4 will issue a formal decision resolving the dispute ("Formal Decision") based on the statements of

position and any replies and supplemental statements of position. The Formal Decision is binding unless the objecting Party timely seeks judicial review under ¶ 52.

c. **Compilation of Administrative Record.** The Forest Service shall compile an administrative record regarding the dispute, which must include all statements of position, replies, supplemental statements of position, and the Formal Decision.

## 52. **Judicial Review**

a. Settling Defendants may obtain judicial review of the Formal Decision by filing, within 30 days after receiving it, a motion with the Court and serving the motion on all Parties. The motion must describe the matter in dispute and the relief requested. The parties to the dispute shall brief the matter in accordance with local court rules.

b. **Review on the Administrative Record.** Judicial review of disputes regarding the following issues must be on the administrative record: (i) the adequacy or appropriateness of deliverables required under the Decree; (ii) the adequacy of the performance of the Remedial Action; (iii) whether a Work Takeover is warranted under ¶ 24; (iv) determinations about financial assurance under Section VIII; (v) the Forest Service's selection of modified or further response actions; (vi) any other items requiring the Forest Service's approval under the Decree; and (vii) any other disputes that the Court determines should be reviewed on the administrative record. For all of these disputes, Settling Defendants bear the burden of demonstrating that the Formal Decision was arbitrary and capricious or otherwise not in accordance with law.

53. Judicial review of any dispute not governed by ¶ 52.b shall be governed by applicable principles of law.

54. The initiation of dispute resolution procedures under this Section does not extend, postpone, or affect in any way any requirement of this Decree, except as the Forest Service agrees, or as determined by the Court. Stipulated penalties with respect to the disputed matter will continue to accrue, but payment is stayed pending resolution of the dispute, as provided in ¶ 57.

## **XIV. STIPULATED PENALTIES**

55. Unless the noncompliance is excused under Section XII, Settling Defendants are liable for the following stipulated penalties:

a. to the United States for any failure: (i) to timely pay any amount due under this Decree, except ¶¶ 43 and 44 (ii) to establish and maintain financial assurance in accordance with Section VIII, or (iii) to submit adequate deliverables required by this Decree or the SOW;

b. to the State for the following stipulated penalties for any failure to timely pay State Response Costs under ¶ 43; and

c. to the Tribes for the following stipulated penalties for any failure to timely pay Tribal Response Costs for ¶ 44.

Period of Noncompliance	Penalty Per Noncompliance Per Day
1st through 14th day	\$1,000
15th through 30th day	\$3,000
31st day and beyond	\$7,500

56. **Work Takeover Penalty.** If the Forest Service commences a Work Takeover, Settling Defendants are liable for a stipulated penalty in the amount of (i) if the Work Takeover occurs prior to the Forest Service's issuance of the Certification of Remedial Action Completion under ¶ 5.7 of the SOW, \$5 million, or (ii) if the Work Takeover occurs after the Forest Service's issuance of the Certification of Remedial Action Completion under ¶ 5.7 of the SOW, \$1 million. This stipulated penalty is in addition to the remedy available to the Forest Service under ¶ 33 (Access to Financial Assurance) to fund the performance of the Work by the Forest Service.

57. **Accrual of Penalties.** Stipulated penalties accrue from the date performance is due, or the day a noncompliance occurs, whichever is applicable, until the date the requirement is completed or the final day of the correction of the noncompliance. Nothing in this Decree prevents the simultaneous accrual of separate penalties for separate noncompliances with this Decree. Stipulated penalties accrue regardless of whether Settling Defendants have been notified of their noncompliance, and regardless of whether Settling Defendants have initiated dispute resolution under Section XIII, provided, however, that no penalties will accrue as follows:

a. with respect to a submission that the Forest Service subsequently determines is deficient under ¶ 7.6 of the SOW, during the period, if any, beginning on the 31st day after the Forest Service's receipt of such submission until the date that the Forest Service notifies Settling Defendants of any deficiency;

b. with respect to a matter that is the subject of dispute resolution under Section XIII, during the period, if any, beginning on the 21st day after the later of the date that the Plaintiffs' Statement of Position is received or the date that Settling Defendants' reply thereto (if any) is received until the date of the Formal Decision under ¶ 51.b; or

c. with respect to a matter that is the subject of judicial review by the Court under ¶ 52, during the period, if any, beginning on the 31st day after the Court's receipt of the final submission regarding the dispute until the date that the Court issues a final decision regarding such dispute.

58. **Demand and Payment of Stipulated Penalties.** The Forest Service, State or Tribes may send Settling Defendants a demand for stipulated penalties consistent with ¶ 55. The demand will include a description of the noncompliance and will specify the amount of the stipulated penalties owed. Settling Defendants may initiate dispute resolution under Section XIII within 30 days after receipt of the demand. Settling Defendants shall pay the amount demanded or, if they initiate dispute resolution, the uncontested portion of the amount demanded, within 30 days after receipt of the demand. Settling Defendants shall pay the contested portion of the penalties determined to be owed, if any, within 30 days after the resolution of the dispute. Each payment for: (a) the uncontested penalty demand or uncontested portion, if late, and; (b) the contested portion of the penalty demand determined to be owed, if any, must include an additional amount for Interest accrued from the date of receipt of the demand through the date of

payment. Settling Defendants shall make payment as directed by the Forest Service, State or Tribes in any such demand. Settling Defendants shall send a notice of this payment to DOJ and the Forest Service. or if the demand came from them the State or Tribes, in accordance with ¶ 79. The payment of stipulated penalties and Interest, if any, does not alter any obligation by Settling Defendants under the Decree.

59. Nothing in this Decree limits the authority of the United States, State, or Tribes: (a) to seek any remedy otherwise provided by law for Settling Defendants' failure to pay stipulated penalties or interest; or (b) to seek any other remedies or sanctions available by virtue of Settling Defendants' noncompliances with this Decree or of the statutes and regulations upon which it is based, including penalties under section 122(l) of CERCLA, provided, however, that the United States may not seek civil penalties under section 122(l) of CERCLA for any noncompliance for which a stipulated penalty is provided for in this Decree, except in the case of a willful noncompliance with this Decree.

60. Notwithstanding any other provision of this Section, the United States, or the State and Tribes for penalties under Paragraph 55 b or c, may, in their unreviewable discretion, waive any portion of stipulated penalties that have accrued under this Decree.

## XV. COVENANTS BY PLAINTIFFS

61. **Covenants for Settling Defendants.** Subject to ¶¶ 63 and 64, the United States covenants not to sue or to take administrative action against Settling Defendants under sections 106 and 107(a) of CERCLA regarding the Work. The State and the Tribes covenant not to sue or take administrative action against Settling Defendants regarding the Work, State Response Costs and Tribal Response Costs under any of sections 106 and 107(a) of CERCLA, the Idaho Environmental Protection & Health Act, Idaho Code §§ 39-101 to 39-130, the Hazardous Waste Management Act of 1983, Idaho Code §§ 39-4401 to 39-4432, and the Idaho Water Quality Act, Idaho Code §§ 39-3601, et seq.

62. Covenants for United States. Subject to ¶ 64, the State and the Tribes covenant not to sue and shall not assert any claim against the United States under sections 106 and 107(a) of CERCLA regarding the Work, State Response Costs and Tribal Response Costs.

63. The covenants under ¶ 61: (a) take effect upon the Effective Date; (b) are conditioned on the satisfactory performance by Settling Defendants of the requirements of this Decree; (c) extend to the successors of each Settling Defendant but only to the extent that the alleged liability of the successor of the Settling Defendant is based solely on its status as a successor of the Settling Defendant; and (d) do not extend to any other person.

64. **General Reservations** Notwithstanding any other provision of this Decree, the United States, State, and Tribes reserve, and this Decree is without prejudice to, all rights against Settling Defendants regarding the following:

a. liability for failure by Settling Defendants to meet a requirement of this Decree;



- b. liability arising from the past, present, or future disposal, release, or threat of release of Waste Material outside of the Site;
- c. liability based on Settling Defendants' ownership of the Site when such ownership commences after the last of Settling Defendants' signatures of this Decree;
- d. liability based on Settling Defendants' operation of the Site when such operation commences after the last of Settling Defendants' signatures of this Decree and does not arise solely from Settling Defendants' performance of the Work;
- e. liability based on Settling Defendants' transportation, treatment, storage, or disposal, or arrangement for transportation, treatment, storage, or disposal of Waste Material at or in connection with the Site, after the last signature of this Decree by Settling Defendants, other than as provided in the Record of Decision, under this Decree, or ordered by the Forest Service;
- f. liability for additional operable units at the Site or the final response action at the Site;
- g. liability, prior to achievement of Performance Standards, for additional response actions that the Forest Service determines are necessary to achieve and maintain Performance Standards or to carry out and maintain the effectiveness of the Remedial Action, but that are not covered by ¶ 22.b;
- h. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; and
- i. criminal liability;

65. Subject to ¶ 61, nothing in this Decree limits any authority of Plaintiffs to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, respond to, or minimize an actual or threatened release of Waste Material on, at, or from the Site, or to request a Court to order such action.

## **XVI. COVENANTS BY SETTLING DEFENDANTS**

### **66. Covenants by Settling Defendants.**

- a. Subject to ¶ 67 Settling Defendants covenant not to sue and shall not assert any claim or cause of action against the United States under CERCLA, section 7002(a) of RCRA, the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, the Idaho State Constitution, Idaho state law, or at common law regarding the Work.
- b. Subject to ¶ 67 Settling Defendants covenant not to seek reimbursement from the Fund through CERCLA or any other law for costs of the Work, State Response Costs and Tribal Response Costs.

67. **Settling Defendants' Reservation.** The covenants in ¶ 66 do not apply to any claim or cause of action brought, or order issued, after the Effective Date by the United States, State, or the Tribes to the extent such claim, cause of action, or order is within the scope of a reservation under ¶ 64.a through i.

## XVII. EFFECT OF SETTLEMENT; CONTRIBUTION

68. The Parties agree and the Court finds that: (a) the complaint filed by the United States in this action is a civil action within the meaning of section 113(f)(1) of CERCLA; (b) this Decree constitutes a judicially approved settlement under which each Settling Defendant has, as of the Effective Date, resolved its liability to the United States within the meaning of sections 113(f)(2) and 113(f)(3)(B) of CERCLA; and (c) each Settling Defendant is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by section 113(f)(2) of CERCLA, or as may be otherwise provided by law, for the “matters addressed” in the Consent Decree. The contribution protection under the preceding sentence extends to the successors of each Settling Defendant but only to the extent that the alleged liability of the successor of the Settling Defendant is based solely on its status as a successor of the Settling Defendant. The “matters addressed” in this Consent Decree are the Work, State Response Costs, and Tribal Response Costs provided, however, that if Plaintiffs exercise rights under the reservations in ¶¶ 64.a through g, the “matters addressed” in this Decree will no longer include those response costs or response actions that are within the scope of the exercised reservation.

69. Each Settling Defendant shall, with respect to any suit or claim brought by it for matters related to this Decree, notify DOJ and the Forest Service no later than 60 days prior to the initiation of such suit or claim. Each Settling Defendant shall, with respect to any suit or claim brought against it for matters related to this Decree, notify DOJ and the Forest Service within 10 days after service of the complaint on such Settling Defendant. In addition, each Settling Defendant shall notify DOJ and the Forest Service within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial.

70. **Res Judicata and Other Defenses.** In any subsequent administrative or judicial proceeding initiated against any Settling Defendant by Plaintiffs for injunctive relief, recovery of response costs, or other appropriate relief relating to the Site, Settling Defendants shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, claim preclusion (res judicata), issue preclusion (collateral estoppel), claim-splitting, or other defenses based upon any contention that the claims raised by the United States, the State, or the Tribes in the subsequent proceeding were or should have been brought in the instant case.

71. Nothing in this Decree diminishes the right of the United States under section 113(f)(2) and (3) of CERCLA to pursue any person not a party to this Decree 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).



## XVIII. RECORDS

72. **Settling Defendant Certification.** Each Settling Defendant certifies individually that: (a) to the best of its knowledge and belief, after thorough inquiry it has not altered, mutilated, discarded, destroyed or otherwise disposed of any documents and electronically stored information relating to the Site, including information relating to its potential liability under CERCLA regarding the Site, since the earlier of notification of potential liability by the United States or the State or the filing of suit against it regarding the Site; and (b) it has fully complied with any and all Forest Service requests for information under sections 104(e) and 122(e) of CERCLA, and section 3007 of RCRA.

### 73. **Retention of Records and Information**

a. Settling Defendants shall retain, and instruct their contractors and agents to retain, the following documents and electronically stored data (“Records”) until 10 years after the Certification of Work Completion is delivered under SOW ¶ 5.9 (the “Record Retention Period”):

- (1) All records regarding Settling Defendants’ liability under CERCLA regarding the Site;
- (2) All reports, plans, permits, and documents submitted to the Forest Service in accordance with this Decree, including all underlying research and data; and
- (3) All data developed by, or on behalf of, Settling Defendants in the course of performing the Remedial Action.

b. At the end of the Record Retention Period, Settling Defendants shall notify the Forest Service that it has 90 days to request the Settling Defendants’ Records subject to this Section. Settling Defendants shall retain and preserve their Records subject to this Section until 90 days after the Forest Service’s receipt of the notice. These Record retention requirements apply regardless of any corporate record retention policy.

74. Settling Defendants shall provide to the Forest Service, upon request, copies of all Records and information required to be retained under this Section. Settling Defendants shall also make available to the Forest Service, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

### 75. **Privileged and Protected Claims**

a. Settling Defendants may assert that all or part of a Record requested by Plaintiff is privileged or protected as provided under federal law, in lieu of providing the Record, provided that Settling Defendants comply with ¶ 75.b, and except as provided in 75.c.

b. If Settling Defendants assert a claim of privilege or protection, they shall provide Plaintiff with the following information regarding such Record: its title; its date; the

name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Settling Defendants shall provide the Record to Plaintiff in redacted form to mask the privileged or protected portion only. Settling Defendants shall retain all Records that they claim to be privileged or protected until Plaintiff has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Settling Defendants' favor.

c. Settling Defendants shall not make any claim of privilege or protection regarding: (1) any data regarding the EMDSOU, including all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological or engineering data, or the portion of any other Record that evidences conditions at or around the EMDSOU; or (2) the portion of any Record that Settling Defendants are required to create or generate in accordance with this Decree.

76. **Confidential Business Information (CBI) Claims.** Settling Defendants may claim that all or part of a Record provided to any Plaintiff under this Section is CBI to the extent permitted by and in accordance with section 104(e)(7) of CERCLA and 40 C.F.R. § 2.203(b). Settling Defendants shall segregate and shall clearly identify all Records or parts thereof submitted under this Decree for which they claim is CBI by labeling each page or each electronic file "claimed as confidential business information" or "claimed as CBI." Records that Settling Defendants claim to be CBI will be afforded the protection specified in 40 C.F.R. part 2, subpart B. If no CBI claim accompanies Records when they are submitted to the Forest Service, or if the Forest Service notifies Settling Defendants that the Records are not entitled to confidential treatment under the standards of section 104(e)(7) of CERCLA or 40 C.F.R. part 2, subpart B, the public may be given access to such Records without further notice to Settling Defendants.

77. In any proceeding under this Decree, validated sampling or monitoring data generated in accordance with the SOW and reviewed and approved by the Forest Service, if relevant to the proceeding, is admissible as evidence, without objection.

78. Notwithstanding any provision of this Decree, Plaintiff retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

## **XIX. NOTICES AND SUBMISSIONS**

79. All agreements, approvals, consents, deliverables, modifications, notices, notifications, objections, proposals, reports, waivers, and requests specified in this Decree must be in writing unless otherwise specified. Whenever a notice is required to be given or a report or other document is required to be sent by one Party to another under this Decree, it must be sent as specified below. All notices under this Section are effective upon receipt, unless otherwise specified. In the case of emailed notices, there is a rebuttable presumption that such notices are received on the same day that they are sent. Any Party may change the method, person, or address applicable to it by providing notice of such change to all Parties.

As to DOJ:

eescdcopy.enrd@usdoj.gov  
Re: DJ # 90-11-3-1776/10

As to the Forest Service: Brian Deeken  
Remedial Project Manager  
Forest Service  
Caribou-Targhee National Forest  
4350 Cliffs Drive  
Pocatello, ID 83204  
(208) 236-7516  
brian.deeken@usda.gov

As to FWS: United States Department of the Interior  
Office of the Solicitor  
Nathalie Doherty  
nathalie.doherty@sol.doi.gov

United States Department of the Interior  
U.S. Fish and Wildlife Service  
Matthew Schenk  
matthew\_schenk@fws.gov

As to the State: Aaron Harnsberger  
Mining Project Coordinator  
Idaho Department of Environmental Quality  
444 Hospital Way, #300  
Pocatello, ID 83201  
(208) 239-5014  
aaron.harnsberger@deq.idaho.gov

As to the Tribes: Kelly Wright  
Environmental Waste Management Program  
Shoshone-Bannock Tribes of Fort Hall  
P.O. Box 306  
Fort Hall, ID  
208-478-3700  
kelly.wright@sbtribes.com

As to Settling Defendants: Nu-West Industries, Inc. and Nu-West Mining Inc.  
c/o Nu-West Inc.  
421 West 2nd S  
Soda Springs, Idaho 83276  
Attention: Jon Bronson  
Email: Jon.Bronson@nutrien.com  
Telephone: 208-547-1900

## **XIX. APPENDICES**

79. The following appendixes are attached to and incorporated into this Decree:

“Appendix A” is the 2013 Consent Decree.

“Appendix B” is the ASAOC.

“Appendix C” is the Record of Decision.

“Appendix D” is the description and map of the Site.

“Appendix E” is the SOW.

“Appendix F” is the sample Settling Defendants’ financial test and guarantee.

## **XXI. MODIFICATIONS TO DECREE**

81. Except as provided in ¶ 22 of the Decree and the SOW, nonmaterial modifications to Sections I through XXV and the Appendixes must be in writing and are effective when signed (including electronically signed) by the Parties. Material modifications to Sections I through XXV and the Appendixes must be in writing, signed (which may include electronically signed) by the Parties, and are effective upon approval by the Court. As to changes to the remedy, a modification to the Decree, including the SOW, to implement an amendment to the Record of Decision that “fundamentally alters the basic features” of the Remedial Action within the meaning of 40 C.F.R. § 300.435(c)(2)(ii) will be considered a material modification.

## **XXII. SIGNATORIES**

82. The undersigned representatives of the United States, the State, the Tribes and each undersigned representative of a Settling Defendant certifies that he or she is fully authorized to enter into the terms and conditions of this Decree and to execute and legally bind such Party to this document.

## **XXIII. PRE-ENTRY PROVISIONS**

83. If for any reason the Court should decline to approve this Decree in the form presented, this agreement, except for ¶¶ 84 and 85, is voidable at the sole discretion of any Party and its terms may not be used as evidence in any litigation between the Parties.

84. This Decree will be lodged with the Court for at least 30 days for public notice and comment in accordance with section 122(d)(2) of CERCLA and 28 C.F.R. § 50.7. The United States may withdraw or withhold its consent if the comments regarding the Decree disclose facts or considerations that indicate that the Decree is inappropriate, improper, or inadequate.

85. Settling Defendants agree not to oppose or appeal the entry of this Decree.

#### **XXIV. INTEGRATION**

86. This Decree constitutes the entire agreement among the Parties regarding the subject matter of the Decree and supersedes all prior representations, agreements, and understandings, whether oral or written, regarding the subject matter of the Decree.

#### **XXV. FINAL JUDGMENT**

87. Upon entry of this Decree by the Court, this Decree constitutes a final judgment under Fed. R. Civ. P. 54 and 58 among the Parties.

SO ORDERED this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

---

United State District Judge

g

**FOR THE UNITED STATES:**

ADAM R.F. GUSTAFSON  
Acting Assistant Attorney General  
U.S. Department of Justice Environment  
and Natural Resources Division

A handwritten signature in black ink, appearing to read 'Katherine L. Matthews', is written over a horizontal line.

KATHERINE L. MATTHEWS  
SENIOR ATTORNEY (CO Bar No. 53372)  
U.S. Department of Justice  
Environment and Natural Resources Division  
Environmental Enforcement Section  
999 18th Street, Suite 600  
Denver, CO 80202  
Telephone: 303-844-1365  
Email: Katherine.Matthews@usdoj.gov

**FOR THE UNITED STATES Forest Service:**

  
\_\_\_\_\_  
Mary Farnsworth  
Regional Forester

3/24/25

\_\_\_\_\_  
[name]  
[title]

**FOR THE TRIBES:**

Lee Juan Tendoy, Chairman  
Fort Hall Business Council

[name]

[title]

*Lee Juan Tendoy* 2/12/2025

Bill Bacon, General Counsel  
Fort Hall Business Council

[name]

[title]

*Bill Bacon* 2/12/2025  
*2/25/2025*



**FOR THE STATE:**

**Dated: 1/3/25**

  
\_\_\_\_\_  
[name] Jess Byrne  
[title]

*Director* \_\_\_\_\_  
Idaho Department of Environmental Quality  
1410 N. Hilton St.  
Boise, Id 83706

FOR NU-WEST MINING INC.

12/18/2024  
Dated

JEFF CRUSSING  
[name]  
Title VICE PRESIDENT, NUTRIEN NU-WEST  
Address 5296 HARVEST LAKE DRIVE  
LOVELAND, CO 80538

If the Decree is not approved by the Court within 60 days after the date of lodging, and the United States requests, this Settling Defendant agrees to accept service of the complaint by mail, and to execute a waiver of service of a summons under Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court. **This Settling Defendant hereby designates the agent below to accept service of the complaint by mail and to execute the Rule 4 waiver of service.** This Settling Defendant understands that it does not need to file an answer to the complaint until it has executed the waiver of service or otherwise has been served with the complaint.

Name: Bart Wilking  
Title: Vice President  
Company: Nutrien / Nu-West  
Address: 5296 Harvest Lake Drive  
Loveland, CO 80538  
Phone: (970) 613-3189  
email: bart.wilking@nutrien.com

FOR NU-WEST INDUSTRIES, INC.

12/18/2024  
Dated

JEFF CRUSSING  
[name]  
Title VICE PRESIDENT, NUTRIEN NU-WEST  
Address 5296 HARVEST LAKE DRIVE  
LOVELAND, CO 80538

If the Decree is not approved by the Court within 60 days after the date of lodging, and the United States requests, this Settling Defendant agrees to accept service of the complaint by mail, and to execute a waiver of service of a summons under Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court. **This Settling Defendant hereby designates the agent below to accept service of the complaint by mail and to execute the Rule 4 waiver of service.** This Settling Defendant understands that it does not need to file an answer to the complaint until it has executed the waiver of service or otherwise has been served with the complaint.

Name: Bart Wilking  
Title: Vice President  
Company: Nutrien / Nu-West  
Address: 5296 Harvest Lake Dr.  
Loveland, CO 80538  
Phone: (970) 613-3189  
email: bart.wilking@nutrien.com

EAST MILL DUMP SUB-OPERABLE  
UNIT REMEDIAL DESIGN/REMEDIAL  
ACTION  
CONSENT DECREE

APPENDIX A

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF IDAHO

NU-WEST MINING INC., NU-WEST  
INDUSTRIES, INC.,

Plaintiffs,

v.

UNITED STATES OF AMERICA,

Defendant.

NO. 4:CV-09-431-BLW

**JUDGMENT**

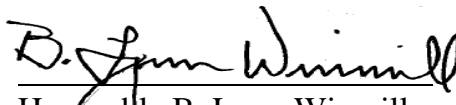
In accordance with the Memorandum Decision filed with this Judgment  
NOW THEREFORE IT IS HEREBY ORDERED, ADJUDGED, AND  
DECREED, that the motion for settlement (docket no. 132) is GRANTED.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED, that the Consent  
Decree (docket no. 132-1) is hereby APPROVED and incorporated fully herein by  
reference.

IT IS FURTHER ORDERED, ADJUDGED, AND DECREED, that the Clerk  
close this case.



DATED: **March 6, 2013**

  
Honorable B. Lynn Winmill  
Chief U. S. District Judge

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF IDAHO

NU-WEST MINING, INC., and  
NU-WEST INDUSTRIES, INC.,

Plaintiffs,

vs.

UNITED STATES OF AMERICA,

Defendant.

Case No. 09-431-E-BLW

**CONSENT DECREE AND JUDGMENT**

This Consent Decree and Judgment ("Agreement") is made as of the Effective Date of this Agreement, as defined herein, between Plaintiffs Nu-West Mining, Inc. and Nu-West Industries, Inc. (collectively, "Plaintiffs") and Defendant the United States of America ("United States"). Plaintiffs and the United States are referred to collectively as the "Parties" and individually as a "Party."

WHEREAS, this action involves claims by Plaintiffs against the United States for declaratory relief, cost recovery, and contribution under the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9601-9675 ("CERCLA"), and counterclaims by the United States against Plaintiffs for declaratory relief, cost recovery, and contribution under CERCLA;

WHEREAS, these claims and counterclaims relate to the following inactive phosphate mines in southeastern Idaho: the South Maybe Canyon Mine ("South Maybe"); the North Maybe Mine ("North Maybe"); the Champ Mine and Champ Mine Extension ("Champ"); and



the Mountain Fuel Mine ("Mountain Fuel") (each site, individually, "Mine Site," and collectively, the "Mine Sites"), as defined further herein;

WHEREAS, the Mine Sites and the surrounding property disturbed or impacted by historical mining and related activity constitute "facilities" within the meaning of CERCLA and require environmental remediation, or cleanup, because mining and related activity resulted in the release of selenium into the environment;

WHEREAS, there has been and continues to be a release or threat of release of hazardous substances into the environment at each of the Mine Sites;

WHEREAS, the Forest Service in the United States Department of Agriculture ("USFS") is the lead regulatory agency responsible for oversight of the Response Actions at the Mine Sites under CERCLA;

WHEREAS, USFS has completed an Engineering Evaluation/Cost Analysis and signed a Removal Action Memorandum for capping the Cross Valley Fill at South Maybe and is conducting remedial investigations and feasibility studies at North Maybe;

WHEREAS, the Parties intend to negotiate Administrative Settlement Agreements and Orders on Consent ("ASAOCs") pursuant to which Plaintiffs would perform a focused feasibility study for the East Mill Dump at North Maybe, and would perform remedial investigations and feasibility studies for South Maybe, Champ, Mountain Fuel, and the East Side of North Maybe;

WHEREAS, the Parties intend to negotiate an ASAOC pursuant to which Plaintiffs would cap the Cross-Valley Fill at South Maybe;

WHEREAS, on September 2, 2009, Plaintiffs filed the Complaint that forms the basis of this lawsuit to obtain cost recovery or contribution from the United States for certain costs Plaintiffs have incurred, or will incur, in response to the release or threatened release of

hazardous substances at or from the Mine Sites, along with a declaration as to the liability of the United States for costs to be incurred at the Mine Sites in the future;

WHEREAS, on November 3, 2009, the United States answered Plaintiffs' Complaint and made counterclaims against Plaintiffs for declaratory relief, cost recovery, and contribution under CERCLA;

WHEREAS, on November 13, 2009, the United States amended its counterclaims against Plaintiffs;

WHEREAS, on November 24, 2009, Plaintiffs answered the United States' amended counterclaims;

WHEREAS, the Parties now wish to enter into this Agreement: (1) to have a full and final resolution of Covered Matters, as defined herein; (2) to establish the allocation of liability between the Parties for all Past and Future Response Costs, as defined herein; and (3) to avoid the complication and expense associated with a trial to determine the allocation of liability for all Past and Future Response Costs between the Parties; and

WHEREAS, the Parties agree, and the Court, by entering this Consent Decree finds, that this Agreement has been negotiated by the Parties in good faith, and implementation of this Agreement will expedite the cleanup of the Mine Sites and will avoid costly litigation between the Parties, and that this Agreement is fair, reasonable, lawful, and in the public interest.

NOW, THEREFORE, IT IS ORDERED, ADJUDGED, AND DECREED that:

1. Jurisdiction and Venue.

This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. § 1331 and 42 U.S.C. § 9613(b). Venue is proper pursuant to 28 U.S.C. § 1391(e) and 42 U.S.C. § 9613(b).

2. The Parties.

The Parties to this Agreement are Plaintiffs and the United States.

3. Application of this Agreement.

This Agreement applies to, is binding upon, and inures to the benefit of Plaintiffs and the United States. Except as provided by Paragraph 7, and in Sub-Paragraph 12.b with regard to Huntsman and Wells Cargo, as defined in Sub-Paragraph 12.b, this Agreement does not extend to or inure to the benefit of any party, person, or entity other than Plaintiffs and the United States, and nothing in this Agreement shall be construed to make any other person or entity a third-party beneficiary of this Agreement.

4. Effective Date.

The Effective Date of this Agreement shall be the date on which this Agreement is approved by the Court.

5. Definitions.

Unless otherwise expressly provided herein, terms used in this Agreement that are defined in CERCLA or its implementing regulations shall have the meaning assigned to them in CERCLA or its implementing regulations. Whenever the terms listed below are used in this Agreement, the following definitions shall apply:

- a. "Agreement" or "Consent Decree" shall mean this Consent Decree and Judgment.
- b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 *et seq.*
- c. "Complaint" shall mean the Complaint filed by Plaintiffs in this action on September 2, 2009.

d. “Contamination” shall mean the release or threatened release of selenium or any other pollutant, contaminant, hazardous substance, solid waste, or hazardous waste, as those terms are defined under CERCLA and/or the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. § 6901 *et seq.*

e. “Covered Matters” shall mean any and all Response Actions taken or to be taken at or in connection with the Mine Sites by the United States, Plaintiffs, or any other person, and all associated CERCLA-recoverable costs incurred or to be incurred by the United States, Plaintiffs, or any other person. “Covered Matters” do not include: (i) tort claims against Plaintiffs or the United States by third parties alleging personal injury or property damage resulting from alleged exposure to Contamination, including selenium, except to the extent that the sums claimed qualify as Response Costs; or (ii) claims otherwise reserved pursuant to Sub-Paragraph 7.e, below, including claims for natural resource damages brought pursuant to CERCLA section 107(f), 42 U.S.C. § 9607(f), or any equivalent state law.

f. “Day” shall mean a calendar day. In computing any period of time under this 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 day that is not a Saturday, Sunday, or federal holiday.

g. “USFS” shall mean the Forest Service in the United States Department of Agriculture.

h. “Future Response Costs” shall mean all Response Costs incurred by any Party on or after January 1, 2012.

i. “Interest” shall mean interest at the rate that is established pursuant to section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

- j. "Lodging Date" shall mean the date this Agreement is filed with the Court.
- k. "NCP" shall mean the "National Oil and Hazardous Substances Pollution Contingency Plan," as codified at 40 C.F.R. Part 300 and referenced in CERCLA section 107(a)(4)(B), 42 U.S.C. § 9607(a)(4)(B).
- l. "Paragraph" or "Sub-Paragraph" shall mean an enumerated paragraph or sub-paragraph of this Agreement.
- m. "Past Response Costs" shall mean all Response Costs incurred by the Parties through December 31, 2011. Plaintiffs and the United States hereby agree that, for purposes of this Agreement, the United States has incurred \$1,787,440.66 in total Past Response Costs and Plaintiffs have incurred \$10,420,070.00 in total Past Response Costs.
- n. "Remedial Action" shall have the meaning set forth at CERCLA section 101(24), 42 U.S.C. § 9601(24).
- o. "Removal" shall have the meaning set forth at CERCLA section 101(23), 42 U.S.C. § 9601(23).
- p. "Response Action" shall have the meaning set forth at CERCLA section 101(25), 42 U.S.C. § 9601(25).
- q. "Response Costs" for purposes of this Agreement shall mean (1) any "costs of removal or remedial action" within the meaning of CERCLA section 107(a)(4)(A), 42 U.S.C. § 9607(a)(4)(A), and "necessary costs of response" incurred "consistent with the national contingency plan," within the meaning of CERCLA section 107(a)(4)(B), 42 U.S.C. § 9607(a)(4)(B), that Plaintiffs have incurred, or may incur, performing a Response Action pertaining to Contamination at or emanating from the Mine Sites, including pursuant to an order or consent agreement issued by or entered into with USFS or by such other regulatory authority

as may have CERCLA jurisdiction during the time period in which the Response Action is performed, and (2) any “costs of removal or remedial action” that are “not inconsistent with the national contingency plan,” within the meaning of CERCLA section 107(a)(4)(A), 42 U.S.C. § 9607(a)(4)(A), that the United States has incurred or may incur performing or overseeing the performance of a Response Action pertaining to Contamination at or emanating from the Mine Sites. The Parties agree that Response Costs hereunder may include reasonable prorated charges for services provided by any employee of any Party in performing or overseeing any Removal or Remedial Action at the Mine Sites, provided such services are documented in sufficient detail to confirm the specific nature, duration, and NCP-compliance, or, in the case of the United States, a lack of NCP non-compliance, of each such activity, including the fair market value of any in-kind materials (such as topsoil or capping materials) contributed by a Party in connection with such actions by agreement of the Parties, and including costs of any enforcement activities.

r. The “Mine Sites” shall mean the South Maybe Canyon Mine (“South Maybe”), the North Maybe Mine (“North Maybe”), the Champ Mine and Champ Mine Extension (collectively, “Champ”), and the Mountain Fuel Mine (“Mountain Fuel”), more specifically defined as:

i. “South Maybe” shall mean: 1) the property where mining activities took place, including mine pit development, ore extraction, stockpiling, and shipment, and waste disposal, located south of the road along Maybe Creek in the east-west segment of Maybe Creek, and including portions of Sections 10, 11, 14, and 15, Township 8 South, Range 44 East, Boise Meridian; 2) the areal extent of Contamination emanating from or in connection with the South Maybe Canyon Mine mining activities; and 3) all suitable areas located in very close proximity to the Contamination necessary for the

implementation of Response Actions, all of which is located approximately 16 miles east of Soda Springs in Caribou County, Idaho.

ii. “North Maybe” shall mean: 1) the property where mining activities took place, including mine pit development, ore extraction, stockpiling, and shipment, and waste disposal, located to the north of Maybe Creek and including portions of Sections 15, 16, 21, 22, 27, 28, 33, and 34 of Township 7 South, Range 44 East, and Sections 3, 4, 9, and 10 of Township 8 South, Range 44 East, Boise Meridian; 2) the areal extent of Contamination emanating from or in connection with the North Maybe Mine mining activities; and 3) all suitable areas located in very close proximity to the Contamination necessary for the implementation of Response Actions, all of which is located approximately 16 miles east of Soda Springs in Caribou County, Idaho.

iii. “Champ” shall mean: 1) the property where mining activities took place, including mine pit development, ore extraction, stockpiling, and shipment, and waste disposal, including portions of Section 2 of Township 9 South, Range 44 East, and Section 35 of Township 8 South, Range 44 East, Boise Meridian; 2) the areal extent of Contamination emanating from or in connection with the Champ Mine and Champ Mine Extension mining activities; and 3) all suitable areas located in very close proximity to the Contamination necessary for the implementation of Response Actions, all of which is located approximately 16 miles east of Soda Springs in Caribou County, Idaho.

iv. “Mountain Fuel” shall mean: 1) the property where mining activities took place, including mine pit development, ore extraction, stockpiling, and shipment, and waste disposal, including portions of Sections 13, 14, 15, 23-26, 35, and 36 of Township 9 South, Range 44 East, Boise Meridian; 2) the areal extent of Contamination emanating



from or in connection with the Mountain Fuel Mine mining activities; and 3) all suitable areas located in very close proximity to the Contamination necessary for the implementation of Response Actions, all of which is located approximately 16 miles east of Soda Springs in Caribou County, Idaho.

s. "United States" shall mean the United States of America and all of its departments, agencies, and instrumentalities, including but not limited to the United States Department of Justice, the United States Department of the Interior, and the United States Department of Agriculture.

6. Allocation Agreement.

Plaintiffs, jointly and severally, hereby agree to pay 67% of all Past and Future Response Costs, and the United States hereby agrees to pay 33% of all Past and Future Response Costs.

7. Covenants Not To Sue and Reservation of Rights.

a. In consideration of the United States' agreement to pay 33% of all Past and Future Response Costs pursuant to the process described in this Agreement, and except for claims or causes of action expressly reserved herein, Plaintiffs hereby covenant not to sue and agree not to assert any claims or causes of action against the United States with respect to Past or Future Response Costs, other than liability for failure to meet a requirement of this Agreement, including but not limited to:

i. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund 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;

ii. any claim arising out of the Response Actions at the Mine Sites for which the Past or Future Response Costs were or are incurred, including any claim under the

United States Constitution, the Constitution of the State of Idaho, 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

iii. any claim against the United States, including any department, agency, or instrumentality of the United States, pursuant to Section 107 or 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law for Past or Future Response Costs.

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). These covenants shall take effect, as to Past Response Costs, upon receipt by Plaintiffs of the payments required by Paragraph 6 (Allocation Agreement) and Paragraph 8 (Payment for Past Response Costs), and as to Future Response Costs, upon receipt by Plaintiffs of the payments required by Paragraph 6 (Allocation Agreement) and Paragraph 9 (Payment of Future Response Costs), and any Interest due thereon. These covenants are conditioned upon the United States' performance of its obligations under this Agreement. Except as provided by this Paragraph, these covenants do not extend to any other person or entity.

b. In consideration of Plaintiffs' agreement to pay 67% of all Past and Future Response Costs, and except for claims or causes of action expressly reserved by Sub-Paragraph 7.e, the United States hereby covenants not to sue or to take administrative action against Plaintiffs pursuant to Section 107(a) or 113 of CERCLA, 42 U.S.C. §§ 9607(a) or 9613, to recover any Past or Future Response Costs. These covenants shall take effect, as to Past Response Costs, upon receipt by the United States of the payments required by Paragraph 6 (Allocation Agreement) and Paragraph 8 (Payment for Past Response Costs), and as to Future

Response Costs, upon receipt by the United States of the payments required by Paragraph 6 (Allocation Agreement) and Paragraph 9 (Payment of Future Response Costs), and any Interest due thereon.

c. In further consideration of Plaintiffs' agreement to pay 67% of all Past and Future Response Costs, and except for claims or causes of action expressly reserved by Sub-Paragraph 7.e, the United States hereby covenants not to sue or to take administrative action against Agrium Inc. or Agrium U.S. Inc., Plaintiffs' direct and indirect parent corporations, pursuant to Sections 107(a) or 113 of CERCLA, 42 U.S.C. §§ 9607(a) or 9613, to recover any Past or Future Response Costs. These covenants are based on the representations made by Agrium Inc. and Agrium U.S. Inc. pursuant to section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and Plaintiffs' responses to discovery requests in this litigation. If any material representations or responses were inaccurate, the covenants in this Sub-Paragraph are void.

d. The covenants contained in Sub-Paragraphs 7.b and 7.c, above, are conditioned upon Plaintiffs' performance of their obligations under this Agreement. These covenants do not extend to any operations of the fertilizer plant facility owned and operated by Nu-West Industries, Inc., which is located north of Soda Springs, Idaho. Except as provided in Sub-Paragraphs 7.b and 7.c, these covenants extend only to Plaintiffs and do not extend to any other person or entity.

e. The United States reserves, and this Agreement is without prejudice to, all rights against Plaintiffs, Agrium Inc., and Agrium U.S. Inc., with respect to all matters not expressly included within the covenants by the United States in Sub-Paragraphs 7.b and 7.c. Notwithstanding any other provision of this Agreement, the United States reserves all rights against Plaintiffs, Agrium Inc., and Agrium U.S. Inc., with respect to:

- i. liability for failure of Plaintiffs to meet a requirement of this Agreement;
- ii. liability for costs incurred or to be incurred by the United States that are not within the definition of Past or Future Response Costs;
- iii. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 9606, or failure to meet the requirements of any ASAOC entered into by the Parties;
- iv. criminal liability; and
- v. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments.

8. Payment for Past Response Costs.

Within a reasonable time after the Effective Date of this Agreement, and no later than 60 days after the Effective Date, the United States shall pay Plaintiffs the sum of \$3,438,623.10, which represents the United States' 33% allocation of Plaintiffs' Past Response Costs, and Plaintiffs shall pay the United States the sum of \$1,197,585.24, which represents Plaintiffs' 67% allocation of the United States' Past Response Costs. Payment shall be made by electronic funds transfer to the account designated by each of the Parties. If such payment is not made in full within 60 days after the Effective Date of this Agreement, then the Party failing to make timely payment shall pay Interest on the unpaid balance commencing on the 61st day after the Effective Date until the date that payment is made in full.

9. Payment for Future Response Costs.

The Parties agree to provide reimbursement for their agreed upon allocation of Future Response Costs in the manner set forth below:

a. Within 30 days of the Effective Date, Plaintiffs shall establish a trust, which is intended to qualify as an "environmental remediation trust" under 26 C.F.R. § 301.7701-4(e), on such terms as are approved in writing by the Parties. Funds in the trust shall be available to Plaintiffs and the United States only for payment of Future Response Costs and for payment of the reasonable administrative expenses of the trust. As set forth in Paragraph 10, below, funds recovered from the Washington Group International bankruptcy ("WGI Funds") shall be available, on a pro rata basis, for payment of first-incurred Future Response Costs as those costs are incurred at each of the four Mine Sites. In the event that the estimated 2012 expenditures of Future Response Costs at any Mine Site are expected to exceed the remaining pro rata share of WGI Funds, then as soon as reasonably practicable, the United States shall pay 33% into the trust and Plaintiffs shall pay 67% into the trust of the Parties' agreed estimated expenditures of Future Response Costs in excess of WGI Funds through December 31, 2012.

b. Within 30 days of the Effective Date, the Parties shall reach agreement on estimated Future Response Costs expected to be incurred through December 31, 2013, and within 60 days thereafter, shall fund those estimated Costs in the manner described in Sub-Paragraph 9.a, above. Thereafter, on or before October 1 of each year until the United States determines that no portion of the Mine Sites requires further CERCLA Response Action, the Parties shall reach agreement on estimated Future Response Costs expected to be incurred during the following calendar year. On or before December 15, 2013, and not later than December 15 of every year thereafter until the United States determines that no portion of the Mine Sites requires further CERCLA Response Action, Plaintiffs and the United States shall pay into the trust 67% and 33%, respectively, of the estimated Future Response Costs expected to be incurred during the following calendar year, net of the remaining pro rata share of WGI Funds for each

Mine Site. If such payment is not made in full by December 15th, then the Party failing to make timely payment shall pay Interest on the unpaid balance, at the rate established by CERCLA Section 107(a), 42 U.S.C. § 9607(a).

c. A Party incurring Future Response Costs shall make best efforts to make a written demand upon the trustee within 30 days after the close of each calendar quarter, with a copy to the other Parties, for payment of Future Response Costs incurred ("Payment Demand"). All Payment Demands shall be sent to the applicable addresses set forth in Paragraph 26. A Party's failure to make written Payment Demand in accordance with this schedule does not constitute a waiver of the right to seek such payment. Unreasonable delay in making a Payment Demand, however, may constitute a legitimate basis to dispute a Payment Demand.

d. Each Payment Demand shall include:

- i. a statement of Future Response Costs paid by the Party during the period covered by the Payment Demand;
- ii. documentation, including copies of contracts, work orders, invoices, supporting documentation, and information sufficient to identify each internal cost for which expenses were incurred, or contractor, vendor, or other person to whom money for which the Party seeks reimbursement was paid, and to show, for each such contractor, vendor, or other person, the amount of money they were paid and the services or goods they provided and proof of payment, to permit the other Party to determine the work performed and the costs incurred for which reimbursement is sought;
- iii. certification from the Party making the Payment Demand that the costs sought constitute Response Costs within the meaning of this Agreement,

that the supporting documentation truly and accurately reflects the costs incurred, and that payment of the amount demanded will be accepted as payment in full with respect to the costs incurred; and

- iv. a Payment Demand that does not comply with the requirements of this Sub-Paragraph 9.d. shall be returned to the submitting Party for proper completion or documentation. In the event of a disagreement between the Parties concerning whether a Payment Demand complies with the requirements of this Sub-Paragraph, the dispute resolution provisions of this Paragraph shall apply.

e. Within 30 days of receipt of a Payment Demand, the receiving Party shall communicate to the trustee in writing, with a copy to the other Parties, its approval to pay all or part of the Payment Demand and/or notice that it disputes part or all of the Payment Demand. A Party disputing all or any part of a Payment Demand shall be deemed to have invoked, and shall comply with, the dispute resolution provisions set forth below. Payment of any disputed amount shall be suspended until the dispute is resolved. A Payment Demand shall be deemed approved if it is not disputed in whole or in part within 30 days of receipt by the receiving Party. The trustee shall remit in accordance with the trust instructions any Payment Demand or part thereof that is approved hereunder.

f. If a Party in good faith contests all or any part of a Payment Demand, the disputing Party shall notify in writing the Party who submitted the Payment Demand of any such disputed amount as soon as reasonably practical, and no later than 30 days following receipt of the Payment Demand. The Parties shall promptly make a good faith effort to resolve any dispute regarding the Payment Demand. In the event that the Parties do not resolve the dispute



informally within 30 days after the date of the disputing Party's written notice, then, within 15 days thereafter, each Party shall provide the others with a written Statement of Position. If, after 30 days following the exchange of Statements of Position the Parties have not resolved their dispute, any Party may thereafter seek relief from the Court, unless the Parties agree to an alternative dispute resolution process.

g. In the event that a Party seeks relief from the Court to resolve a dispute under Sub-Paragraph 9.f, the Party disputing the Payment Demand shall pay Interest to the Party making the Payment Demand on so much of the disputed amount that the Court determines is payable, commencing on the 61st day following receipt of the Payment Demand until the date payment of the disputed amount is made.

h. Once the United States has determined, in writing, that no portion of the Mine Sites requires further CERCLA response action, the Parties shall designate their subsequent Payment Demand as the "Final Payment Demand."

i. Following the completion of payment under this Paragraph in response to the Final Payment Demand, including payment of any Interest due hereunder, any amounts remaining in the trust shall be returned to the Parties, pro rata, and the Parties shall have no further obligations under this Paragraph.

10. Contribution by Washington Group International.

a. The Parties acknowledge and agree that the United States received from Washington Group International ("WGI") approximately \$15,496,515.00 ("WGI Funds") as part of the settlement of the bankruptcy proceeding *In re Washington Group International*, Case No. 01-31627-gwz (Bankr. D. Nev.). WGI was a responsible party under CERCLA at all the Mine Sites. The WGI Funds represent WGI's contribution to the costs of investigation and

remediation of the Mine Sites. Pursuant to applicable law, the United States deposited the WGI Funds into a non-interest-bearing government account. In accordance with regulation, the United States Department of Justice retained approximately \$135,000.00 of the WGI Funds. Additionally, as of September 30, 2011, WGI Funds in the amount of \$1,456,573.06 have been used to reimburse the United States for a portion of the United States' Past Response Costs. Subsequent to September 30, 2011, an additional amount of WGI Funds has been or will be spent or obligated by the United States to pay for ongoing work at the Mine Sites prior to the Effective Date of this Agreement. The remainder of the WGI Funds remains in one or more government accounts for use at the Mine Sites.

b. The Parties agree that the WGI Funds shall be distributed equally between the Mine Sites to pay for investigation and response at each Mine Site and that these funds shall be used to pay for the first Future Response Costs incurred at each Mine Site. For each Mine Site, Plaintiffs shall submit to the United States a Payment Demand for Plaintiffs' Future Response Costs consistent with Paragraph 9. The United States will use the WGI Funds allocated to that Mine Site to reimburse the portion of those Future Response Costs that do not exceed the allocated WGI Funds for the Mine Site.

c. The United States shall continue to oversee and administer the WGI Funds. As part of this responsibility, the United States shall provide to Plaintiffs a quarterly statement within 30 days of the close of each quarter showing the balance remaining of the WGI Funds with respect to each Mine Site, and the payments made from those funds, including, for payments made to the United States, the information and documents specified in Sub-Paragraph 9.d. The United States shall distribute the WGI Funds pursuant to Payment Demands submitted in accordance with this Paragraph and Paragraph 9, so long as neither Party has raised a dispute

pursuant to Sub-Paragraph 9.e. The United States may pay its Response Costs with WGI Funds as those costs are incurred. However, Plaintiffs may raise a dispute under Sub-Paragraph 9.e with respect to such payments. To the extent that Plaintiffs should prevail in any dispute regarding such a payment, the United States shall repay such amount of the WGI Funds, with Interest from the payment date to the date of repayment.

d. The Parties shall have no liability for Future Response Costs that are paid for with the WGI Funds, as described in Sub-Paragraphs 10.b and 10.c.

e. In the event that the United States should receive any additional funds from the WGI bankruptcy, the Parties agree that such funds shall be managed and spent in the manner set forth in this Paragraph.

11. Contribution by Third Parties.

In the event that any third party, including but not limited to Huntsman, Wells Cargo, or any related entities, agree or are required pursuant to contract, court order, or otherwise, to pay any portion of the costs for any CERCLA Response Action at any of the Mine Sites (“Contributed Funds”), the Contributed Funds shall be paid to the trust and used to pay the next Payment Demand(s) following receipt of the Contributed Funds at the Mine Site(s) for which the contribution is designated, otherwise the Contributed Funds shall be used to pay for the next Payment Demand(s) following receipt of the Contributed Funds at each Mine Site based on a pro rata allocation of the Contributed Funds to each Mine Site. For each Mine Site, a Party incurring Future Response Costs shall submit a Payment Demand pursuant to Paragraph 9, and the Contributed Funds allocated to that Mine Site will be used to reimburse the portion of those Future Response Costs that do not exceed the allocated Contributed Funds for the Mine Site.

The Parties shall have no liability for Future Response Costs that are paid for with the Contributed Funds as described in this Paragraph.

12. Effect of Settlement/Contribution.

a. Except as provided in Paragraph 7, and in Sub-Paragraph 12.b with regard to Huntsman and Wells Cargo (as defined in Sub-Paragraph 12.b), nothing in this Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Agreement. Except as provided in Paragraph 7, and in Sub-Paragraph 12.b with regard to Huntsman and Wells Cargo (as defined in Sub-Paragraph 12.b), each of the Parties expressly reserves any and all rights (including, but not limited to, rights pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Mine Sites against any person not a Party hereto. Except as provided in Paragraph 7, nothing in this Agreement diminishes the right of the Parties, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2) and (3), to pursue any such persons to obtain additional Response Costs or Response Actions and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

b. The Parties agree, and by entering this Agreement as a judgment this Court finds, that this Agreement constitutes a judicially approved settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that the Parties are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), or as may be otherwise provided by law, for Covered Matters in this Agreement. Notwithstanding the foregoing, or any other provision of this Agreement, Huntsman and Wells Cargo shall not be precluded from bringing an action or asserting a claim for

contribution under CERCLA §113(f)(1), or as may be otherwise provided by law, against the United States and/or Plaintiffs regarding Covered Matters. For purposes of this Agreement: (1) “Wells Cargo” shall mean Wells Cargo, Inc. and its parent entity (H&L Wells, Ltd.), successors and assigns, but only to the extent such parent entity, successors or assigns are bringing an action or asserting a claim for contribution for Covered Matters that is wholly acquired and derived from Wells Cargo, Inc., and (2) “Huntsman” shall mean Huntsman Advanced Materials LLC, and its parent entity (Huntsman International LLC), successors and assigns, but only to the extent such parent entity, successors or assigns are bringing an action or asserting a claim for contribution for Covered Matters that is wholly acquired and derived from Huntsman Advanced Materials LLC. The Parties shall, with respect to any suit or claim brought by them for matters related to this Agreement, notify the other Parties in writing at the addresses set forth in Paragraph 26 no later than 60 days prior to the initiation of such suit or claim. The Parties also shall, with respect to any suit or claim brought against them for matters related to this Agreement, notify the other Parties in writing at the addresses set forth in Paragraph 26 within 10 days after service of the complaint or claim upon them. In addition, the Parties shall notify the other Parties in writing at the addresses set forth in Paragraph 26 within 10 days after service or receipt of any Motion for Summary Judgment, and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Agreement.

c. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of Response Costs, or other relief relating to the Mine Sites, Plaintiffs shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent

proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants by the United States set forth in Sub-Paragraphs 7.b and 7.c.

d. The Parties acknowledge and agree, and the Court finds, that the Parties' agreement to the allocations of liability for Response Costs, as described in Paragraph 6, represents a good faith compromise of disputed claims, and the compromise represents a fair, reasonable, and equitable resolution of Covered Matters. Any rights the United States or Plaintiffs may have to obtain contribution or otherwise recover costs or damages from other persons are preserved.

13. Compliance with the Anti-Deficiency Act.

All payment obligations by the United States under this Agreement are subject to the availability of appropriated funds applicable for that purpose. No provision of this Agreement shall be interpreted as or constitute a commitment or requirement that the United States obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. §§ 1341-44 and 1511-19, or any other applicable provision of law.

14. Records Retention.

Plaintiffs agree that they shall retain all records related to their performance of Response Actions to address Contamination at or emanating from the Mine Sites for a period of no less than ten calendar years after the date of the last payment made pursuant to this Agreement. Plaintiffs shall make available to the United States any of these non-privileged records promptly upon written request and shall notify the United States at least 90 days prior to their destruction. Plaintiffs preserve their ability to assert that certain cost information is confidential business information and should be treated as such by the United States.

15. Effect of Settlement/Entry of Judgment.

a. This Agreement was negotiated and executed by the Parties in good faith and at arm's length and is a fair and equitable compromise of claims that were vigorously contested. This Agreement and the Parties' performance of any obligations hereunder shall not constitute or be construed as an admission of any liability, including liability for Response Costs, by any Party. Nor shall they constitute or be construed as an admission or denial of any factual allegation or legal assertion set forth in the Complaint, amended counterclaims, or elsewhere, or as an admission of violation of any law, rule, regulation, or policy by any Party.

b. Upon approval and entry of this Agreement by the Court, this Agreement shall constitute a final judgment with respect to the claims resolved by this Agreement.

16. Retention of Jurisdiction.

This Court shall retain jurisdiction both over the subject matter of this Agreement and over the Parties: (a) for the duration of the performance of the terms and provisions of this Agreement; (b) for the purpose of enabling any Party to apply to the Court consistent with this Agreement for such further order, direction, and relief as may be necessary or appropriate to construe this Agreement; (c) to effectuate or enforce compliance with its terms; and (d) to resolve any disputes arising under this Agreement. Notwithstanding the foregoing, any dispute regarding any requirement of any ASAOC entered into by the Parties shall be resolved in accordance with the provisions of that ASAOC, except disputes related to the payment of Future Response Costs as contemplated by this Agreement.

17. No Use As Evidence.



This Agreement shall not be admissible as evidence in any proceeding other than an action brought by a Party to enforce this Agreement or any proceeding where a Party seeks to establish that it is entitled to contribution protection.

18. Governing Law.

This Agreement shall be governed by and construed in accordance with United States federal law.

19. Severability.

If any provision of this Agreement is deemed invalid or unenforceable, the balance of this Agreement shall remain in full force and effect.

20. Headings.

Any Paragraph headings to this Agreement are provided solely as a matter of convenience to the reader and shall not be construed to alter the meaning of any Paragraph or provision of this Agreement.

21. Original Counterparts.

This Agreement may be executed in any number of original counterparts, all of which together shall be deemed to constitute one agreement. The execution of one counterpart by any Party shall have the same force and effect as if that Party had signed all other counterparts. Signatures transmitted by email or facsimile shall have the same force and effect as original signatures.

22. Integration Provision.

This Agreement constitutes the entire Agreement between the Parties with respect to the subject matter addressed herein. All prior drafts or writings and all prior contracts, agreements, understandings, discussions or negotiations, oral or written, relating to the subject matter hereof

are specifically and fully superseded by this Agreement and may not be used to vary or contest the terms of this Agreement. There are no warranties or representations, oral or written, relating to the subject matter hereof that are not fully expressed or provided for herein.

23. Modification.

This Agreement shall not be modified or amended except by mutual written consent of the Parties and subsequent Court approval.

24. Successors and Assigns.

This Agreement shall be binding on any successors and assigns of the Parties. Any change of ownership, corporate, or other legal status of any Party to this Agreement shall in no way alter the obligations of any Party under this Agreement. Plaintiffs shall provide written notice to the United States, at the address specified in Paragraph 26, within 45 days after the effective date of any material change in ownership, corporate, or other legal status.

25. Non-Parties to this Agreement.

Except as provided in Paragraph 7, nothing in this Agreement shall constitute or be construed as a waiver or release of, or covenant not to sue for, any claim or cause of action, in law or in equity, whether known or unknown, which Plaintiffs or the United States may have against any person or entity that is not a Party to this Agreement.

26. Notices.

All notices and written communications pertaining to this Agreement shall be sent to the Parties at the addresses specified in this Paragraph.

a. To the United States:

i. For notices sent via the United States Postal Service:

Chief, Environmental Defense Section  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611

Chief, Environmental Enforcement Section  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611

USDA Forest Service  
CERCLA Manager  
Caribou/Targhee National Forest  
4350 Cliffs Dr.  
Pocatello, ID 83204

Bureau of Land Management  
Pocatello Field Office  
Minerals Branch Chief  
4350 Cliffs Drive  
Pocatello, ID 83204

ii. For notices sent via any private delivery service:

Chief, Environmental Defense Section  
U.S. Department of Justice  
601 D Street, NW, Suite 8000  
Washington, D.C. 20004

Chief, Environmental Enforcement Section  
U.S. Department of Justice  
601 D. Street, NW  
Washington, D.C. 20004

USDA Forest Service  
CERCLA Manager  
Caribou/Targhee National Forest  
4350 Cliffs Dr.  
Pocatello, ID 83204

Bureau of Land Management  
Pocatello Field Office  
Minerals Branch Chief  
4350 Cliffs Drive  
Pocatello, ID 83204

b. To Plaintiffs:

Mitchell J. Hart, P.E.  
Nu-West Industries, Inc.  
3010 Conda Road  
Soda Springs, Idaho 83276  
E-mail: mhart@agrium.com

27. Lodging and Opportunity for Public Comment.

This Consent Decree shall be lodged with the Court for a period of not less than 30 days for public notice and comment. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Plaintiffs consent to the entry of this Consent Decree without further notice. If for any reason this Court should decline to approve this Consent Decree in the form presented, this Agreement is voidable at the sole discretion of any Party, and the terms of the Agreement may not be used as evidence in any litigation between the Parties.

28. Representative Authority.

Each signatory to this Agreement hereby certifies that he/she has been duly authorized to enter into this Agreement by the Party on whose behalf the signatory indicates he/she is signing.

FOR NU-WEST MINING, INC.:

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

FOR NU-WEST INDUSTRIES, INC.:

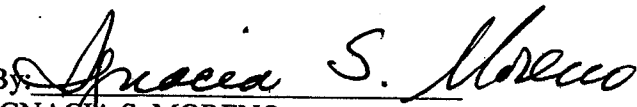
Date: \_\_\_\_\_

Name: \_\_\_\_\_

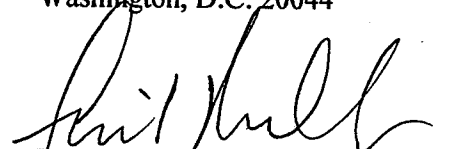
Title: \_\_\_\_\_

FOR THE UNITED STATES OF AMERICA:

Date: 8-10-12

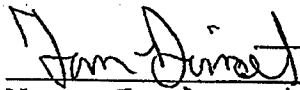
By:   
IGNACIA S. MORENO  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice  
Washington, D.C. 20044

Date: 12-18-12

  
FREDERICK S. PHILLIPS, Attorney  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
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FOR NU-WEST MINING, INC.:

Date: JULY 31, 2012



Name: Tom Diment  
Title: PRESIDENT, NUWEST

FOR NU-WEST INDUSTRIES, INC.:

Date: July 30, 2012



Name: JON GOODE  
Title: VICE PRESIDENT

FOR THE UNITED STATES OF AMERICA:

Date: \_\_\_\_\_

By: \_\_\_\_\_  
IGNACIA S. MORENO  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice  
Washington, D.C. 20044

Date: \_\_\_\_\_

\_\_\_\_\_  
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EAST MILL DUMP SUB-OPERABLE  
UNIT REMEDIAL DESIGN/REMEDIAL  
ACTION  
CONSENT DECREE

APPENDIX B

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE REGION 4  
IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY  
SHOSHONE-BANNOCK TRIBES

IN THE MATTER OF: )  
)  
)  
North Maybe Mine Site )  
Caribou-Targhee National Forest )  
Idaho )  
)  
)  
Nu-West Mining, Inc. and )  
Nu-West Industries, Inc. )  
)  
Respondents )  
)  
)  
Proceeding Under Sections 104, 107, and 122 )  
of the Comprehensive Environmental )  
Response, Compensation, and Liability Act, )  
42 U.S.C. §§ 9604, 9607, and 9622, and )  
Idaho Code §§ 39-4413 and 39-108 )

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**ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON  
CONSENT/CONSENT ORDER FOR PERFORMANCE OF REMEDIAL  
INVESTIGATIONS AND FEASIBILITY STUDIES FOR THE EAST MILL OPERABLE  
UNIT OF NORTH MAYBE MINE IN SOUTHEASTERN IDAHO**



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## I. INTRODUCTION AND STATEMENT OF OBJECTIVES

- 1.1 This Administrative Settlement Agreement and Order on Consent / Consent Order (“Settlement Agreement”) is entered into by the Parties, which include Nu-West Mining Inc. and Nu-West Industries, Inc. (collectively “Respondents”), the United States Department of Agriculture, Forest Service (“Forest Service”), the Idaho Department of Environmental Quality (“IDEQ”), and the Shoshone-Bannock Tribes (the “Tribes”), for performance by Respondents of a remedial investigation and focused feasibility study (“RI/FFS”) Report for the East Mill Dump Sub-Operable Unit, a remedial investigation and feasibility study (“RI/FS”) for the Open Pit Sub-Operable Unit, and an RI/FS for the Creeks Sub-Operable Unit, which are all located on the East Mill Operable Unit of the North Maybe Mine Site (the “Site”), as further defined in this Settlement Agreement. The performance of these activities, as provided in this Settlement Agreement, is pursuant to sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“CERCLA”), 42 U.S.C. §§ 9604, 9607, and 9622, and 40 C.F.R. § 300.430 of the National Oil and Hazardous Substance Pollution Contingency Plan, 40 C.F.R. Part 300 (“NCP”).
- 1.2 Huntsman Advanced Materials LLC (“Huntsman”) and Wells Cargo, Inc. (“Wells Cargo”) are performing an RI/FS for the West Ridge Operable Unit of the Site under a unilateral administrative order (“UAO”) issued by the Forest Service.

- 1.3 In 2004 Respondents, the Forest Service, IDEQ, and the U.S. Environmental Protection Agency (“EPA”) entered into an Administrative Order on Consent / Consent Order (“AOC/CO”) for the North Maybe Phosphate Mine. Respondents submitted a Site Investigation (“SI”) for the Site under that AOC/CO and submitted a Draft Engineering Evaluation / Cost Analysis (“EE/CA”) under that AOC/CO.
- 1.4 Respondents, with Forest Service approval, completed a Time Critical Removal Action in 2008 to reconstruct sediment ponds at the toe of the East Mill Dump at the Site.
- 1.5 The Forest Service has conducted RI Work on the East Mill Operable Unit of the Site collecting data, as well as utilizing the data collected by Respondents under the 2004 AOC/CO for the Site.
- 1.6 This Settlement Agreement provides for the performance by Respondents of an RI/FFS Report for the East Mill Dump Sub-Operable Unit, an RI/FS for the Open Pit Sub-Operable Unit, and an RI/FS for the Creeks Sub-Operable Unit, which are all located on the East Mill Operable Unit of the Site. The Site is primarily located on lands under the jurisdiction, custody, and control of the Forest Service within the established boundaries of the Caribou-Targhee National Forest located in the State of Idaho. In entering into this Settlement Agreement, the objectives of the Parties are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or

contaminants at or from the Site, by conducting remedial investigations; and (b) to determine and evaluate alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting feasibility studies. The Work required for performance of this Settlement Agreement is specified in Statements of Work (“SOWs”) attached, and incorporated by reference, as Appendices A, B, and C to this Settlement Agreement, and is governed by Section X of this Settlement Agreement (“Work to be Performed”). This Settlement Agreement also provides for the payment of certain response costs incurred by the United States, IDEQ, the Tribes, and Respondents at or in connection with the Site.

1.7 Respondents and the United States have reached a mutual understanding of the essential terms in a Consent Decree and Judgment (“Consent Decree”) to settle *Nu-West Mining Inc. v. United States of America*, Case No. 09-431-E-BLW, a case in the United States District Court for the District of Idaho. If a Consent Decree is entered by the Court in that case, as between the United States, including the Forest Service, and Respondents, the terms of the Consent Decree shall control in conflicts between the terms of the Consent Decree and this Settlement Agreement. This Settlement Agreement shall be effective whether or not the Court approves the Consent Decree.

1.8 The Assistant Attorney General for the Environment and Natural Resources Division of the United States Department of Justice, or designee, has concurred with this Settlement

Agreement, in accordance with the requirements of Section 4 of Executive Order 12580 (52 Fed. Reg. 2926 (January 23, 1987), 3 C.F.R., 1987 Compilation, p.193).

## II. JURISDICTION AND GENERAL PROVISIONS

2.1 This Settlement Agreement is entered into by the Forest Service under the authority vested in the President of the United States by Sections 104, 107, and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607, and 9622. The authority was delegated to the Secretary of the Department of Agriculture (the "Secretary") by Executive Order 12580, 52 Fed. Reg. 2926 (January 23, 1987), 3 C.F.R., 1987 Compilation, p. 193. The Secretary's authority was further delegated to the Chief of the Forest Service (the "Chief") by 7 C.F.R. § 2.60(a)(39). The Chief's authority was re-delegated to Regional Foresters, pursuant to the Forest Service Manual 2164.04c, 2.1, effective November 10, 1994. This Settlement Agreement is entered into by IDEQ pursuant to Idaho's Environmental Protection & Health Act, Idaho Code §§ 39-101 to 39-130, the Hazardous Waste Management Act of 1983, Idaho Code §§ 39-4401 to 39-4432, Idaho's Water Quality Act, Idaho Code §§ 39-3601, et seq., and the rules and standards promulgated pursuant thereto. This Settlement Agreement is entered into by the Tribes pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

- 2.2 The Forest Service is the “Lead Agency” for this Site. IDEQ, the Tribes, and the U.S. Fish and Wildlife Service (“FWS”) of the United States Department of the Interior (“DOI”), are “Support Agencies” for this Site.
- 2.3 The Parties have negotiated this Settlement Agreement in good faith and agree that the actions undertaken by Respondents in accordance with this Settlement Agreement do not constitute an admission of any liability. Without admitting any liability, Respondents agree to comply with and be bound by the terms and conditions of this Settlement Agreement without the issuance of a Notice of Violation or the holding of a compliance conference under applicable Idaho law.
- 2.4 In any action to enforce the terms of this Settlement Agreement, the Parties agree not to contest its validity or the authority and jurisdiction of the United States to issue and enforce this Settlement Agreement, and the Parties agree to comply with and be bound by the terms and conditions of this Settlement Agreement. In addition, the Parties agree not to contest the authority and jurisdiction of the United States, IDEQ, and the Tribes, respectively, to enforce the provisions in Section XXIX (Reimbursement of FWS Response Costs), Section XXVII (Reimbursement of State Response Costs), and Section XXVIII (Reimbursement of Tribes’ Response Costs) of this Settlement Agreement, as applicable to those entities. As a signatory and Support Agency under this Settlement Agreement, the Tribes have authority to enforce the provisions in Section XXVIII (Reimbursement of Tribes’ Response Costs) in accordance with the terms of the

Settlement Agreement but do not have any authority independent of the Forest Service or the United States to enforce any other terms of this Settlement Agreement or related work plans or requirements. By signing this Settlement Agreement, however, Respondents do not concede or waive their rights to object to any authority the United States, Tribes, or IDEQ may have or assert to issue, take, or enforce any other order or action relating to this Site.

### III. PARTIES BOUND

- 3.1 This Settlement Agreement applies to and is binding upon the Forest Service, IDEQ, and the Tribes, and upon Respondents and their successors and assigns. Any change in ownership or corporate status of a Respondent, including, but not limited to, any transfer of assets or real or personal property, shall not alter such Respondent's responsibilities under this Settlement Agreement. The signatories to the Settlement Agreement certify that they are authorized to execute and legally bind the Parties that they represent to this Settlement Agreement. Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement. In the event of the insolvency or other failure of one Respondent to implement the requirements of this Settlement Agreement, the remaining Respondent shall complete all such requirements.
- 3.2 Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondents shall be responsible for any noncompliance with this Settlement Agreement.



#### IV. DEFINITIONS

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

“Agency” shall mean the Forest Service and any Support Agency.

“Allocated Funds” shall mean the \$100,000 allocated to pay Response Costs in Section XXVI of this Settlement Agreement from the Washington Group International Bankruptcy Recovery Special Account and any additional amount the Consent Decree may allocate to the Site.

“BLM” shall mean the United States Department of the Interior, Bureau of Land Management.

“Consent Decree” shall mean the Consent Decree and Judgment regarding cost allocation and reimbursement for the investigation and response at the North Maybe Mine, South Maybe Canyon Mine, Champ Mine & Extension, and Mountain Fuel Mine Sites negotiated to settle *Nu-West Mining Inc. v. United States of America*, Case No. 09-431-E-BLW, a case in the United States District Court for the District of Idaho. Respondents and the United States have reached a mutual understanding of the essential terms of the Consent Decree.

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

“Creeks Sub-Operable Unit” shall mean 1) the areal extent of contamination from the East Mill Operable Unit that is not located within or is not otherwise addressed by the definitions of the East Mill Dump Sub-Operable Unit and the Open Pit Sub-Operable Unit in this Settlement Agreement. The Creeks Sub-Operable Unit includes, but may not be limited to, all or portions of Sections 9, 10, 15, 16, 21, 22, 27, 28, 33, and 34 of Township 7 South, Range 44 East and all or portions of Section 3 of Township 8 South, Range 44 East, Boise Meridian.

“Day” or “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.

“Deliverable” shall mean the documents identified in this Settlement Agreement that Respondents must submit pursuant to this Settlement Agreement, and any additional documents identified in writing by the Lead Agency under Section XVII (Additional Work) of this Settlement Agreement. All Deliverables under this Settlement Agreement are subject to review, comment, and approval.

“DOI” shall mean the United States Department of the Interior.

“East Mill Dump Sub-Operable Unit” shall mean 1) the area encompassing the extent of the East Mill Dump within the East Mill Operable Unit of the Site, and 2) all suitable areas in very close proximity to the Site necessary for implementation of response actions. The East Mill Dump Sub-Operable Unit is located within Sections 27, 28, 33 and 34 of Township 7 South, Range 44 East, Boise Meridian.

“East Mill Operable Unit” shall mean all portions of the Site not included in the West Ridge Operable Unit. The East Mill Operable Unit includes and is subdivided into 1) the Open Pit Sub-Operable Unit, 2) the East Mill Dump Sub-Operable Unit, and 3) the Creeks Sub-Operable Unit. The East Mill Operable Unit includes, but may not be limited to, all or portions of Sections 9, 10, 15, 16, 21, 22, 27, 28, 33 and 34 of Township 7 South, Range 44 East, and Sections 3, 4, and 10 of Township 8 South, Range 44 East, Boise Meridian. Before this Settlement Agreement the Forest Service conducted remedial investigation work for the East Mill Operable Unit.

“Effective Date” shall mean the date this Settlement Agreement has been executed by all of the Parties.

“EPA” shall mean the United States Environmental Protection Agency.

“EPHA” shall mean the Idaho Environmental Protection & Health Act, Idaho Code §§ 39-101 to 39-130.

"Forest Service" shall mean the United States Department of Agriculture, Forest Service, and other USDA agencies.

“FWS” shall mean the United States Department of the Interior, U.S. Fish and Wildlife Service.

“HWMA” shall mean the Hazardous Waste Management Act of 1983, Idaho Code §§ 39-4401 to 39-4432.

“Idaho’s Water Quality Act” shall mean Idaho Code §§ 39-3601 et seq.

“IDEQ” shall mean the Idaho Department of Environmental Quality.

“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.

“Lead Agency” shall have the meaning as stated in the NCP at 40 C.F.R. § 300.5.

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

“National Forest System land” or “NFS land” shall mean those lands over which the Forest Service exercises jurisdiction, custody and control on behalf of the United States.

“Open Pit Sub-Operable Unit” shall mean 1) the area encompassing the open pit on the Site; and 2) the areal extent of contamination from the open pit. The Open Pit Sub-Operable Unit includes, but may not be limited to, Sections 28, 33 and 34 of Township 7 South, Range 44 East, and Sections 3, 4 and 10 of Township 8 South, Range 44 East, Boise Meridian.

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

“Parties” shall mean the Forest Service, IDEQ, the Shoshone-Bannock Tribes, and Respondents.

“Payment Notice” shall mean the written notice the Forest Service provides to Respondents of Forest Service and USDA Response Costs paid from Allocated Funds.

“Payment Demand” shall mean Respondents’ written demand to the Forest Service for payment of Response Costs from Allocated Funds and the Forest Service’s written demand to Respondents for certain Response Costs attributable to Work Takeover.

“RCRA” shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6922. (also known as the Resource Conservation and Recovery Act).

“Respondents” shall mean Nu-West Mining, Inc. and Nu-West Industries, Inc.

“Response Costs” shall mean all direct and indirect costs incurred by the United States, IDEQ, the Tribes, and Respondents after January 1, 2012, related to this Settlement Agreement and the Work, including, but not limited to, costs incurred in preparing this Settlement Agreement, reviewing of Deliverables, overseeing implementation of the Work, preparing the Proposed Plan and Record of Decision 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 to obtain Site access (including, but not limited to, costs and attorney’s fees and any monies paid to secure access, including, but not limited to, the amount of just compensation), emergency response and work takeover. With respect to IDEQ, the Tribes, and FWS, Response Costs also include IDEQ’s, the Tribes’ and FWS’s costs, as otherwise described in this definition, in their roles as Support Agencies for the RI/FS for the West Ridge Operable Unit. These West Ridge Operable Unit Response Costs also include \$11,288.95 incurred by IDEQ before January 1, 2012. IDEQ, the Tribes, and FWS will document West Ridge Operable Unit Response Costs separately for other Response Costs under this Settlement Agreement.

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

"Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent/Consent Order, all attached appendices, and all documents incorporated by reference into this Settlement Agreement including, without limitation, Forest Service-approved Deliverables. Forest Service-approved Deliverables (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by the Forest Service. In the event of conflict between this Settlement Agreement and any appendix or Deliverable, this Settlement Agreement shall control.

"Site" or "the North Maybe Mine Site" shall mean: 1) the property at the North Maybe Mine where mining activities took place, including mine pit development, ore extraction, stockpiling and loading for shipment, and waste disposal, including portions of Sections 27, 28, 33, and 34 of Township 7 South, Range 44 East, and Sections 3, 4, 9, and 10 of Township 8 South, Range 44 East, Boise Meridian; a map of which is attached as Appendix D to this Settlement Agreement; 2) the areal extent of contamination emanating from or in connection with the North Maybe Mine mining activities; and 3) all suitable areas located in very close proximity to the contamination necessary for the implementation of response actions, including but not limited to the area within the Dry Valley formerly known as the Anderson Ranch, all of which is located approximately 16 miles east of Soda Springs in Caribou County, Idaho.

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

"Statements of Work" or "SOWs" shall mean the statements of work for implementation of the Work, as set forth in Appendices A, B, and C to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.

“Support Agency” means an agency that provides a support agency coordinator or project manager to furnish necessary data to the Lead Agency, and/or that reviews response data and documents, and/or provides other assistance requested by the Remedial Project Manager, as provided in the NCP.

“Tribes” shall mean the Shoshone-Bannock Tribes residing on the Fort Hall Reservation near Pocatello, Idaho.

“United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including the Forest Service.

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

“Waste Material” shall mean (a) any “hazardous substance” under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any “solid waste” under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); (d) any substances defined under Idaho Code § 39-7203(3); (e) any “pollutants” as defined by Idaho Administrative Procedures Act (IDAPA) § 58.01.02.003.87; (f) any “deleterious materials” as defined by IDAPA § 58.01.02.003.22; and (g) any “hazardous material” as defined by IDAPA § 58.01.02.003.48.

“West Ridge Operable Unit” shall mean 1) that portion of the Site which lies to the west of the North Maybe Mine pit, which is generally recognized as comprising the West Mill Dump (Dump 2 and Dump 4), Dump 5 North and South, Dump F, the El Paso Dump, Big Draw Dump, Dump 6, and Dumps 7 and 8, located within Sections 28 and 33, Township 7 South, Range 44 East; and Sections 4, 9, and 10, Township 8 South, Range 44 East, Boise Meridian in Caribou County in southeast Idaho, 2) the areal extent of

contamination from the area described in this definition, and 3) all suitable areas in close proximity to the Site contamination necessary for response action implementation.

“Work” shall mean all activities Respondents are required to perform under this Settlement Agreement, except those required by Section XIV (Record Retention).

## V. FINDINGS OF FACT

5.1 Findings of Fact. The Forest Service and IDEQ make the following Findings of Fact:

5.1.1 The North Maybe Phosphate Mine is located in Caribou County, Idaho, primarily on National Forest System (“NFS”) land. The Forest Service exercises jurisdiction, custody and control over NFS land on behalf of the United States. The North Maybe Mine is located on Federal Leases IDI-04 and IDI-8289, held by Nu-West Mining, Inc. The leases and the area of mining activity at the North Maybe Mine are located in Sections, 27, 28, 33, and 34 of Township 7 South, Range 44 East, and Sections 3, 4, 9, and 10 of Township 8 South, Range 44 East, Boise Meridian in Caribou County, Idaho. On behalf of the United States, the BLM is responsible for issuing and administering leases for mineral extraction on those lands. The Site includes private lands since some overburden disposal took place on land that is currently owned by Nu-West Industries, Inc., and the areal extent of contamination from the mine and overburden disposal areas extends to privately-owned lands. Both the mine and overburden disposal areas are located within an area where the Tribes assert rights to hunt, fish, and gather pursuant to the Fort Bridger Treaty of 1868. As related to the foregoing statement concerning



the Tribes’ asserted rights, the State of Idaho reserves its rights as set forth in the July 17, 2000, Memorandum of Understanding Concerning Selenium Contamination in Southeastern Idaho, notwithstanding the expiration of the same.

5.1.2 BLM issued Lease I-04 to Western Fertilizer Association in 1950. Lease I-04 was assigned to Central Farmers Fertilizer Company in 1959, El Paso Natural Gas Products Company (name changed to El Paso Products Company in 1966) (“El Paso”) and El Paso Products Service Company in 1964 and 1970, respectively, and Agricultural Products Corporation (“APC”) in 1972. APC merged into Beker Industries Corporation (“Beker”) in 1974.

5.1.3 In December 1978, Beker assigned a 50% interest in Lease I-04 to Western Cooperative Fertilizers (U.S.), Inc. (“WCFUS”), and at the same time WCFUS and Beker each assigned their 50% shares in Lease I-04 to the newly-created Conda Partnership.

5.1.4. BLM issued Lease IDI-8289 to the Conda Partnership in 1983. Some overburden from mining on Lease I-04 was deposited on lands encompassed under Lease IDI-8289.

5.1.5 In 1987, Nu-West Industries, Inc. acquired Beker's 50% interest in the Conda Partnership. In 1992, Nu-West Industries, Inc. acquired the stock of WCFUS, which thereafter changed its name to Nu-West Mining, Inc.

5.1.6 The Conda Partnership assigned Lease I-04 and Lease I-8289 to Nu-West Mining, Inc. in 1995. Nu-West Mining, Inc. currently holds Lease I-04 and I-8289, and special use permits associated with the North Maybe Mine.

5.1.7 El Paso Products Company, Wells Cargo, Inc. (El Paso's mining contractor), APC, Beker, and the Conda Partnership conducted extensive mine-related operations at the North Maybe Mine on NFS land covered by the federal phosphate leases described in this Section, and on NFS land not included in the leases, under special use permits issued and administered by the Forest Service.

5.1.8 Predecessors of Washington Group International, Inc. ("WGI") conducted mining at the North Maybe Mine on behalf of APC, Beker and the Conda Partnership. WGI resolved its liability at the Site through a 2004 Settlement Agreement with the United States.

5.1.9 The mining operations at North Maybe Mine placed overburden in a waste dump at the head of Mill Creek called the East Mill Dump. The shale portion of the

overburden contains contaminants which are hazardous substances, including selenium.

5.1.10 Selenium and other hazardous substances are present in elevated concentrations in soil, vegetation, and water on or within the East Mill Dump, the Mine Pit, and down gradient from the East Mill Dump, including Mill Creek and groundwater.

## VI. CONCLUSIONS OF LAW

6.1 Subject to Paragraphs 7.1 and 7.2 of this Settlement Agreement, and based on the Findings of Fact set forth above in Section V, the Forest Service and IDEQ make the following determinations:

6.1.1 The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

6.1.2 The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substance(s)" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and are "hazardous materials" and/or "deleterious materials" subject to the provisions of IDAPA 58.01.02.800, or are otherwise "pollutants" as defined by IDAPA 58.01.02.010.71.

6.1.3 There has been an actual or threatened "release" as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22) of a hazardous substance from the facility.

- 6.1.4 There has been an actual discharge, as defined in IDAPA 58.01.02.003.25, of one or more pollutants or hazardous or deleterious materials from the facility to waters of the State of Idaho.
- 6.1.5 Respondents are “persons” as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21) and IDAPA 58.01.02.003.83.
- 6.1.6 Each 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 actions and for response costs incurred and to be incurred at the Site.
- 6.1.7 Respondents are liable to the State of Idaho under IDAPA 58.01.02.080.01.a-b as a result of discharge to waters of the State of pollutants and/or hazardous and deleterious materials.
- 6.1.8 The conditions present at the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment.
- 6.1.9 The Work approved under this Settlement Agreement is necessary to protect public health, welfare or the environment, will be consistent with CERCLA, the NCP, EPHA and HWMA, will expedite effective response actions, and is in the public interest.
- 6.1.10 Based on information currently available, the Forest Service has determined, for purposes of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), that Respondents are qualified to properly and promptly perform the Work required by this Settlement Agreement.

VII. COLLATERAL USE OF THIS SETTLEMENT AGREEMENT

- 7.1 Except as set forth in Paragraph 2.4, nothing in this Settlement Agreement shall constitute or be construed as an admission of jurisdiction, liability, fact, or legal conclusion by any of the Parties.
- 7.2 None of the provisions of this Settlement Agreement shall be admissible in evidence in any proceeding, other than in a proceeding to enforce this Settlement Agreement or the Consent Decree, or any judgment related to them, or for the purpose of demonstrating the consistency of the actions taken under this Settlement Agreement with the NCP and CERCLA, and/or any applicable provisions of the EPHA, HWMA, or Idaho's Water Quality Act.

VIII. SETTLEMENT AGREEMENT AND ORDER

- 8.1 Based upon the foregoing provisions of this Settlement Agreement, it is hereby ordered and agreed that Respondents shall comply with the provisions of this Settlement Agreement, including but not limited to, all appendices to this Settlement Agreement and documents incorporated by reference into this Settlement Agreement, and perform the actions required in this Settlement Agreement.

IX. DESIGNATION OF REMEDIAL PROJECT MANAGER,  
PROJECT COORDINATOR, AND CONTRACTORS

- 9.1 The Forest Service has been designated as the Lead Agency for the Site. The Forest Service will coordinate with the Support Agencies. The Forest Service Remedial Project Manager for the Site is:

Brian Deeken  
USDA Forest Service  
Caribou-Targhee National Forest  
4350 Cliffs Drive  
Pocatello, ID 83204  
Phone: (208) 236-7516  
Fax: (208) 236-7375  
E-mail: [btdeeken@fs.fed.us](mailto:btdeeken@fs.fed.us)

Respondents have designated as the Project Coordinator for the Site:

Mitchell J. Hart, P.E.  
Nu West Industries, Inc.  
3010 Conda Road  
Soda Springs, Idaho 83276  
Phone: (208) 547-3935 x13 (Dry Valley Office)  
Phone: (208) 547-1800 (Soda Springs Office)  
Cell: (303) 883-1184  
E-mail: [mitchell.hart@agrium.com](mailto:mitchell.hart@agrium.com)

- 9.2 The Remedial Project Manager and the Project Coordinator shall be responsible for overseeing implementation of the Work and/or activities required at the Site under this Settlement Agreement. The Forest Service may change its Remedial Project Manager and Respondents may change their Project Coordinator and shall notify each other in writing at least five (5) days prior to any such change.

9.3 Copies of Deliverables and other communications shall be sent to each of the following persons in the manner described in Paragraph 10.7 of this Settlement Agreement:

9.3.1 For the Forest Service: the Remedial Project Manager designated in Paragraph 9.1, the Site Record, as indicated below, and any other persons designated by the Remedial Project Manager in writing to Respondents.

Caribou-Targhee National Forest  
Soda Springs Ranger District  
Attn: East Mill Operable Unit of North Maybe Site Record  
410 E. Hooper St.  
Soda Springs, ID 83276

For the IDEQ:

Douglas Tanner  
Regional Environmental Manager  
Idaho Department of Environmental Quality  
444 Hospital Way, Suite 300  
Pocatello, ID 83201  
Phone: (208) 236-6160  
Fax: (208) 236-6168  
E-mail: [douglas.tanner@deq.idaho.gov](mailto:douglas.tanner@deq.idaho.gov)

For FWS:

Sandi Fisher  
Contaminants Biologist  
U.S. Fish and Wildlife Service  
Eastern Idaho Field Office  
4425 Burley Drive, Suite A  
Chubbuck, Idaho 83202  
Phone: 208-237-6975 x 102  
Fax: 208-237-8213  
Email: [Sandi\\_Fisher@fws.gov](mailto:Sandi_Fisher@fws.gov)

For the Tribes:

Kelly Wright  
Environmental Waste Management Program  
Shoshone-Bannock Tribes  
PO Box 306  
Fort Hall, ID 83203  
Phone: (208) 478-3903  
Fax: (208) 478-3909  
E-mail: [kwright@shoshonebannocktribes.com](mailto:kwright@shoshonebannocktribes.com)

Susan Hanson  
11458 Philbin Rd.  
Pocatello, Idaho 83202  
E-mail: [susanh@ida.net](mailto:susanh@ida.net)

For Respondents: the Project Coordinator designated in Paragraph 9.1.

- 9.4 Work to be performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel of Respondents or their consultants with experience in CERCLA investigations and response actions. Respondents have selected, and as of the Effective Date the Remedial Project Manager approves, AECOM as Respondents' contractor acceptable to the Forest Service. AECOM's contact information follows:

Julie Lincoln  
Project Manager  
AECOM  
10461 Old Placerville Road #170  
Sacramento, CA 95827  
Phone (Office): 916-361-6400  
Phone (Direct): 916-361-6420  
Phone (Cell): 916-335-8260  
Fax: 916-361-6401  
E-mail: [julie.lincoln@aecom.com](mailto:julie.lincoln@aecom.com)



- 9.5 If Respondents propose to change their contractor(s) or subcontractor(s), Respondents shall notify the Remedial Project Manager and must obtain an authorization to proceed from the Remedial Project Manager before the new contractor(s) or subcontractor(s) perform, direct, or supervise any Work under this Settlement Agreement. The Forest Service retains the right to disapprove of any of the contractors and/or subcontractors retained by Respondents, or of Respondents' choice of themselves to do the Work.
- 9.6 If the Remedial Project Manager disapproves a contractor or subcontractor, the Remedial Project Manager will notify Respondents in writing. Respondents shall submit to the Remedial Project Manager a list of contractors and/or subcontractors, including the qualifications of each that would be acceptable to Respondents within 30 days after receipt of the Remedial Project Manager's disapproval of a contractor. The Remedial Project Manager will provide written notice of the names of any contractor(s) and/or subcontractor(s) that it disapproves and an authorization to proceed with respect to any of the other contractors and/or subcontractors. Respondents may select any contractor and/or subcontractor from that list that is not disapproved and shall notify the Remedial Project Manager of the name of the contractor and or subcontractor selected within 21 days after the Remedial Project Manager's authorization to proceed.
- 9.7 The Remedial Project Manager shall be responsible for overseeing Respondents' implementation of this Settlement Agreement. The Remedial Project Manager shall have the authority vested in a Remedial Project Manager by the NCP, including the authority

to halt, conduct, or direct any Work required by this Settlement Agreement. Absence of the Remedial Project Manager from the Site shall not be cause for stoppage of work unless specifically directed by the Remedial Project Manager.

#### X. WORK TO BE PERFORMED

- 10.1 Respondents agree to perform an RI/ FFS Report for the East Mill Dump Sub-Operable Unit and complete an RI/FS for the Open Pit Sub-Operable Unit and an RI/FS for the Creeks Sub-Operable Unit on the East Mill Operable Unit of the Site, consistent with this Settlement Agreement and attached SOWs. Work under these projects will be coordinated and phased as provided in the SOWs. Investigations and related activities have already been performed that may be relevant in completing the Work under this Settlement Agreement and the SOWs. The Parties intend that relevant data from previous investigations and related activities will be incorporated in the Work. Portions of the Site may become operating facilities subject to other regulatory programs.
- 10.2 The general objective of each RI at the Site is to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, and to assess risk to human health and the environment. The general objective of each FS at the Site is to identify and evaluate (based on treatability testing, where appropriate) alternatives for remedial action designed to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances

from the Site. The alternatives evaluated shall include, but shall not be limited to the range of alternatives described in the NCP, and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430(e) of the NCP, 40 C.F.R. § 300.430(e). FS Reports as amended, and the administrative record shall provide the basis for the Proposed Plan under CERCLA Sections 113(k) and 117(a), 42 U.S.C. §§ 9613(k) and 9617(a), by the Forest Service, and shall document the development and analysis of remedial alternatives.

- 10.3 Respondents shall conduct activities and submit Deliverables as provided by this Settlement Agreement and the SOWs for the development of each RI and FS, and in accordance with the standards, specifications, and other requirements of each Work Plan, Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP) as initially approved or modified, and as may be amended by the Remedial Project Manager, pursuant to this Settlement Agreement. All such Work shall be conducted under the direction and supervision of qualified personnel with experience in CERCLA response actions in accordance with CERCLA, the NCP, and EPA guidance, including, but not limited to, the “Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA” (OSWER Directive #9355.3-01, October 1988), “Guidance for Data Useability in Risk Assessment” (OSWER Directive

#9285.7-09A, April 1992) guidance referenced therein, and guidance referenced in the SOW, as may be amended or modified by the Forest Service. In addition, all Work conducted shall be done in accordance with any applicable provisions of the EPHA, HWMA, and Idaho's Water Quality Act.

10.4 For the purposes of this Settlement Agreement, Deliverables shall include, but are not limited to, the Draft and Final RI/FS Work Plan Addenda, Draft and Final RI/FFS Report, the Draft and Final RI Reports, the Draft and Final FS Reports, and all other documents required by this Settlement Agreement and the SOWs. These Deliverables are described more fully below:

10.4.1 RI/FS Work Plan Addenda. The Forest Service approved an RI/FS Work Plan (including a FSP, and QAPP) that satisfies the SOW requirement for a Final RI/FS Work Plan, which the Respondents shall implement. If additional or modified Work is required under this Settlement Agreement, Respondents shall modify the RI/FS Work Plan, and the FSP, HASP, and QAPP accordingly through addenda.

10.4.2 FSP, QAPP, and HASP. The Respondents shall prepare a HASP covering all work under this Settlement Agreement. Respondents shall implement the approved QAPP and FSP covering all Work under this Settlement Agreement. These plans shall be developed and modified, as appropriate, in accordance with the NCP and any applicable EPA guidance and guidelines listed in the SOW and/or the FSP, QAPP, and HASP, including but not limited to EPA's current

Standard Operating Safety Guidelines (EPA Publication 9285.1-03, PB92 963414, June 1992) and US EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA/540/ R-10/011, 2010), and “EPA Contract Laboratory Program Statement of Work for Inorganic Analysis” (March 2004). In addition, the HASP shall comply with all applicable occupational safety and health regulations. Also, the FSP and QAPP will include procedures for collecting, transporting, and analyzing all samples collected at the Site, as well as procedures for Quality Assurance/Quality Control (“QA/QC”). These procedures shall be consistent with 40 C.F.R. § 300.430(b)(8) and EPA guidance and guidelines listed in the SOW, FSP and QAPP, including “EPA Guidance for Quality Assurance Project Plans (QA/G-5)” (EPA/600/R-02/009, December 2002, or subsequently issued guidance), and “EPA Requirements for Quality Assurance Project Plans (QA/R-5)” (EPA 8240/B-01/003, March 2001, or subsequently issued guidance). The FSP and QAPP shall identify laboratories to be used during performance of the Work of this Settlement Agreement. All samples analyzed shall be analyzed by a laboratory that participates in a QA/QC program equivalent to that specified in the guidance documents listed in the SOW. All samples collected and analyzed and other Work performed under the FSP and QAPP shall be performed consistent with the QAPP approved by the Forest Service and appropriate EPA guidance.

10.4.3 RI Reports. Respondents shall submit for review and approval RI Reports consistent with the SOWs, RI/FS Work Plan (including an RI/FS Work Plan Addenda), FSP, and QAPP. The RI Reports shall include the results of the baseline human health and ecological risk assessments.

10.4.4 FS Reports (including RI/FFS Report for the East Mill Dump Sub-Operable Unit). Respondents shall submit FS Reports which reflect data collected or approved for use during site characterization and the Site-specific and/or Operable Unit Remedial Action Objectives (“RAOs”). The FS Reports shall be in accordance with the SOWs and the RI/FS Work Plan, and any RI/FS Work Plan Addenda. The FS Reports and the associated administrative record files shall provide the basis for Proposed Plans by the Forest Service under CERCLA Sections 113(k) and 117(a), 42 U.S.C. §§ 9613(k) and 9617(a), and shall document the development and analysis of alternatives.

10.5 Approval of Plans and Other Deliverables. Respondents shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondents shall not commence implementation of an RI/FS Work Plan or any other work plan developed hereunder until receiving written Forest Service approval.

10.5.1 All Deliverables shall be submitted initially by Respondents in draft form, in accordance with the schedule provided in the SOWs, or such longer period established by the Remedial Project Manager, and are subject to Forest Service review, comment, and written approval or disapproval. The Remedial Project

Manager shall consolidate any comments received from the Forest Service and the Support Agencies and provide a single set of comments to Respondents.

Approved Deliverables shall be enforceable as a part of this Settlement Agreement. All Work performed pursuant to this Settlement Agreement shall be in accordance with approved Deliverables, unless otherwise authorized in writing. Failure to comply with any provision of an approved Deliverable may be considered a violation of this Settlement Agreement.

10.5.2 A Deliverable may also be approved with modifications, and subject to the Dispute Resolution provision of this Settlement Agreement, shall be enforceable as part of this Settlement Agreement. In the event Respondents disagree with a modification, such disagreement shall be resolved under the provisions of Section XVIII (“Dispute Resolution”) of this Settlement Agreement. Upon completion of Dispute Resolution, the Deliverable, as modified and approved through the Dispute Resolution process, shall be incorporated herein and shall be enforceable as part of this Settlement Agreement.

10.5.3 Subsequent to the procedure described in Paragraph 10.5.1, Respondents shall revise draft Deliverables and submit proposed final Deliverables to the Remedial Project Manager in accordance with the schedule in the SOWs. The proposed final Deliverables shall incorporate all comments and correct all draft Deliverables deficiencies identified by the Remedial Project Manager, unless such comments have been revised or withdrawn in writing. Any stipulated penalties applicable to a Deliverable shall accrue during the period specified in

the SOWs for resubmission by Respondents, but Respondents shall not be liable for payment of such penalties unless the proposed final Deliverable is disapproved or modified due to a material defect.

10.5.3.1 Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the Deliverable, unless otherwise directed by the Remedial Project Manager. Implementation of any non-deficient portion of the Deliverable shall not relieve Respondents of any liability for stipulated penalties.

10.5.3.2 Respondents shall not proceed further with any subsequent activities or tasks applicable to a particular Sub-Operable Unit until receiving Forest Service approval, approval on condition, or modification of the following Deliverables: RI/FS Work Plan Addendum , RI Report, Risk Assessment Reports (Human Health Risk Assessment & Ecological Risk Assessment), Treatability Testing Work Plan, FSP and QAPP (if required), RI/FFS Report, and FS Report. While awaiting Forest Service approval, approval on condition, or modification of these Deliverables, Respondents shall proceed with all other tasks and activities which may be conducted independently of these Deliverables, in accordance with the schedule set forth under this Settlement Agreement.



10.5.3.3 For all remaining Deliverables, not listed in Paragraph 10.5.3.2, Respondents shall proceed with all subsequent tasks, activities, and Deliverables without awaiting Forest Service approval on the submitted Deliverable.

10.5.3.4 If the Forest Service disapproves a resubmitted plan, report, or other Deliverable, or portion thereof, the Remedial Project Manager may again direct Respondents to correct the deficiencies. The Forest Service shall also retain the right to modify or develop the plan, report or other Deliverable. Respondents shall implement any such plan, report or other Deliverable as corrected, modified, or developed by the Forest Service, subject only to Respondents' right to invoke Dispute Resolution (Section XVIII). The Forest Service reserves the right to stop work from proceeding further, either temporarily or permanently, on any task, activity, or Deliverable at any point during performance of the Work required under this Settlement Agreement if Respondents fail to comply with the terms of this Settlement Agreement.

10.6 The absence of written comments or a written disapproval in response to the submission of any Deliverable by Respondents shall not be construed as approval of the Deliverable under this Settlement Agreement. No informal advice, guidance, suggestion, or comment by the RPM or other Forest Service representatives regarding Deliverables, schedules, or

any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement.

- 10.7 Unless the Remedial Project Manager authorizes a smaller number in writing, Respondents shall provide to the Remedial Project Manager an electronic copy and three (3) paper copies of each draft and final Deliverable, including one unbound copy, and shall provide one electronic copy and one paper copy to each Support Agency. Such copies shall be sent to the contacts listed in Paragraph 9.3 of this Settlement Agreement. All reports, maps and supporting information shall be provided in readily reproducible form. Electronic copies shall be in a form that can be electronically modified. Paper copies of Deliverables shall be sent by regular or overnight mail.
- 10.8 The Forest Service has prepared and approved a Community Relations Plan for the Site in accordance with applicable EPA guidance and the NCP. Respondents shall provide information and otherwise cooperate in support of the Forest Service implementation and any modification of the Community Relations Plan.
- 10.9 Upon request by the Remedial Project Manager, Respondents shall provide copies of plans, task memoranda, field modifications, recommendations for further action, quality assurance memoranda and audits, raw data, un-validated data, validated data, global positioning satellite locations for all sample points, field notes, laboratory analytical

reports and other non-privileged documents generated in connection with the Work performed under this Settlement Agreement to the Forest Service or a Support Agency.

10.10 If the Forest Service performs any of the Work required under this Settlement Agreement, Respondents shall incorporate or integrate the results of such Work into any Deliverable to which the Work is relevant.

10.11 Respondents who own or control property at the Site shall, at least thirty (30) days prior to the conveyance of any interest in real property at the Site, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to the Forest Service of the proposed conveyance, including the name and address of the transferee. Respondents who own or control property at the Site also agree to require that their successors comply with the immediately-proceeding sentence and Sections XI (Site Access) and XIII (Sampling/Data Availability/Access to Information).

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

- 10.12.1 Respondents shall include in the written notification the following information:
- 10.12.1.1 the name and location of the facility to which the Waste Material is to be shipped;
  - 10.12.1.2 the type and quantity of the Waste Material to be shipped;
  - 10.12.1.3 the expected schedule for the shipment of the Waste Material; and
  - 10.12.1.4 the method of transportation.
- 10.12.2 Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.
- 10.12.3 The identity of the receiving facility and state will be determined by Respondents. Respondents shall provide the information required by this Section as soon as practicable after the award of a contract and before the Waste Material is actually shipped.
- 10.12.4 Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondents shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

## XI. SITE ACCESS

- 11.1 Respondents shall, commencing on the Effective Date, provide to Forest Service personnel and contractors, and Support Agency personnel accompanied or authorized by the Remedial Project Manager, access to the Site and to off-Site areas under the ownership and/or control of Respondents as may be needed to implement this Settlement Agreement.
- 11.2 Beginning on the Effective Date, the Forest Service shall permit access to the portions of the Site located on NFS land to Respondents and their authorized representatives, as necessary to perform the Work required under this Settlement Agreement.
- 11.3 Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondents or the Forest Service, Respondents shall use their best efforts to obtain all necessary access agreements within thirty (30) days after the Effective Date, or as otherwise specified in writing by the Remedial Project Manager. Respondents shall immediately notify the Forest Service if, after using their best efforts, they are unable to obtain such agreements. For purposes of this Paragraph, “best efforts” includes the payment of reasonable sums of money in consideration of access. Respondents shall describe in writing their efforts to obtain access. The Forest Service may then assist Respondents in gaining access, to the extent necessary to effectuate the Work, using such means as the Forest Service deems appropriate. The

Forest Service shall be entitled to recover all costs and attorney's fees incurred by the United States in obtaining such access, consistent with Section XXVI (Payment of Response Costs).

## XII. COUNTERPARTS AND EFFECTIVE DATE

- 12.1 This Settlement Agreement may be executed in counterparts, each of which shall be deemed to be an original, but such counterparts shall together constitute a single, integrated document. This Settlement Agreement shall be effective on the date it has been signed by all Parties.

## XIII. SAMPLING/DATA AVAILABILITY/ACCESS TO INFORMATION

- 13.1 Respondents shall notify the Remedial Project Manager at least seven (7) Days prior to conducting field events, including construction, excavation, drilling and sampling events. The seven-day notice period may be shortened if the Remedial Project Manager agrees that this notice period would impede or prevent necessary or desirable sampling. Any Party, including its contractors, that is taking samples, will, at the request of another Party, allow split or duplicate samples to be taken by or for the other Party of any samples collected in the course of implementing this Settlement Agreement.
- 13.2 The Respondents waive any objection to the validity and admissibility of any data generated in the course of performance of Work under this Settlement Agreement, if such data have been collected or generated in compliance with this Settlement Agreement, and

validated in accordance with the QA/QC procedures set forth in the QAPP. The Parties do not waive their rights to object to the relevance or the interpretation of, or the conclusions to be drawn from, such validated data.

- 13.3 All results of sampling, tests, modeling or other data (including raw data) generated by Respondents, or on Respondents' behalves, during implementation of this Settlement Agreement, shall be submitted to the Remedial Project Manager, upon request, in the subsequent progress report as described in the SOWs. Upon request, the Remedial Project Manager will make available to Respondents data generated by the Forest Service unless they are exempt from disclosure by any federal or state law or regulation.
- Respondents shall provide to the Forest Service, upon request, copies of all documents and information within their possession or control or those of their contractors or agents relating to the Work or to the implementation of this Settlement Agreement, subject to the following Paragraphs 13.4 and 13.5. No claim of privilege or confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site generated by Respondents, or on Respondents' behalves, during implementation of this Settlement Agreement.

- 13.4 Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to the Forest Service 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 the Forest Service will be afforded the protection specified in 7 C.F.R. § 1.12. If no claim of confidentiality accompanies documents or information when they are submitted to the Forest Service, or if the Forest Service has notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondents. Disclosure of such information to and by IDEQ shall be governed by the provisions of this Paragraph, the following Paragraph, and the Idaho Public Records Act, Idaho Code § 9-342.

- 13.5 Respondents 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 Respondents assert such a privilege in lieu of providing documents, they shall provide the Forest Service with the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of the author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the contents of the document, record, or information; and (f) the privilege asserted by Respondents. Based on the information supplied by Respondents, the Forest Service shall determine whether to accept Respondents' claim of privilege. In the event the Forest Service disagrees with



Respondents' claim of privilege, Respondents shall promptly disclose the document or information previously withheld, unless Respondents dispute the determination by invoking the dispute resolution provisions of Section XVIII of this Settlement Agreement. However, no documents, reports, or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

#### XIV. RECORD RETENTION

- 14.1 Until 10 years after Respondents' receipt of the Forest Service's notification pursuant to Section XXXIV (Notice of Completion), each 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 Site, regardless of any corporate retention policy to the contrary. Until ten (10) years after Respondents' receipt of the Forest Service's notification, Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature, or description relating to performance of the Work.
- 14.2 At the conclusion of this document retention period, Respondents shall notify the Forest Service at least ninety (90) days prior to the destruction of any such records or documents, and, upon request by the Forest Service, Respondents shall deliver any such

records or documents to the Forest Service. Such notice is only required for five (5) years following expiration of the ten-year post-completion period, unless extended by request of the Forest Service in writing.

- 14.3 Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any records, documents, or other information (other than identical copies) relating to its potential liability regarding the Site since the notification of potential liability by the United States against it regarding the Site and that it has fully complied with any and all Forest Service requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

#### XV. COMPLIANCE WITH OTHER LAWS

- 15.1 All actions to be taken pursuant to this Settlement Agreement shall be performed in accordance with all applicable state and federal laws and regulations, except that pursuant to Section 121(e) of CERCLA, 42 U.S.C. § 6921(e) and 40 C.F.R. § 300.400(e), no Federal, State, or local permit shall be required for the portion of the Work conducted entirely on-Site, where such Work is carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621, and the NCP.

- 15.2 Compliance by Respondents with the terms of this Settlement Agreement shall not relieve Respondents of their obligations to comply with CERCLA, RCRA, EPHA, HWMA, or any other applicable local, state, or federal laws and regulations.

#### XVI. EMERGENCY RESPONSE AND NOTIFICATION

- 16.1 In the event of any action or occurrence during performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate, or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the Remedial Project Manager of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and the Forest Service takes such action instead, the Forest Service shall receive reimbursement for costs of the response action not inconsistent with the NCP pursuant to Section XXVI (Payment of Response Costs), and consistent with the Consent Decree if it is in effect.
- 16.2 In addition, in the event of any release of a hazardous substance from the Site, Respondents shall immediately notify the National Response Center at (800) 424-8802.

Respondents shall submit a written report to the Forest Service 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.

#### XVII. ADDITIONAL WORK

- 17.1 Where there is an immediate need, Respondents may implement additional Work or modifications of the Work based on a verbal agreement between the Remedial Project Manager and the Project Coordinator; however, in such cases, written confirmation of that agreement shall be transmitted between the Remedial Project Manager and the Project Coordinator within 10 days of such verbal agreement. If there is no verbal agreement with respect to an immediate need, and at any time during the implementation of this Settlement Agreement Respondents identify a need for additional Work or modification to the Work, Respondents shall submit a memorandum documenting the need for the additional or modified Work to the Remedial Project Manager within 10 days of identification. The Forest Service in its discretion will determine whether the additional or modified Work will be conducted by Respondents and whether it will be incorporated into plans, reports, and other Deliverables. The relevant SOW and/or Work

Plan shall be modified to incorporate any additional or modified Work. Where there is an immediate need, on a limited basis dependent on Site conditions, to take additional samples, and the Remedial Project Manager is not available, Respondents may take such additional samples and shall promptly orally notify the Remedial Project Manager of such samples and provide written confirmation within 5 days. If Respondents anticipate a need for additional samples prior to initiation of field work, the Respondents shall contact the Remedial Project Manager to coordinate and request approval for the effort to take the additional samples.

- 17.2 If the Forest Service determines that additional Work on the Site is required to meet the objectives of the Settlement Agreement and that work is not covered by Section X (Work to be Performed) of this Settlement Agreement, the Forest Service may notify Respondents in writing of its determination and specify any proposed changes to any Deliverable to reflect the additional Work. Respondents agree to conduct this additional Work pursuant to this Settlement Agreement. Within fourteen (14) days of receipt of the written determination that additional Work is required, Respondents shall confirm their willingness to perform the additional Work by providing notification to the Remedial Project Manager or invoke dispute resolution, Section XVIII. The relevant SOW and/or Work Plan shall be modified to incorporate the additional Work, in accordance with the final resolution of the dispute. The Forest Service reserves the right to conduct the additional Work at any point, to seek reimbursement from Respondents, and/or to seek any other appropriate relief.

17.3 If prior to the completion of the Work, the Forest Service determines that sufficient data have been collected with respect to a particular area or issue concerning the Site then the Remedial Project Manager may communicate a decision: a) to accelerate any RI Report and/or FS process, or; b) to undertake a removal or remedial action with respect to that particular area or issue. The Forest Service's election to undertake this approach may result in one or more Engineering Evaluation/Cost Analyses ("EE/CAs") and/or one or more FSs, the combination of which will address all pathways for the release or threatened release of hazardous substances at the Site. Respondents will complete each initial FS on the schedule provided in the SOWs. Respondents will complete the EE/CAs or subsequent FSs on a schedule provided in an EE/CA Work Plan or a revised FS Work Plan. Nothing in this Settlement Agreement shall obligate Respondents to conduct any remedial action or removal action (other than performance of the RIs and FSs as required by this Settlement Agreement or as required under Paragraph 16.1 ("Emergency Response and Notification")) at the Site, but upon mutual agreement, the Parties may elect to conduct such removal or remedial work under this Settlement Agreement.

### XVIII. DISPUTE RESOLUTION

18.1 The dispute resolution provisions in the Consent Decree, if entered, will apply to disputes over Forest Service, FWS, and Respondents' Response Costs. Subject to the reservations of the State and the Tribes in Section XXII (Reservations of Rights), with respect to State Response Costs and the Tribes' Response Costs, the dispute resolution procedures in this

Section are otherwise the exclusive mechanism for resolving disputes arising under this Settlement Agreement. A dispute shall be considered to have arisen a) when Respondents or the Forest Service send the State or the Tribes a written Notice of Dispute with respect to the State or the Tribes' Response Costs or b) when Respondents send the Forest Service a written Notice of Dispute with respect to any other disputed matter. A Notice of Dispute for disputes other than Response Costs must be submitted by Respondents within twenty (20) days after receipt of any written final disapproval by the Forest Service of a Deliverable required by this Settlement Agreement or any other written notification by the Forest Service. Disputes with respect to Response Costs covered by this Settlement Agreement must be submitted within thirty (30) days of receipt of documentation of such costs. The failure to submit a timely Notice of Dispute shall be deemed a waiver of the right to invoke dispute resolution under this Section.

- 18.2 In the first instance, the Parties to the dispute (which in all cases shall include the Forest Service) shall attempt to resolve any dispute arising under this Settlement Agreement by informal negotiations. The period for informal negotiations shall not exceed twenty (20) Days after the date of receipt of the Notice of Dispute, unless the Parties agree in writing to modify the period for informal negotiations. If the Parties fail to resolve the dispute informally, the formal dispute resolution procedure in the following Paragraphs shall apply.

- 18.3 In the event the Parties cannot resolve the dispute through informal negotiations, then the Forest Service's position shall be binding unless, within fifteen (15) Days after the conclusion of the informal negotiations period, Respondents, or in the case of State or the Tribes' Response Costs, the Respondents, State, or the Tribes, invoke the formal dispute resolution procedures of this Section by serving on the Forest Service, with a copy to the other Parties, a written Statement of Position on the matter in dispute. Any written Statement of Position shall be sent by electronic mail, overnight mail, or some equivalent service, and shall define the dispute and state the basis of the objections to the Forest Service's position. In the case of a dispute over Response Costs, the other Party with an interest in the dispute may also submit a written Statement of Position.
- 18.4 Following receipt of the Statement(s) of Position, the Forest Service shall promptly provide the Regional Forester with a copy of the Statement(s) of Position and a written response to the Statement(s) of Position. A copy of the Forest Service's response shall be simultaneously sent to all other Parties to the dispute by electronic mail, overnight mail, or some equivalent service.
- 18.5 Following receipt of the Statement(s) of Position and the Forest Service's response, the Regional Forester or his/her designee, shall make a final determination resolving the matter in dispute. The Regional Forester shall determine what, if any, stipulated penalties shall apply to Respondents for the matter in dispute, as part of the final determination.
- Subject to the reservations of the State and the Tribes in Section XXII (Reservations of



Rights), with respect to State Response Costs and the Tribes' Response Costs, and the provisions of the Consent Decree, if entered, with respect to the United States' and Respondents' Response Costs, no Forest Service decision made pursuant to this Section shall constitute a final agency action giving rise to judicial review. In the event the Forest Service files any judicial action against Respondents to enforce this Settlement Agreement, subject to the restrictions of CERCLA section 113(h), 42 U.S.C. § 9613(h), Respondents may challenge the underlying Forest Service decision or claims in such action, and the terms of this Section shall not constitute a bar or waiver of any defenses by Respondents to such action.

- 18.6 Respondents shall proceed in accordance with the final determination regarding the matter in dispute. If Respondents do not perform any required Work in accordance with the final determination, the Forest Service may perform any portion of the Work itself and/or pursue any other appropriate relief, including judicial enforcement of this Settlement Agreement pursuant to Section 122(d)(3) of CERCLA, 42 U.S.C. § 9622(d)(3), stipulated penalties pursuant to this Settlement Agreement, statutory penalties pursuant to Section 109 of CERCLA, 42 U.S.C. § 9609, or cost recovery pursuant to Section 107 of CERCLA, 42 U.S.C. § 9607, or other applicable law.
- 18.7 The invocation of the dispute resolution provisions of this Settlement Agreement shall not extend, postpone, or affect in any way any obligation of Respondents under this Settlement Agreement not directly in dispute, unless the Forest Service agrees in writing

otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue during dispute resolution, subject to the limitations in Paragraph 20.3 of Section XX (Stipulated Penalties), but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of the Settlement Agreement. In the event Respondents do not prevail on the disputed matter, stipulated penalties shall be assessed and paid as provided in Section XX (Stipulated Penalties).

- 18.8 Nothing in this Settlement Agreement precludes the Parties from agreeing to use other forms of alternative dispute resolution in lieu of the procedures described in this Section.

#### XIX. FORCE MAJEURE

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

- 19.2 If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondents shall notify the Forest Service orally within seven (7) Days of when Respondents first knew that the event might cause a delay. Within fourteen (14) Days thereafter, Respondents shall provide to the Forest Service 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; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondents from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.
- 19.3 If the Forest Service 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 the Forest Service 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 the Forest Service does not agree that the delay or anticipated delay has been or will be caused by a *force*

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

## XX. STIPULATED PENALTIES

- 20.1 Respondents shall be liable to the Forest Service for stipulated penalties in the amounts set forth in this Section for failure to comply with the requirements of this Settlement Agreement, unless excused under the preceding Section as *force majeure*. “Compliance” by Respondents shall include completion of all payments and activities required under this Settlement Agreement, the SOW, or any Deliverable approved under this Settlement Agreement, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, or any Deliverables approved by the Forest Service pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.
- 20.2 Respondents shall pay stipulated penalties in the amount of \$1,000 per day, per violation for the 1st through 14th day of noncompliance; \$3,000 per day, per violation for the 15th through 30th day of noncompliance; and \$7,500 per day, per violation for the 31st day of noncompliance and every day thereafter.

- 20.3 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 of a Deliverable under Section X (“Work to be Performed”), during the period, if any, beginning on the 31st day after the Remedial Project Manager’s receipt of such Deliverable until the date that the Remedial Project Manager notifies Respondents of any deficiency, and (2) with respect to a matter subject to Dispute Resolution (Section XVIII), during the period, if any, beginning on the 31st day after the Negotiation Period begins until the date that the Forest Service issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.
- 20.4 The Forest Service will advise Respondents in writing of any stipulated penalties owed by Respondents pursuant to this Section. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether the Forest Service has notified Respondents of a violation. The payment of penalties shall not alter in any way Respondents’ obligation to complete performance of the Work required under this Settlement Agreement.
- 20.5 Penalties that accrue during any dispute resolution period need not be paid until fifteen (15) days after the dispute is resolved by agreement or by receipt of the Forest Service’s decision.

20.6 If Respondents fail to pay stipulated penalties when due, the Forest Service may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of the Forest Service to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, civil penalties pursuant to CERCLA. Provided, however, that the Forest Service shall not seek civil penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l) or punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of this Settlement Agreement or in the event that the Forest Service assumes performance of a portion or all of the Work pursuant to Section XXII (Reservations of Rights), Paragraph 22.4. Notwithstanding any other provision of this Section, the Forest Service (and with respect to penalties assessed by the Forest Service on behalf of the State or Tribes for Respondent's nonpayment of the State's or Tribes' Response Costs, the State or the Tribes) may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XXI. COVENANTS NOT TO SUE BY THE FOREST SERVICE,  
THE STATE OF IDAHO, AND THE TRIBES

21.1 In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement or in the Consent Decree, if entered, the Forest Service covenants not to sue or to take administrative action against Respondents pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for the Work and Response Costs that are paid by Respondents pursuant to this Settlement Agreement. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondents of all obligations under this Settlement Agreement, including, but not limited to, payment of Response Costs pursuant to Section XXVI (Payment of Response Costs). This covenant not to sue extends only to Respondents and does not extend to any other person.

21.2 In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, the State of Idaho and the Tribes covenant not to sue or to take administrative action against Respondents or the United States pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for the Work and Response Costs that are reimbursed to the State and the Tribes, respectively, pursuant to this Settlement Agreement. These covenants not to sue shall take effect upon the Effective Date and are conditioned upon the complete and satisfactory performance of all

Work and other obligations under this Settlement Agreement, including, but not limited to, payment of State Response Costs pursuant to Section XXVII (for the State) and the Tribes' Response Costs pursuant to Section XXVIII (for the Tribes). These covenants not to sue extend only to Respondents and the United States and do not extend to any other person.

## XXII. RESERVATIONS OF RIGHTS

- 22.1 Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of the Forest Service, the United States or the State of Idaho, if any, to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, except as provided in Section XX (Stipulated Penalties) nothing in this Settlement Agreement shall prevent the Forest Service from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.
- 22.2 The State and the Tribes reserve any right they might otherwise have to seek recovery of Response Costs if the State or the Tribes do not agree with the outcome of Dispute Resolution (Section XVIII), with respect to their Response Costs.



- 22.3 The covenants not to sue set forth in Section XXI do not pertain to any matters other than those expressly identified therein and are expressly limited to the Work, as defined herein, and the Response Costs, as defined herein, and do not apply to additional actions as may be necessary to address environmental degradation at the North Maybe Mine Site. Nothing in this Agreement shall be construed or implied to limit the United States' or the State of Idaho's authority to require further actions at the North Maybe Mine Site and this Settlement Agreement shall not operate pursuant to Idaho Code § 39-108(3)(a)(v) as related to any matters other than those addressed in the Work, as defined herein. The State reserves and, except as provided in the Consent Decree, if entered, the Forest Service reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:
- 22.3.1 liability for failure by Respondents to meet a requirement of this Settlement Agreement;
  - 22.3.2 liability for costs not included within the definition of Response Costs;
  - 22.3.3 liability for performance of response action other than the Work;
  - 22.3.4 criminal liability;
  - 22.3.5 liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
  - 22.3.6 liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

22.3.7 liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

22.4 Work Takeover. In the event the Forest Service determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or seriously or repeatedly late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, the Forest Service may issue a written notice (“Work Takeover Notice”) to the Respondents. Any Work Takeover Notice issued by the Forest Service will specify the grounds upon which such notice was issued and the portion of the Work affected and will provide Respondents a period of fourteen (14) days (or such longer period as is necessary under the circumstances, as approved by the Forest Service) within which to remedy the circumstances giving rise to the Forest Service’s issuance of such notice.

22.4.1 If, after expiration of the notice period specified in the preceding Paragraph, Respondents have not remedied to the Forest Service’s satisfaction the circumstances giving rise to the Forest Service’s issuance of the relevant Work Takeover Notice, the Forest Service may assume the performance of all or any portion of the Work as the Forest Service determines necessary (“Work Takeover”). The Forest Service shall notify Respondents in writing (which writing may be electronic) if the Forest Service determines that implementation of a Work Takeover is warranted under this Paragraph.

22.4.2 Respondents may invoke the procedures set forth in Section XVIII (Dispute

Resolution) to dispute the Forest Service's determination that Work Takeover is warranted under this Section. However, notwithstanding Respondents' invocation of such dispute resolution procedures, and during the pendency of any such dispute, the Forest Service may in its sole discretion commence and continue a Work Takeover under this Section until the earlier of:

- 22.4.2.1 the date that Respondents remedy, to the Forest Service's satisfaction, the circumstances giving rise to the Forest Service's issuance of the relevant Work Takeover Notice; or
- 22.4.2.2 the date that a final decision is rendered in accordance with Section XVIII (Dispute Resolution) requiring the Forest Service to terminate such Work Takeover.

22.4.3 Costs incurred by the United States in performing the Work pursuant to this Section shall be considered Response Costs that shall be paid pursuant to Section XXVI (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, the Forest Service retains all authority and reserves all rights to take any and all response actions authorized by law.

### XXIII. COVENANT NOT TO SUE BY RESPONDENTS

- 23.1 Except as provided in this Settlement Agreement or the Consent Decree, if entered, Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its employees, with respect to the Work or Response Costs

paid by Respondents under this Settlement Agreement, as specified below in this Paragraph:

- 23.1.1 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; or
  - 23.1.2 any claim against EPA or the Superfund arising out of the Work or response actions at or in connection with the Site, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; but
  - 23.1.3 subject to the preceding Paragraphs of this Section, and the Consent Decree, if entered, Respondents reserve all rights, claims and defenses they may have against the United States, including the right to bring an action against the United States and its agencies and departments under CERCLA for recovery of any response costs incurred in connection with the Site under CERCLA, including Response Costs paid or incurred by Respondents under this Settlement Agreement.
- 23.2 Nothing in this Settlement 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).

#### XXIV. INDEMNIFICATION

- 24.1 Respondents shall indemnify, save, and hold harmless the United States, the Tribes, and the State of Idaho and their officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorneys' fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalves or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Settlement Agreement. Neither Respondents nor any such contractor shall be considered an agent of the United States.
- 24.2 The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

- 24.3 In performing any of the Work required by this Settlement Agreement, Respondents have an affirmative duty to protect from injury and damage lands of the United States. Damage includes, but is not limited to, fire suppression costs and all costs and damages associated with restoration or rehabilitation of natural resources associated with Respondents' implementation of this Settlement Agreement. Respondents shall be liable for damage to all roads and trails of the United States caused by Respondents' use, or those acting on their behalf, except that damage shall not include reasonable and ordinary wear and tear.
- 24.4 Subject to the limitations and procedures of the Idaho Tort Claims Act, Idaho Code § 6-901–29, IDEQ agrees to indemnify Respondents and their agents and employees from all claims of third parties arising from acts or omissions of the IDEQ or those acting on its behalf, including its officers, employees, agents, contractors, subcontractors, or assigns, in carrying out activities under this Settlement Agreement to the extent that such a claim could be made against IDEQ under the Idaho Tort Claims Act, Idaho Code § 6-901-29.

#### XXV. EFFECT OF SETTLEMENT/CONTRIBUTION

- 25.1 Nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in the Consent Decree, if entered, each of the Parties expressly reserves any and all rights (including, but not limited to, the right to seek contribution pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action

which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response actions and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

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

25.3 Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify the Forest Service in writing no later than sixty (60) days prior to the initiation of such suit or claim. Each Respondent also shall, with respect

to any suit or claim brought against it for matters related to this Settlement Agreement, notify the Forest Service in writing within ten (10) days after service of the complaint or claim upon it. In addition, each Respondent shall notify the Forest Service within ten (10) days of service or receipt of any Motion for Summary Judgment and within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

- 25.4 In any subsequent administrative or judicial proceeding initiated by the Forest Service, or by the United States on behalf of the Forest Service, for injunctive relief, recovery of Response Costs, or other relief relating to the Site, Respondents shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects any other defenses that may be asserted by Respondents in such proceeding or the enforceability of the covenant by the Forest Service set forth in Section XXI (Covenants Not To Sue by the Forest Service, the State of Idaho, and the Tribes).

#### XXVI. PAYMENT OF RESPONSE COSTS

- 26.1 Allocation of WGI funds to pay Response Costs. Upon the Effective Date, the Forest Service shall allocate \$100,000 (Allocated Funds) from the Washington Group



International Bankruptcy Recovery Special Account (WGI Account) to the Site. The Consent Decree, if in effect, may allocate additional WGI Account funds to the Site.

26.2 Subject to the terms and conditions set forth in this Section, the Forest Service will pay Response Costs with Allocated Funds, including Respondents' payments to Support Agencies, under this Settlement Agreement.

26.3 USDA and Forest Service Response Costs. The Forest Service may pay Forest Service and USDA Response Costs with the Allocated Funds as those costs are incurred. However, to the extent that Respondents should prevail in any dispute regarding such a payment, the Forest Service shall repay such amount of the Allocated Funds, with Interest from the reimbursement date to the date of repayment.

26.4 If the Consent Decree is in effect, USDA, Forest Service, and Respondents' Response Costs will be paid as provided in the Consent Decree. If the Consent Decree is not in effect, and the Allocated Funds are exhausted, Respondents shall reimburse those USDA and Forest Service Response Costs attributable to a Work Takeover undertaken consistent with Paragraph 22.4, while the Forest Service will continue to bear the Forest Service's Response Costs to oversee the Work.

26.5 The Forest Service shall make best efforts to provide written notice to the Respondents for Forest Service and USDA Response Costs paid from Allocated Funds within 30 days

after the end of each calendar quarter (“Payment Notice”). Respondents shall make best efforts to provide a written demand upon the Forest Service for reimbursement of Response Costs (“Payment Demand”) from the Allocated Funds within 30 days after the Effective Date of this Settlement Agreement for Response Costs incurred prior to the Effective Date, and at the end of each calendar quarter thereafter. If the Consent Decree is not in effect, and the Allocated Funds are exhausted, the Forest Service shall make best efforts to provide a Payment Demand upon Respondents within 30 days after the end of each calendar quarter for those Response Costs attributable to a Work Takeover. Failure to make written Payment Demand or provide Payment Notice in accordance with this schedule does not constitute a waiver of the right to seek or retain such payment. Unreasonable delay in making a Payment Demand or providing a Payment Notice, however, may constitute a legitimate basis to dispute a Payment Demand or Payment Notice.

26.6 Contents of Payment Demand/Payment Notice. Each Payment Demand and Payment Notice shall include:

- 26.6.1 a Statement of Response Costs paid during the period covered by the Statement;
- 26.6.2 documentation of the costs incurred, including copies of contracts, work orders, invoices, supporting documentation and information sufficient to identify each internal cost for which expenses were incurred, or contractor, vendor, or other person to whom money qualifying as Response Costs was paid, and to show, for each such contractor, vendor, or other person, the amount of money they were

paid and the services or goods they provided and proof of payment, to permit the recipient to determine the work performed and the costs incurred for which reimbursement is sought; and

- 26.6.3 certification from the Party making the Payment Demand or providing the Payment Notice that the costs sought were incurred in furtherance of Work contemplated by this Settlement Agreement, that the supporting documentation truly and accurately reflects the costs incurred, and that payment of the amount demanded will be accepted as payment in full with respect to the costs incurred.
- 26.7 A Payment Demand or Payment Notice that does not comply with the requirements of Paragraph 26.6 shall be returned to the submitting Party for proper completion or documentation. In the event of a disagreement between the Respondents and the Forest Service concerning whether a Payment Demand or Payment Notice complies with the requirements of the preceding Paragraph, Section XVIII (Dispute Resolution) shall apply.
- 26.8 Respondents shall pay a Payment Demand from the Forest Service within 30 days of receipt of the Payment Demand consistent with payment instructions provided with the Payment Demand.
- 26.9 Timing and Method of Disbursing Allocated Funds to Respondents. Within thirty (30) days of receipt of a Payment Demand or Payment Notice, the receiving Party shall communicate to the other in writing its approval of all or part of the Payment Demand or

Payment Notice and/or notice that it disputes part or all of the Payment Demand or Payment Notice. A Party disputing part or all of a Payment Demand or Payment Notice shall be deemed to have invoked, and shall comply with Section XVIII (Dispute Resolution). Payment of any disputed amount shall be suspended until the dispute is resolved. A Payment Demand or Payment Notice shall be deemed approved if it is not disputed in whole or in part within 30 days of receipt. The Forest Service shall remit undisputed Payment Demand amounts from Allocated Funds within 45 days of receipt of the Payment Demand.

26.10 The Forest Service shall disburse Allocated Funds required to be paid to Respondents by this Section by wire transfer to the following account:

Beneficiary name:	Nu-West Industries
Bank Name:	BMO Harris Bank
Address:	111 W. Monroe Street Chicago, IL 60603
SWIFT:	HATRUS44XXX
ABA:	071000288
Account number:	3660255

26.11 Limitation of Allocated Funds Disbursements. The Forest Service's obligation to disburse Allocated Funds is limited to the Allocated Funds available. The Forest Service shall provide to Respondents a quarterly statement within 30 days after the end of the quarter showing the Allocated Funds balance remaining.

XXVII. REIMBURSEMENT OF STATE RESPONSE COSTS

27.1 Response Costs incurred by IDEQ with respect to the Work under this Settlement Agreement will be reimbursed in the following manner:

27.1.1 Within 30 days of the Effective Date, Respondents will pay the sum of \$11,288.95 for IDEQ's Response Costs incurred before January 1, 2012.

27.1.2 As an initial deposit, within 30 days of the Effective Date, Respondents will pay the sum of \$5,000 to be deposited to an account established for this Site.

27.1.3 Thereafter, IDEQ shall provide a quarterly accounting and invoice to Respondents, with a copy to the Forest Service, of Response Costs incurred by IDEQ in relation to this Settlement Agreement. IDEQ Response Costs subject to reimbursement under this Paragraph shall mean all direct or indirect costs incurred by IDEQ in connection with IDEQ's role as a Support Agency for the Work and the West Ridge Operable Unit RI/FS, including but not limited to: reasonable time and travel costs; IDEQ's contractor costs; compliance monitoring, including the collection and analysis of split samples; Site visits; review of reports; reasonable overhead charges; and any other costs directly or indirectly incurred in overseeing the Work.

27.1.4 Within thirty (30) days of Respondents' receipt of IDEQ's quarterly accounting invoice, Respondents shall reimburse the State for all costs reflected in the accounting invoice.

27.1.5 The initial deposit will be returned to Respondents within sixty (60) days of the date IDEQ incurs final Response Costs.

27.1.6 All payments to IDEQ shall be made to:

Administrative Services-Accounts Receivable  
Idaho Department of Environmental Quality  
1410 N. Hilton  
Boise, ID 83706-1255

27.2 Respondents or the Forest Service may dispute payment of any portion of IDEQ's submitted costs, but only on the basis of accounting errors or the sufficiency of supporting documentation, the inclusion of costs inconsistent with State regulations, the inclusion of costs inconsistent with IDEQ's role as a Support Agency under the NCP for the Work or the West Ridge Operable Unit RI/FS, or the inclusion of costs that have not been paid or approved for payment by IDEQ. Disputes regarding the State's Response Costs will be resolved using the dispute resolution procedures described in Section XVIII. Any objection by Respondents or the Forest Service shall be made in writing within thirty (30) days of receipt of the Quarterly Billing and shall specifically identify the disputed costs and the basis of the dispute. All undisputed costs shall be remitted by Respondents in accordance with the provisions in the preceding Paragraphs of this Section. In any dispute resolution proceeding, Respondents or the Forest Service shall bear the burden of establishing their contentions as to inappropriate costs. If IDEQ prevails in the dispute resolution proceeding, Respondents shall remit the amount(s) in question, including Interest, within thirty (30) days after receipt of the final determination.

XXVIII. REIMBURSEMENT OF TRIBES' RESPONSE COSTS

- 28.1 Respondents hereby agree to pay the sum of up to \$20,000 per year to pay the Tribes' Response Costs from January 1, 2012. Within thirty (30) days of the Effective Date of this Settlement Agreement, Respondents shall pay to the Tribes \$20,000 to pay the Tribes' Response Costs through December 31, 2012. By November 1, 2012, and annually thereafter, the Tribes shall submit to Respondents and the Forest Service an estimated annual cost budget (January 1 through December 31) ("Annual Tribal Cost Budget"). Within thirty (30) days of receipt of the Annual Tribal Cost Budget, Respondents shall deposit with the Tribes an amount equal to the estimated Annual Tribal Cost Budget or \$20,000, whichever is less.
- 28.2 The Tribes shall use such monies to establish, and shall deposit any monies received from Respondents hereunder in, an interest bearing account ("Tribal Account Fund") dedicated solely to the Tribes' activities associated with oversight of the Work performed under this Settlement Agreement. The Tribes shall provide Respondents and the Forest Service with a quarterly accounting and invoice ("Tribal Cost Accounting") of all costs incurred by the Tribes that the Tribes assert are the Tribes' Response Costs. The Tribal Cost Accounting shall include detailed supporting summaries of such costs and shall be submitted no later than 30 days following the end of each calendar quarter. Monies present in the Tribal Account Fund at the time of submission of the Annual Tribal Cost Budget will be credited against Respondents' prepayment obligation under Paragraph 28.1 for the upcoming year.

28.3 Payments made by Respondents to the Tribes for deposit into the Tribal Account Fund shall be made by certified or cashier's check made payable to the Shoshone-Bannock Tribes and mailed to:

Environmental Waste Management Program  
Shoshone-Bannock Tribes  
PO Box 306  
Fort Hall, Idaho 83203

Each check shall reference: Site Name: Southeast Idaho Phosphate Mining – North  
Maybe Settlement Agreement 2012.

28.4 The Tribes may withdraw sums from the Tribal Account Fund as reimbursement for Tribes' Response Costs incurred by the Tribes and reflected in a submitted quarterly Tribal Costs Accounting, subject to dispute resolution described below in this Section and in Section XVIII (Dispute Resolution).

28.5 Within 120 days after completion of Tribal support activities under this Settlement Agreement, the Tribes shall provide Respondents, with a copy to the Forest Service, with a final cost accounting. In the event that the monies remain in the Tribal Account Fund, the Tribes shall reimburse Respondents within thirty (30) days of submission of the final cost accounting.



28.6 Respondents or the Forest Service may dispute the Tribes' Response Costs identified in the Tribal Cost Accounting, but only on the basis of accounting errors or the sufficiency of supporting documentation, or the inclusion of costs inconsistent with the Tribes' role as a Support Agency under the NCP for the Work or the West Ridge Operable Unit RI/FS. Disputes regarding the Tribes' Response Costs will be resolved using the dispute resolution procedures described in Section XVIII of this Settlement Agreement. Any objection by Respondents or the Forest Service shall be made in writing to the Tribes within thirty (30) days of receipt of the Tribal Cost Accounting and shall specifically identify the disputed costs and the basis of the dispute.

28.7 In any dispute resolution proceeding, Respondents or the Forest Service shall bear the burden of establishing their contentions as to the disputed costs. If the Tribes prevail in the dispute resolution proceeding, the disputed expenditures by the Tribes shall be deemed the Tribes' Response Costs and no adjustment to the balance of the Tribal Account Fund by the Tribes shall be required. If Respondents or the Forest Service prevail in the dispute resolution proceeding, the disputed amount shall be credited to the balance of the Tribal Account Fund and shall be available for subsequent use by the Tribes subject to the terms and conditions of this Section.

28.8 Payment of Interest to the Tribes. For purposes of this Section, Interest shall accrue at the rate established under Section 107(a) of CERCLA, 42 U.S.C. § 9607. 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 and is compounded. In the event that prepayment for Response Costs to the Tribes is not made by the due dates specified in this Settlement Agreement, Respondents shall pay Interest on the unpaid balance.

Interest on Response Costs required to be paid in accordance with this Section shall begin to accrue on the prepayment due date 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 Tribes under this Settlement Agreement by virtue of Respondents' failure to make timely payments under this Section.

#### XXIX. REIMBURSEMENT OF FWS RESPONSE COSTS

29.1 Respondents hereby agree to pay up to \$15,000 per year to pay FWS's Response Costs.

Within 30 days of the Effective Date of this Settlement Agreement, Respondents shall pay to FWS \$15,000 in prepayment of FWS's Response Costs. By November 1, 2012, and annually thereafter, FWS shall submit to Respondents and the Forest Service an estimated annual cost budget (January 1 through December 31). Within thirty (30) days of receipt of this estimated annual cost budget, Respondents shall deposit with the FWS an amount equal to its estimated annual cost budget or \$15,000, whichever is less.

29.2 FWS shall use such monies to establish an account fund ("FWS Account Fund") dedicated solely to its activities associated with this Settlement Agreement or the West Ridge Operable Unit RI/FS, in accordance with the Appropriations Act for the Department of the Interior and Related Agencies of 2000, Pub. L. 106-113, 113 Stat. 150,

and other applicable statutes, regulations and guidance. By February 1, 2013, and every six (6) months thereafter, FWS shall provide Respondents an accounting of its costs, including supporting cost summaries.

29.3 Payments to FWS shall be made by electronic funds transfer through the Department of Treasury's Automated Clearing House/Remittance Express Program. Payments should include the following information:

Receiver Name: DOI Central Hazardous Materials Fund  
ALC 1401001

Receiver Tax ID Number: 53-0196949

Receiver Address: 7401 West Mansfield Avenue  
Mailstop D-2770  
Lakewood, CO 80235

Receiver Bank: Federal Reserve Bank  
New York, NY  
ABA #051036706

Receiver ACH Account No.: 312024

Each payment shall reference: Site Name: Southeast Idaho Phosphate Mining – North  
Maybe Mine Site Settlement Agreement.

29.4 In addition, at the time of payment, Respondents shall send notification of payment referencing the amount of payment and the Site name to the FWS contact identified in Paragraph 9.3.1 and to the following individual:

United States Department of the Interior  
Central Hazardous Materials Fund  
Attn: Fund Manager  
1849 C Street, N.W.  
Mail Stop 2342  
Washington, DC 20240

- 29.5 Within 120 days after completion of FWS support activities under this Settlement Agreement, FWS shall provide Respondents and the Forest Service with a final cost accounting. In the event that the monies remain in the FWS Account Fund, FWS shall reimburse Respondents within thirty (30) days of submission of the final cost accounting.
- 29.6 Respondents may dispute payment of any portion of FWS's Response Costs, but only on the basis of accounting errors or the sufficiency of supporting documentation, or the inclusion of costs inconsistent with FWS's role as a Support Agency under the NCP for the Work or the West Ridge Operable Unit RI/FS. Disputes regarding FWS's Response Costs will be resolved using the dispute resolution procedures described in Section XVIII of this Settlement Agreement. Any objection by Respondents shall be made in writing to FWS within thirty (30) days of receipt of the billing statement and shall specifically identify the disputed FWS costs and the basis of the dispute. In any dispute resolution proceeding, Respondents shall bear the burden of establishing an accounting error or the insufficiency of supporting documentation, or the inclusion of costs inconsistent with FWS's role as a Support Agency under the NCP for the Work or the West Ridge Operable Unit RI/FS. If FWS prevails in the dispute resolution proceeding, the disputed expenditures by the FWS shall be deemed Response Costs and no adjustment to the

balance of the FWS Account Fund shall be required. If Respondents prevail in the dispute resolution proceeding, the disputed amount shall be credited to the balance of the FWS Account Fund by FWS and shall be available for subsequent use by FWS subject to the terms and conditions of this Section.

29.7 For purposes of this Section, Interest shall accrue at the rate established under Section 107(a) of CERCLA, 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 and is compounded. In the event that prepayment for FWS's Response Costs is not made by the due dates specified in this Settlement Agreement, Respondents shall pay Interest on the unpaid balance. Interest on Response Costs paid in accordance with this Section shall begin to accrue on the prepayment due date 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 under this Settlement Agreement by virtue of Respondents' failure to make timely payments under this Section.

### XXX. OTHER CLAIMS

30.1 By entering into this Settlement Agreement, the Parties assume no liability for injuries or damages to persons or property resulting from any acts or omissions of any other Party.

No Party shall be deemed a party to any contract entered into by any other Party or its contractors to carry out actions pursuant to this Settlement Agreement.

#### XXXI. INSURANCE

31.1 At least fifteen (15) days prior to commencing any on-Site work under this Settlement Agreement, Respondents shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of \$1,000,000, combined single limit, naming the United States, State, and Tribes, as additional insureds. Within the same time period, Respondents shall provide the Forest Service with certificates of such insurance and a copy of each insurance policy. Respondents shall resubmit such certificates and copies of policy amendments or new policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondents shall satisfy, and/or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement Agreement. If Respondents demonstrate by evidence satisfactory to the Forest Service that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXXII. FINANCIAL ASSURANCE

32.1 Within sixty (60) days after the Effective Date, Respondents shall establish and maintain financial security for the benefit of the Forest Service in the amount of \$2,000,000 in one or more of the following forms, in order to secure the full and final completion of Work by Respondents:

- 32.1.1 a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- 32.1.2 one or more irrevocable letters of credit, payable to or at the direction of the Forest Service, issued by financial institution(s) acceptable in all respects to the Forest Service;
- 32.1.3 a trust fund or escrow account administered by a trustee or escrow agent acceptable in all respects to the Forest Service;
- 32.1.4 a policy of insurance issued by an insurance carrier acceptable in all respects to the Forest Service, which ensures the payment and/or performance of the Work;
- 32.1.5 a written guarantee to pay for or perform the Work provided by one or more parent companies of Respondents, or by one or more unrelated companies that have a substantial business relationship with at least one of the Respondents, including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. § 264.143(f); and/or

32.1.6 a demonstration of sufficient financial resources to pay for the Work made by one or more of Respondents, which shall consist of a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. § 264.143(f).

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

32.3 If Respondents seek to ensure completion of the Work through a guarantee or demonstration pursuant to this Section, Respondents shall: (a) demonstrate to the Forest Service's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. § 264.143(f); and (b) resubmit sworn statements to the Forest Service conveying the



information required by 40 C.F.R. § 264.143(f) annually, on the anniversary of the Effective Date or such other date as agreed by the Forest Service. For the purposes of this Settlement Agreement, wherever 40 C.F.R. § 264.143(f) references “sum of current closure and post-closure cost estimates and the current plugging and abandonment cost estimates,” the dollar amount to be used in the relevant financial test calculations shall be \$2,000,000 for the Work at the Site, plus any other RCRA, CERCLA, TSCA, or other federal environmental obligations financially assured by the relevant Respondent or guarantor to the United States by means of passing a financial test.

- 32.4 If, after the Effective Date, Respondents can show that the estimated cost that Respondents must pay to complete the remaining Work has diminished below the amount set forth above, Respondents 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. Respondents shall submit a proposal for such reduction to the Forest Service, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from the Forest Service. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XVIII (Dispute Resolution). Respondents may reduce the amount of security in accordance with the Forest Service’s written decision resolving the dispute. If the Consent Decree is entered, Respondents may decrease the total amount of financial security required in accordance

with Respondents' allocated percentage of Response Costs agreed to in the Consent Decree with notice to the Forest Service, but without seeking Forest Service approval.

#### XXXIII. MODIFICATIONS

- 33.1 Minor field modifications may be made orally by the Remedial Project Manager and shall be memorialized in writing within ten (10) days; provided, however, that the modification effective date shall be the date of the Remedial Project Manager's oral direction. Consistent with Sections X ("Work to be Performed"), XVI (Emergency Response and Notification), and XVII (Additional Work) modification to any plan or schedule may be made, in writing, by the Remedial Project Manager. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the Parties. In the event Respondents disagree with any modification proposed under this Paragraph, such disagreement shall be resolved in accordance with the provisions of Section XVIII ("Dispute Resolution").

#### XXXIV. NOTICE OF COMPLETION

- 34.1 When the Forest Service determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including payment of Response Costs (Sections XXVI, XXVII, XXVIII, and XXIX), and Record Retention (Section XIV), the Forest Service will provide written notice to Respondents. If the Forest Service determines that such Work has not been completed in accordance with this Settlement

Agreement, the Forest Service will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the relevant Work Plan, if appropriate, in order to correct such deficiencies. Respondents shall implement the modified and approved Work Plan and shall submit a modified FS Report or other Deliverable, as determined by the Forest Service, in accordance with the Forest Service notice. Failure by Respondents to implement the approved modified Work Plan or other Deliverable shall be a violation of this Settlement Agreement.

#### XXXV. ADMINISTRATIVE RECORD

- 35.1 In accordance with 40 C.F.R. §§ 300.800-825, the Forest Service shall determine the contents and location of the administrative record for the Site and shall provide reasonable notice to Respondents of these contents and this location. Respondents may submit to the Remedial Project Manager for consideration for inclusion in the administrative record any records, reports, data, documents, photographs, or other information or materials prepared, discovered, relied on, or otherwise generated or used in connection with Respondents' performance of Work under this Settlement Agreement. However, nothing in this Paragraph shall be deemed to limit or affect the lawful discretion of the Forest Service to determine the contents of the administrative record.
- 35.2 The Forest Service retains the responsibility for the release to the public of reports produced under this Settlement Agreement. The Forest Service retains responsibility for the preparation and the release to the public of the Proposed Plans and Records of

Decision in accordance with CERCLA and the NCP, and any applicable state law. The Remedial Project Manager shall provide Respondents with copies of the final RI/FS Reports, Proposed Plans, and Records of Decision.

#### XXXVI. MISCELLANEOUS PROVISIONS

- 36.1 Respondents agree that in connection with the performance of Work under this Settlement Agreement, Respondents shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age or handicap. Respondents shall include and require compliance with the above nondiscrimination provision in any contract or subcontract made with respect to this Settlement Agreement. The Lead Agency shall have the right to enforce the foregoing nondiscrimination provisions by suit for specific performance or any other remedy under the laws of the United States or the state in which the breach or violation occurs.
- 36.2 If, while implementing the terms of this Settlement Agreement, Respondents discover any objects of historic, cultural, Tribal, or scientific interest, they shall notify the Remedial Project Manager and leave such discoveries intact until and unless otherwise instructed by the Remedial Project Manager. For the purposes of this Paragraph, such objects of interest include, but are not limited to, ruins, fossils, and artifacts. Compliance with any protective and mitigative measures specified by the Remedial Project Manager shall be Respondents' responsibility.

- 36.3 Respondents shall immediately notify the Remedial Project Manager of any and all threatened or endangered species encountered on the Site in the course of performing the Work.
- 36.4 For the purposes of Section 113(g)(1) of CERCLA, 42 U.S.C. § 9613(g)(1), the Parties agree that, upon issuance of this Settlement Agreement, for performance of RIs and FSs at the Site, remedial action under CERCLA shall be deemed to be scheduled and an action for damages (as defined in 42 U.S.C. § 9601(6)) must be commenced within three (3) years after completion of the remedial action.
- 36.5 References in this Settlement Agreement to specific agency guidance documents or other official agency documents shall include any subsequent amendments to such documents, upon written notification by the Remedial Project Manager to Respondents of such amendment.

#### XXXVII. INTEGRATION/APPENDICES

- 37.1 This Settlement Agreement and its appendices, the Consent Decree, if entered, and any Deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement.

The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement and the Consent Decree, if entered. The following appendices are attached to and incorporated into this Settlement Agreement:

Appendix A – East Mill Dump Sub-Operable Unit Statement of Work

Appendix B – Open Pit Sub-Operable Unit Statement of Work

Appendix C – Creeks Sub-Operable Unit Statement of Work

Appendix D – North Maybe Mine Area Map

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE REGION 4

By:

*Marlene Emley*

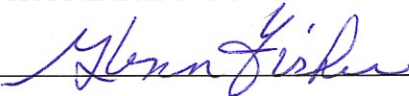
Date:

*1-3-2013*

*for* Name: Harv Forsgren

Title: Regional Forester

SHOSHONE BANNOCK TRIBES

By:  (for)

Name: Nathan Small

Title: Chairman, Fort Hall Business Council

Date: 1/22/13



IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

By: 

Name: CURT FRANSEN

Title: DIRECTOR, IDAHO DEPT. OF ENV. QUALITY

Date: 12/3/12

Nu-West Industries, Inc.

By:  Date: 12/6/12

Name: Jon D. Goode  
Title: Vice President

Nu-West Mining, Inc.

By: Tom Diment

Date: 12/12/04

Name: Tom Diment

Title: President

## APPENDIX A

### NORTH MAYBE MINE SETTLEMENT AGREEMENT 2012

#### EAST MILL DUMP SUB-OPERABLE UNIT STATEMENT OF WORK

**STATEMENT OF WORK FOR THE  
NORTH MAYBE MINE EAST MILL DUMP SUB-OPERABLE UNIT  
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY**

## **1.0 Introduction**

This statement of work (SOW) provides an overview of Work that will be carried out by the Respondents (Nu-West Mining, Inc. and Nu-West Industries, Inc.) as they implement a combined Remedial Investigation and Focused Feasibility Study (RI/FFS) for the North Maybe Mine (NMM) (the Site) East Mill Dump Sub-Operable Unit (EMDSOU) in southeastern Idaho. The purpose of the RI/FS is to determine the nature and extent of contamination and any threat to public health and welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site. The RI/FS is intended to provide the basis for the lead agency's identification of a Final Remedy for the EMDSOU, and ultimately for the entire Site in conjunction with RI/FS work on other Site operable units and sub-operable units.

This SOW is attached to the RI/FS Administrative Settlement Agreement and Order on Consent/Consent Order (Settlement Agreement) for the East Mill Operable Unit of the Site<sup>1</sup>, and is a supporting document for the Settlement Agreement. Technical work described in this SOW is intended to provide more information and direction to the Respondents for the purpose of implementing the Settlement Agreement and is not intended to change the meaning of any Settlement Agreement language. This SOW is also consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP 2003). Any discrepancies between the Settlement Agreement and the SOW are unintended. The Settlement Agreement will control any interpretive disputes.

The United States Department of Agriculture Forest Service (Forest Service) is the Lead Agency for the Site, with the Idaho Department of Environmental Quality (IDEQ), U.S. Fish and Wildlife Service (FWS), and Shoshone-Bannock Tribes designated as Support Agencies. Hereinafter in this SOW, the "Agencies" refers to the Forest Service working in consultation with the Support Agencies.

A map of the immediate vicinity of the Site is attached as Appendix D to the Settlement Agreement.

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<sup>1</sup> Operable Units for the Site currently consist of the West Ridge Operable Unit and the East Mill Operable Unit. The Settlement Agreement addresses the East Mill Operable Unit. The East Mill Operable Unit is further divided into 3 sub-operable units. These are 1) the Creeks Sub-Operable Unit; 2) the Open Pit Sub-Operable Unit; and 3) the East Mill Dump Sub-Operable Unit addressed by this SOW. Each of these Sub-Operable Units has its own SOW. Section IV of the Settlement Agreement defines the Site and its operable units and sub-operable units.

The Respondents shall prepare a RI/FS Work Plan Addendum to fill remaining data gaps and complete the EMDSOU RI/FFS using existing data to the maximum extent possible, including data from the Forest Service East Mill Operable Unit RI/FS work, and using the Forest Service approved RI/FS Work Plan (E & E 2011). Sections 3.0 through 8.0 of this SOW describe the specific requirements and Deliverables the Respondents must complete in performing the RI/FFS for EMDSOU.

## **2.0 Background and Current Status**

The North Maybe Phosphate Mine is located in Caribou County, Idaho, primarily on National Forest System (“NFS”) land. The Forest Service exercises jurisdiction, custody and control over NFS land on behalf of the United States. The North Maybe Mine is located on Federal Leases IDI-04 and IDI-8289, held by Nu-West Mining, Inc. The open pit at the North Maybe Mine from which ore and waste rock was removed (“Mine Pit”) is approximately 2.5 miles long and is surrounded by 10 waste rock dumps, one of which is the East Mill Dump. The East Mill Dump is located on the east side of the north end of the Mine Pit and covers approximately 92 acres.

East Mill Dump was reclaimed from 1981 to 1985. In 1983, a severe thunderstorm washed contaminated sediments from the dump surface into East Mill Creek and downstream into Mill Canyon. The dump was subsequently repaired and sloped to its existing configuration. On the lower portion of the dump, the vegetation was less prolific and erosional rills developed, transporting dump materials into sedimentation ponds that contributed to surface water contamination. In 2008, Nu-West conducted a Time-Critical Removal Action to remove contaminated sediments and repair the sediment control structures to restore settling capacity.

Since 2009, the Forest Service has performed seasonal groundwater and surface water monitoring at the East Mill Operable Unit of the Site.

In 2011, the Forest Service initiated the RI/FS for the East Mill Operable Unit of the NMM. The Forest Service sampled soil, sediment, vegetation, groundwater, and surface water as part of the effort to characterize the nature and extent of contamination (E & E 2011). Various field data collected by the Respondents are also available and will be considered part of the existing unit data set.

## **3.0 RI/FS Overview**

### ***Purpose***

The primary purposes of the RI/FS are to (a) provide information needed to determine the nature and extent of contamination and any threat to public health and welfare or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the EMDSOU; and (b) develop and evaluate alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants or contaminants at or from the EMDSOU. The RI and FS are interactive and may be conducted concurrently so that the data collected in the RI will support the development of remedial alternatives in the FS, which in turn, affect the data needs and the scope of treatability studies, if necessary.

### ***Oversight***

The Agencies will provide oversight of Respondent's work for compliance with CERCLA, the NCP and other applicable laws.

All Deliverables submitted to the Agencies are subject to Agency approval, including, but not limited to, Deliverables specified in the Work Plan(s) or Settlement Agreement and additional Deliverables that may be required under Work Plan modifications. Respondents shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

### ***Schedule***

Refer to Attachment A for the Deliverables and associated schedules.

### ***Guidance***

The Respondents shall conduct the RI/FS and produce reports that are in accordance with the Settlement Agreement and this SOW, the *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (RI/FS Guidance) (EPA 1988) or subsequent revisions, and any other guidance that the Agencies use in conducting a RI/FS, as well as any additional requirements in this SOW. The RI/FS Guidance describes the report format and the required report content.

### ***Roles and Responsibilities***

The Respondents shall furnish all necessary personnel, materials, and services necessary to perform the RI/FS except as otherwise specified in the Settlement Agreement. At the completion of the RI/FS, the Forest Service will be responsible for preparing a proposed plan consistent with CERCLA sections 113(k) and 117(a). The Forest Service will also be responsible for selecting a remedy and documenting this selection in a Record of Decision (ROD).

### ***Remedy Requirements***

The remedial action alternative selected by the Forest Service will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment of the principal threats. The final RI/FS and risk assessment reports, as adopted by the Agencies, with the administrative record for the EMDSOU, will form the basis for the selection of the remedy and will provide the information necessary to support the development of the ROD.

#### 4.0 Task 1 – Scoping

**Subject to future refinement and modifications under the Settlement Agreement and the SOW, the Forest Service has completed the Task 1 scoping and developed the RI/FS Work Plan, including the Health and Safety Plan (HASP), Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) (E & E 2011). The Respondents shall develop a new HASP.**

Scoping is the initial planning process of the RI/FS. In preparing the RI/FS Work Plan, the Forest Service used the objectives of the RI/FS to help evaluate the adequacy of the existing information and to identify any data gaps. Because the work required to complete an RI/FS is not fully known, it may be necessary for the Respondents to modify the Work Plan during the RI/FS to satisfy RI/FS objectives.

The following activities have been performed by the Agencies as a function of the project planning process.

##### *a. Present Site Background Information*

The Forest Service gathered, analyzed, and presented the existing Site background information in the approved RI/FS Work Plan. The Forest Service shared existing Site background information with the Support Agencies and Respondents. The Agencies have evaluated the existing information relative to the specific requirements of the RI/FS process.

##### Collect and analyze existing data and document the need for additional data

The existing Site data has been compiled by the Forest Service and approved by the Agencies for the uses stated in the data usability sections of the RI/FS Work Plan (E & E 2011) and the Data Evaluation Reports (E & E 2012a, 2012b, 2012c). Specifically, this includes presently available data relating to the varieties and quantities of hazardous substances or areas from which hazardous materials were released) at the Site, and past disposal practices. All existing Site data and data collected under the RI/FS will be maintained and updated by the Respondents in a comprehensive database using readily available commercial software (ex., Microsoft Excel or Microsoft Access). Relevant data that have been appropriately validated and qualified per appropriate U.S. EPA guidance will be used in the RI/FS risk assessments.

For previously unevaluated data, the data will be reviewed by the Agencies to confirm that the data quality objectives for the RI/FS and risk assessment will be met. Only those data that are determined by the Agencies to be of appropriate type and quality to support specific intended uses may be utilized in the RI/FS and risk assessments.

##### *b. Project Planning*

The Agencies have collected and analyzed existing data and the specific project scope has been delineated. Project planning activities included tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Forest Service, in coordination with the Agencies, have developed and approved the scoping Deliverables listed below.



#### Update Conceptual Site Model

The Conceptual Site Model (CSM) includes known and suspected sources of contamination, types of contamination and affected media, known and potential routes of migration, and known or potential human and environmental receptors. Additional data may be collected as needed to ensure all exposure pathways and contaminants are adequately characterized, and appropriate technologies and/or treatment options may be evaluated. The CSM for the Site includes various animal species and their habitats that could be impacted by Site-related contamination and shows the relationships among animal species, contaminated media (i.e. soil, water, sediment) and potential exposure pathways. The CSM also identifies potential human receptor populations and potential human exposure pathways. The existing CSM will be revised and updated by the Respondents based on any new information or findings as the EMDSOU RI progresses. This effort, in addition to assisting in identification of locations where sampling is necessary, will assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a conceptual model is provided in the Data Quality Objective (DQO) Guidance (EPA 2000).

#### Refine and document preliminary remedial action objectives and alternatives

Existing Site information has been analyzed and a general understanding of the potential Site risks has been established by the Forest Service. The Agencies reviewed and refined general remedial action objectives for each actually or potentially contaminated media. These objectives, as revised during the EMDSOU RI/FS, will be preliminary remedial action objectives (PRAOs) for the EMDSOU.

The Agencies developed the preliminary range of broadly defined potential remedial action alternatives and associated technologies. The range of remedial action alternatives encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

#### Document the need for treatability studies

If during the EMDSOU RI/FS process Respondents or the Agencies identify potential remedial actions involving treatment, Respondents shall conduct treatability studies, except where the Respondents demonstrate to the Agencies' satisfaction that a treatability study is not necessary. When Agencies conclude treatability studies are needed, initial treatability testing activities (such as research and study design) will be documented in technical memoranda and planned to occur concurrently with EMDSOU characterization activities.

#### Begin preliminary identification of potential ARARs

The Forest Service has conducted a preliminary identification of potential state, federal and tribal ARARs (chemical-specific, location-specific and action-specific) to assist in the refinement of remedial action objectives and the initial identification of remedial alternatives and ARARs associated with particular actions. ARAR identification will continue by the Agencies and Respondents as Site conditions, contaminants, and remedial action alternatives are better defined.

*c. Scoping Deliverables*

The Agencies have approved an RI/FS Work Plan, a FSP, and a QAPP and HASP (E & E 2011).

RI/FS Work Plan

The Agencies developed an RI/FS Work Plan documenting the decisions and evaluations completed during the scoping process (E & E 2011). The RI/FS Work Plan was developed in conjunction with the FSP, QAPP, and the HASP. The RI/FS Work Plan includes a comprehensive description of the Work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the RI/FS Work Plan includes the rationale for performing the required activities. Specifically, the RI/FS Work Plan presents a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the RI/FS Work Plan includes a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, including current and historical features, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site.

The Forest Service has determined that it is appropriate to conduct a baseline Human Health Risk Assessment (HHRA) and an Ecological Risk Assessment (ERA). Considering this, a key component of the RI/FS Work Plan is a description of the approach and methodology for conducting the HHRA and ERA.

Risk Assessments

The Respondents will complete the baseline HHRA in accordance with current EPA guidance (EPA, 1989, 1991a, 1991b, 1992a, 1992b, 1992c, 1995, 2001, 2004a, 2005) and the RA Work Plan. The HHRA should evaluate the potential for current and future adverse human health effects that may be caused by contaminant release(s) from the EMDSOU if no action is taken. The HHRA should consist of two phases: problem formulation and risk quantification. The problem formulation phase will identify the conditions at and surrounding the EMDSOU that can influence human exposure from EMDSOU-related releases.

The risk quantification phase of the HHRA shall include the four tasks identified below, and should use the information developed during the problem formulation phase of the HHRA:

- Exposure Assessment - Identifies the pathways by which potential human exposures could occur, describes how they are evaluated, and evaluates the magnitude, frequency, and duration of these exposures
- Toxicity Assessment - Summarizes the toxicity of the contaminants of potential concern and the relationship between magnitude of exposure and the occurrence of adverse health effects
- Risk Characterization - Integrates information from the exposure and toxicity

assessments to characterize the risks to human health from potential exposure to chemicals in environmental media

- Uncertainty Analysis - Summarizes the basic assumptions used in the HHRA, as well as limitations of data and methodology

Consistent with current EPA guidance (EPA 1997a, 1997b, and 1998), a baseline ERA shall include the following three interrelated phases:

- Problem formulation phase - the process shall begin with the problem formulation because this element defines the objectives and scope of the ecological assessment. Problem formulation identifies ecological resources and attributes at the EMDSOU as well as the stressors that could affect these attributes. Two outputs of problem formulation include (1) the conceptual exposure model (CEM) to identify the pathways by which exposure to chemicals of potential ecological concern (COPECs) can occur for ecological receptors, and (2) identification of ecological endpoints that provide measures of the health of ecosystems at the EMDSOU.
- Analysis phase - the analysis phase shall be directed by the results of the problem formulation. This phase will estimate the magnitude of actual or potential ecological exposures to representative wildlife species (“characterization of ecological exposure”) and identify the types of ecological effects that can result from exposure to EMDSOU related chemicals (“characterization of ecological effects”). The outputs of the analysis phase are a profile of potential exposure at the EMDSOU and a profile of the toxicological properties of EMDSOU -related chemicals (stressor-response profile). These products provide the basis of the risk characterization.
- Ecological risk characterization phase - this final phase of the ERA shall integrate the ecological exposure and effects assessments to estimate the potential for adverse impacts to ecological receptors from exposure to EMDSOU COPECs. This phase shall include a discussion of the lines of evidence and the assumptions and limitations of the analyses.

The Risk Assessment Work Plan documents the guidance, data evaluation approach (representativeness, grouping, and processing), exposure quantification methods and assumptions, and sources of toxicity factors to be used in the ERA and HHRA.

The RI/FS Work Plan, FSP, and QAPP describe the details of the EMDSOU investigation, data quality objectives, as well as the data analysis methods to be used to define or quantify risks at the EMDSOU.

The baseline HHRA and ERA will provide the basis for determining whether a response action is needed. Technical details and professional judgment needed to complete the baseline HHRA and ERA have already been incorporated into the RI/FS Work Plan, FSP, and QAPP. Work Plan, FSP, and QAPP implementation should provide the Remedial Project Manager with the information needed to incorporate risk management decisions into the remedy selection process.

An integral part of the RI/FS Work Plan is a detailed description of the tasks to be performed, information needed for each task, information to be produced during and at the conclusion of each task, and a description of the Deliverables that will be submitted to the Agencies. This includes the Deliverables as set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS Guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), appropriate reporting to the Agencies and work sessions to introduce and review key RI/FS work elements. The Respondents must refer to Attachment B of the RI/FS Guidance for a comprehensive description of the contents of the required RI/FS Work Plan. Because of the iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. The Respondents shall submit a technical memorandum documenting the need for additional data, and identifying the DQOs whenever such requirements are identified. In any event, the Respondents are responsible for fulfilling additional data and analysis needs consistent with the general scope and objectives of the RI/FS. The RI/FS Work Plan must reflect coordination with treatability study requirements, if treatability studies are initiated.

#### Field Sampling Plan and Quality Assurance Project Plan

The Agencies have prepared a FSP and QAPP for the RI/FS (E & E 2011). The Respondents are to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs established for the RI/FS and risk assessment.

The FSP defines in detail the sampling and data-gathering methods that the Respondents will use on the project. It includes sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP describes the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs reflect the use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the NCP. In addition, the QAPP addresses the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

The Respondents shall demonstrate, in advance and to the satisfaction of the Agencies, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of potential concern (COPCs) in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the EMDSOU by the Agencies. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used for the purposes proposed and QA/QC procedures approved by the Agencies will be used. If the laboratory is not in the CLP program, a laboratory QAPP must be submitted for the Agencies' review and approval. The Agencies may require that the Respondents submit detailed information to demonstrate that the laboratory is qualified to conduct the Work, including information on personnel qualifications, equipment, and material specifications. The Respondents shall assure that the

Agencies have access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

As determined appropriate by the Agencies, given EMDSOU-specific considerations, the Respondents will ensure that any modifications to the FSP and QAPP are consistent with those developed for other regional phosphate mining sites to allow for valuable comparison and integration of data. The FSP and QAPP were prepared in accordance with EPA Data Quality guidance documents (EPA 2000, 2002a, 2002b, and 2006) as well as the *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2010) and any other appropriate EPA guidance documents such as *Guidance for Choosing a Sampling Design for Environmental Data Collection* (EPA 2002a). The Respondents will ensure these standards are maintained.

#### Potential Target Analytes

Potential target analytes include the COPCs listed in Attachment B to this SOW for the various media of interest (soils, vegetation, surface water, and ground water). Other constituents may be added to the preliminary COPC list based on Agency and Respondent review. The number of samples and media to be analyzed for the full target analyte list is documented in the FSP and QAPP.

The Respondents shall evaluate the analytical data in an annual Data Summary Report (DSR) by comparing the analytical results of each media of interest for each of the COPCs against appropriate screening levels as determined during scoping.

#### Surface Water

As the RI progresses, the Respondents shall review the results of surface water sampling (this includes prior sampling conducted at the EMDSOU), shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by the Agencies, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Follow-up sampling of surface water pathways during the seasonal runoff period of the next average annual precipitation year is required to ensure that all release sources and contaminant migration routes have been identified. Follow-up sampling will be defined in greater detail in the RI/FS Work Plan Addendum.

#### Groundwater

As the RI progresses, the Respondents shall review the results of ground water sampling (this includes prior sampling conducted at the EMDSOU), shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent ground water sampling events. Upon approval by the

Agencies, the COPCs eliminated by this process do not need to be included in the analyses for subsequent ground water sampling events.

#### Soils and Sediments

The sampling results of the analytes listed in Attachment B of this SOW must be screened by comparison to appropriate benchmarks.

#### Vegetation

The sampling results of the analytes listed in Attachment B of this SOW must be screened by comparison to appropriate benchmarks.

#### Health and Safety Plan

A HASP shall be prepared in conformance with the Respondents' health and safety program, and in compliance with Occupational Safety and Health Administration (OSHA) regulations and protocols. It should be noted that the Agencies do not "approve" the Respondents' health and safety plan, but rather the Agencies review it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

### **5.0 TASK 2 - COMMUNITY RELATIONS**

The development and implementation of community relations activities are the responsibility of the Agencies. Although implementation of the Community Involvement Plan is the responsibility of the Agencies, upon the Agencies' request, in a timely manner, the Respondents may assist by providing information on the Site's history, preparing presentation materials, participating in public meetings, and preparing fact sheets for distribution to the general public.

### **6.0 TASK 3 - EMDSOU CHARACTERIZATION**

The Agencies have completed much of the EMDSOU characterization in accordance with the Agency-approved RI/FS Work Plan, FSP, QAPP, and HASP (E & E 2011). The Spring, Summer, and Fall 2011 Data Evaluation Reports (DERs) summarize investigative activities completed for the EMDSOU (E & E 2012a, 2012b, & 2012c). The Respondents shall review the data collected by the Forest Service in 2012 when it becomes available. As part of the RI, the Respondents shall perform the activities described in this task, including the preparation of Data Summary Reports (DSRs) if additional data collection is necessary, the human health and ecological risk assessments, and the RI report. The overall objective of the EMDSOU RI/FS characterization is to describe areas of the EMDSOU that may pose a threat to human health or the environment. This will be accomplished by first determining the EMDSOU's physiography (current and historical) geology, and hydrology/hydrogeology, and defining surface and subsurface pathways of migration. The Respondents shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as characterize background concentrations in the affected media. The Respondents shall also document the extent of migration of this contamination and any changes in its physical or chemical characteristics, to provide for a



comprehensive understanding of its nature and extent. Respondents will use this information to determine and project contaminant fate and transport.

During this phase of the RI/FS, the Work Plan, FSP, QAPP, and HASP, including any addenda are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondents shall notify the Agencies at least seven (7) days in advance of the field work regarding the planned dates for the RI/FS field activities. The Agencies may waive the seven day notification requirement as appropriate (e.g. in the case of time-critical sampling such as spring high runoff sampling). Every effort should be made to coordinate field work with the Agencies. In such instances, notification of the Agencies shall occur as soon as practicable in advance of the field activities. The Respondents shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during EMDSOU characterization meet the specific QA/QC requirements and the DQOs of the RI as specified in the FSP and QAPP. In view of the unknown Site conditions, activities likely will be iterative, and to satisfy the objectives of the RI/FS it may be necessary for the Respondents to supplement the Work specified in the initial Work Plan. In addition to the Deliverables below, the Respondents shall provide quarterly progress reports (also Deliverables) and participate in work sessions when requested by the Agencies. During implementation of field activities, the Respondents may be directed to produce bi-weekly progress reports.

**a. Field Investigation**

The field investigation shall include the gathering of data to define the EMDSOU physical and biological characteristics, characterize sources of contamination, and the nature and extent of contamination at the EMDSOU. If necessary, Respondents will perform a supplemental investigation in accordance with applicable EPA guidance including *Guidance for Choosing a Sampling Design for Environmental Data Collection* (EPA 2002). Any field investigation activities shall be performed by the Respondents in accordance with the Work Plan, FSP, QAPP, and any addenda.

The Respondents shall collect, analyze and evaluate the data to describe: (1) the EMDSOU physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Descriptions of the EMDSOU's physical characteristics, source characteristics, and extent of contamination analyses are utilized in the evaluation of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to the Agencies in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to the Agencies together with a sensitivity analysis. The Respondents shall collect data required to address data gaps to complete the RI/FS and risk assessments.

The Respondents shall ensure sufficient data is obtained, including the potential for contaminant release (e.g., long-term leaching from soil and waste rock materials) and the projection of

contaminant fate and transport, for the development and screening of remedial action alternatives, including information to assess treatment technologies.

***b. Data Management Procedures***

Data collected by Nu-West in 2005, 2006, 2007, and 2008 were evaluated for data usability in the approved RI/FS Work Plan and are considered appropriate for use in the RI/FS only to characterize nature and extent of contamination. Data collected by the USFS in 2009 and 2010 were evaluated for data usability in the approved RI/FS Work Plan and are considered appropriate for use in the RI/FS and risk assessments. Data collected by the USFS in 2011 were evaluated for data usability in the approved Data Evaluation Reports and are considered appropriate for use in the RI/FS and risk assessments. Data collected by Nu-West as part of the Time Critical Removal Action in 2009, 2010, and 2011 have not been evaluated for data usability. These data will be evaluated for data usability in accordance with procedures defined in the approved RI Work Plan, FSP, QAPP, and documented in the RI/FS. Data collected going forward that have been appropriately validated and qualified consistent with the approved RI/FS Work Plan, FSP, QAPP, and applicable EPA guidance (e.g., USEPA National Functional Guidelines), will be evaluated for usability in the RI/FS and risk assessments. The Respondents shall consistently document the quality and validity of additional field and laboratory data collected during the RI, as specified below.

Document data collection activities

Information gathered during the EMDSOU characterization shall be consistently documented and adequately recorded by the Respondents in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the Work Plan, QAPP, and/or the FSP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Maintain sample management and tracking

The Respondents shall maintain field reports, sample shipment records, analytical results, and quality assurance and quality control (QA/QC) reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. All future sampling and testing data (and available sampling and testing data collected for past investigations), QA/QC documentation, and chain of custody forms that are maintained by the Respondents must be in an electronic format easily accessible by the Agencies. An index of all records pertaining to the above must be maintained and updated after each sampling and/or analysis event with a copy included in the Data Summary Reports (see Attachment A of this SOW under EMDSOU Characterization Deliverables). Analytical results developed under the Work Plan must not be included in any EMDSOU characterization reports unless accompanied by or cross-referenced to a corresponding laboratory QA/QC report. In addition, the Respondents shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.



Data validation management

All validated data, and the electronic data deliverable (EDD) shall be made available to the Agencies in electronic format (i.e., computer disc or equivalent). The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event.

The Respondents will use a third party to validate datasets using the general protocol and process described in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (NFG) (EPA, 2010 or subsequent revision), and QA plans that are consistent with relevant guidance.

**c. EMDSOU Characterization Deliverables**

The Respondents shall prepare Data Summary Reports following each annual field season and prepare the RI report at the completion of the remedial investigation.

Data Summary Reports

After completing each annual field season's sampling and analysis, the Respondents shall prepare a concise EMDSOU characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place, and describe and display data documenting the location and characteristics of surface and subsurface features and contamination at the EMDSOU, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to the Agencies, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report

The Respondents shall prepare and submit a draft RI report to the Agencies for review, comment, modification, and approval. This report shall summarize results of field activities to characterize the EMDSOU, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondents shall refer to the RI/FS Guidance for an outline of the report format and contents. Following comment by the Agencies, the Respondents shall prepare a final RI report, which satisfactorily addresses Agencies' comments and incorporates the Agencies' modifications.

Because of the significant amount of pre-existing data and considerable knowledge of site conditions at EMDSOU the Respondents shall combine the RI Report with the Focused Feasibility Study (FFS) into one deliverable. The Respondents understand that should a

significant data gap be identified in the RI report that sufficient data will be gathered to fill the gap before the Final version of the combined RI/FFS report can be submitted.

#### Risk Assessments (RAs)

The Respondents shall conduct a Human Health Risk Assessment (HHRA) and a Ecological Risk Assessment (ERA) to assess the potential human health and ecological risks posed by the EMDSOU in the absence of any remedial action. The Respondents shall conduct the HHRA and ERA consistent with the approved RI/FS Work Plan and relevant EPA guidance, using exposure point concentrations developed from data collected at the EMDSOU. If unacceptable risks are shown, alternatives to address those risks will be evaluated in the Feasibility Study.

The HHRA must include the following components:

- Identification of chemicals present and a list of chemicals of potential concern that are considered to be most important to the human health evaluation.
- Exposure assessment to identify the pathways by which potential human exposure could occur and estimate the magnitude, frequency, and duration of the exposure; and the related uncertainties for contaminant toxicity (e.g. weight of evidence for a chemical's carcinogenicity). Identification of the most sensitive receptor and most susceptible populations will also be included in the RA.
- Toxicity assessment to summarize the toxicity of the selected chemicals and the relationship between magnitude of exposure and adverse human health effects.
- Risk characterization to integrate the toxicity and exposure assessments to estimate the potential risks to human health from exposure to chemicals in environmental media.
- The HHRA shall be consistent with EPA human health risk assessment guidance (EPA, 1989, 1991a, 1991b, 1992a, 1992b, 1992c, 1995, 2004a, 2005).

The ERA shall be conducted using EPA's eight step process. The ERA will evaluate the likelihood of adverse ecological effects occurring as a result of exposure to physical or chemical stressors. The ERA shall contain detailed information regarding the contact or co-occurrence of stressors with the biological community at the EMDSOU. Exposure profiles shall be developed to identify ecological habitats and pathways of exposure. The sources and distribution of stressors in the environment shall also be characterized. The ERA shall be conducted in accordance with EPA ecological risk assessment guidance (EPA 1997a, 1997b, and 1998).

The Respondents shall prepare and submit a draft Baseline RA Report to the Agencies for review and approval. This report shall summarize results of the EMDSOU-specific Human Health and Ecological Risk Assessments. Following review by the Agencies, the Respondents shall prepare a final Baseline RA Report which satisfactorily addresses the Agencies' comments and modifications. At the discretion of the Agencies, the RA Report may be incorporated into the RI Report.

## 7.0 TASK 4 - TREATABILITY STUDIES

If candidate treatment technologies have not been sufficiently demonstrated, or cannot be adequately evaluated for the EMDSOU on the basis of available information, treatability testing must be conducted. Treatability testing shall be performed by the Respondents, if determined necessary by the Agencies, to assist in the detailed analysis of alternatives. A separate HASP for the treatability studies may be necessary. In addition, if applicable, testing results and operating conditions shall be used in the detailed design of the selected remedial technology. The following activities shall support any treatability studies.

### *a. Determination of Candidate Technologies in Need of Testing*

The Respondents shall propose in a technical memorandum, subject to the Agencies' review, comment, modification, and approval, candidate technologies for a treatability studies program. The listing of candidate technologies must cover the range of technologies required for alternatives analysis including innovative technologies (Task 5.a). The specific data requirements for the testing program will be determined and refined during EMDSOU characterization and the development and screening of remedial alternatives.

Once a decision has been made to perform treatability studies, the Respondents shall propose, subject to the Agencies' review and approval, the type of treatability testing to use (e.g., bench versus pilot). Because of the time required to design, fabricate, and install pilot-scale equipment, as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the Focused FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondents shall either submit to the Agencies a treatability testing Work Plan or an amendment to the original EMDSOU Work Plan for the Agencies' review and approval.

### *b. Treatability Deliverables*

If Respondents conduct treatability testing, the required Deliverables, in addition to the memorandum identifying candidate technologies, include a Work Plan, a FSP, QAPP and a final treatability evaluation report. The Agencies may also require a treatability study HASP, where appropriate.

#### Treatability testing work plan

The Respondents shall prepare a treatability testing Work Plan or amendment to the original Work Plan for the Agencies' review, comment, modification, and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale Work Plan will describe pilot test installation and start-up, pilot test operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed HASP. If testing is to be performed off-Site, permitting requirements must be addressed.

Treatability study FSP and QAPP

If the QAPP or FSP developed for the RI/FS is not adequate for defining the activities to be performed during the treatability tests, a separate treatability study FSP and QAPP or amendment to the EMDSOU FSP and QAPP must be prepared by the Respondents for the Agencies' review and approval. Task 1, Item c. of this SOW provides additional information on the requirements of the treatability study FSP and QAPP.

Treatability study HASP

If the HASP developed for the RI/FS is not adequate for defining the activities to be performed during the treatment tests, a separate health and safety plan or amended HASP must be developed by the Respondents. Task 1, Item c, of this SOW provides additional information on the requirements of the HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondents shall analyze and interpret the testing results in a technical report to the Agencies. Depending on the sequence of activities, this report may be a part of the RI or FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

**8.0 TASK 5 – FOCUSED FEASIBILITY STUDY**

The FFS comprises two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The results of these two FFS components will comprise the draft FFS Report. Interim Deliverables associated with these activities are identified in the RI/FS Work Plan. Future Interim Deliverables will be identified in RI/FS Work Plan Addenda.

***a. Development and Screening of Remedial Alternatives***

The development and screening of remedial alternatives is performed to develop an appropriate range of waste management options that will be evaluated. This range of alternatives must include, as appropriate, options which use treatment to reduce the toxicity, mobility, or volume of wastes, but vary the types of treatment, the amount treated, and the management of long-term residuals or untreated wastes; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative.

The Respondents shall begin to develop and evaluate a range of appropriate waste management options that, at a minimum, ensure protection of human health and the environment, given all current and potential uses of the land, and comply with ARARs. This shall be done concurrent with the RI characterization task. The following activities shall be performed by the Respondents as a function of the development and screening of remedial alternatives.

#### Refine and document remedial action objectives

Based on the risk assessment, the Respondents shall review and, if necessary, modify the EMDSOU specific Remedial Action Objectives (RAOs), specifically the preliminary remediation goals (PRGs) established by the Agencies during the scoping phase of the RI/FS Work Plan. The revised PRGs will be documented in a technical memorandum subject to Agency review, comment, modification, and approval. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route). Objectives and action levels from the EPA Regional Screening Levels (RSL) and Area-Wide Risk Management Plan (AWRMP) (IDEQ 2004) may be used in the review and modification of the PRGs, considering the EMDSOU-specific conditions at the Site, if determined appropriate by the Agencies.

#### Develop general response actions

The Respondents shall develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the remedial action objectives.

#### Identify areas or volumes of media

The Respondents shall identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified in the RAOs. The chemical, biological and physical characterization of the EMDSOU must also be taken into account.

#### Identify, screen, and document remedial technologies

The Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented. General response actions must be refined to specify remedial technology types. Technology process options for each of the technology types shall be identified either concurrent with the identification of technology types, or following the screening of the considered technology types. Process options must be evaluated on the basis of effectiveness, implementability, and cost factors to identify and retain one or, if necessary, more representative processes for each technology type. The technology types and process options must be summarized for inclusion in a technical memorandum. The reasons for eliminating alternatives must be specified.

#### Assemble and document alternatives

The Respondents shall assemble selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives will represent a range of treatment and containment combinations that will address the EMDSOU as a whole. The Respondents must prepare a summary of the assembled alternatives and their related action-specific ARARs for inclusion in a technical memorandum. The reasons for eliminating alternatives during the preliminary screening process must be specified.

Refine alternatives

The Respondents shall refine the remedial alternatives to identify contaminant volume addressed by the proposed process and sizing of critical unit operations as necessary. Sufficient information must be collected for an adequate comparison of alternatives. Respondents shall also modify PRGs for each contaminant of concern in each medium as necessary to incorporate any new risk assessment information presented in the RA Report. Additionally, action-specific ARARs must be updated as the remedial alternatives are refined.

Conduct and document screening evaluation of each alternative

The Respondents may perform a final screening process based on short- and long-term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare a technical memorandum subject to Agency review, comment, modification, and approval, and include in the FFFS Report, a summary of the results and reasoning employed in screening, arraying alternatives that remain after screening, and identifying the action-specific ARARs for the alternatives that remain after screening.

***b. Detailed Analysis of Remedial Alternatives***

The detailed analysis shall be conducted by the Respondents to provide the Agencies with the information needed to allow for the selection of a remedy. This analysis is the final task to be performed by the Respondents during the FFS.

The Respondents shall conduct a detailed analysis of alternatives, which must consist of an analysis of each alternative against the nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison.

The Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 1 and 2 are threshold criteria that must be met (unless a specific ARAR is waived, with respect to Criteria 2); Criteria 3-7 are primary balancing criteria; and Criteria 8 and 9 are modifying criteria evaluated by the Agencies after receiving public comments following release of the RI/FS report and a proposed remedial action plan to the general public. For each alternative, the Respondents must



provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment. Since the Respondents do not have direct input on Criteria 8 (state or support agency acceptance), and Criteria 9 (community acceptance), these will be addressed by the Agencies.

The Respondents shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification of the preferred alternative for the proposed plan and selection of a remedy in the Record of Decision (ROD) is reserved by the Forest Service in consultation with the Support Agencies. The Respondents shall prepare a technical memorandum subject to Agency review, comment, modification, and approval, and include in the Focused FS a summary of the results of the comparative analysis.

***c. Focused Feasibility Study Report***

The Respondents shall prepare a draft FFS Report for the Agencies' review and comment. This report, as ultimately adopted or modified by the Agencies, provides a basis for remedy selection by the Forest Service in consultation with the Support Agencies and documents the development and analysis of remedial alternatives. The Respondents shall refer to the RI/FS Guidance for an outline of the report format and the required report content. The Respondents shall prepare a final Focused FFS Report which satisfactorily addresses the Agencies' comments.

**9.0 Task 6 - RI/FS Project Management**

The Respondents will prepare and submit quarterly Project Deliverables Status reports (PDSRs) to the Agencies to aid in project planning and resource allocations. These reports will document the status of all in-process Deliverables (including interim Deliverables, technical memoranda, and specific Deliverables identified in this SOW) and the Deliverables projected for submission. These PDSRs will be submitted according to the schedule in Attachment A of this SOW.

## 10.0 REFERENCES

- EPA 1988. *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, U.S. EPA, Office of Emergency and Remedial Response, Interim Final, October, 1988.
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- EPA 1992a. *Supplemental Guidance to RAGS: Calculating the Concentration Term*. USEPA Office of Solid Waste and Emergency Response, publication 9285.7-081, 1992.
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- EPA 1998. *Guidelines for Ecological Risk Assessment*. EPA/630/R-95/002F, 1998. EPA 2000. *Guidance for the Data Quality Objectives Process* (EPA QA/G4), 2000.
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- EPA 2004b. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. EPA/540/R-04/004.
- EPA 2005. *Guidelines for Carcinogen Risk Assessment*. EPA/630/P-03/001F, 2005.
- EPA 2006. *Guidance on Systematic Planning Using the Data Quality Objectives Process* (EPA QA/G-4). EPA/240/B-06/001, February 2006.
- IDEQ 2004. *Area Wide Risk Management Plan: Removal Action Goals and Objectives, and Action Levels for Addressing Releases and Impacts from Historic Phosphate Mining Operations in Southeast Idaho*, February 2004, IDEQ# WST.RMIN.SEA.W.6005.67068.



- NCP 2003. *The National Oil and Hazardous Substances Pollution Contingency Plan (NCP)*, 40 CFR, Part 300, July 1, 2003.
- EPA 2010. Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. EPA/540/R-10/011
- E & E 2011. Final Comprehensive Planning Documents, North Maybe Mine, East Mill Operable Unit Remedial Investigation/Feasibility Study, September 2011. Ecology & Environment, Inc.
- E & E 2012a. Final Data Evaluation Report, 2011 Peak Flow Surface and Groundwater Sampling Event, North Maybe Mine, East Mill Operable Unit, January 2012. Ecology & Environment, Inc.
- E & E 2012b. Final Data Evaluation Report, July 2011 Soil and Vegetation Sampling Event, North Maybe Mine, East Mill Operable Unit, April 2012. Ecology & Environment, Inc.
- E & E 2012c. Final Data Evaluation Report, 2011 Fall Surface Water, Groundwater, Terrestrial Vegetation, and Sediment Sampling Event, North Maybe Mine, East Mill Operable Unit, May 2012. Ecology & Environment, Inc.

***Statement of Work Attachments***

- A. EMDSOU RI/FS SOW Deliverables Schedule***
- B. EMDSOU RI/FS COPC List and Analytical Parameters***

**Attachment A**

**EMDSOU RI/FS SOW**

***Deliverables Schedule (all days are calendar days)***

RI/FS Work Plan

- Completed and approved by Forest Service, reviewed by Support Agencies (E & E 2011).
- Draft RI/FS Work Plan Addendum due within 120 days after Forest Service notification to proceed.
- 30 days for Agencies to submit comments (for planning purposes)
- 15 days after receipt, Respondents submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final Updated RI/FS Work Plan Addendum.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days of completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier
- 30 days for Agencies to submit comments (for planning purposes)
- 15 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final DSRs

Combined Remedial Investigation (RI) / Focused Feasibility Study (FFS) Report:

- Submit draft RI/FFS Report within 150 days after receipt of final laboratory data from the final field season or the Final DSR approval. Within 5 days of receipt of final laboratory data, Respondents shall provide written notification to the Forest Service identifying receipt date of final laboratory data.
- 60 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final RI/FFS Report

Risk Assessment (RA) Report:

- Submit draft RA Report within 60 days after receipt of final laboratory data from the final field season.
- 45 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments

- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days after the above meeting/call, Respondents submit Final Focused RA Report

Data Validation Summaries (DVSs):

- DVSs due within 90 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondents will provide written notification to the Forest Service identifying the date of collection of the last sample from each sampling event.

Project Deliverables Status Reports (PDSRs):

- Submit by the 2nd Friday of January, April, July, and October

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies, Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by the Agencies, shall be due within 30 days Respondents' receipt of notice that said Deliverable is required.
- Final Interim Deliverables due within 30 days of receipt of consolidated Agency comments.

Attachment B			
EMDSOU COPC List and Analytical Parameters			
Groundwater	Surface Water	Sediment and Soil	Vegetation / Biota
<b>Field Measurements</b>			
Groundwater Elevation	Discharge		
Temperature	Temperature		
pH	pH		
Specific conductance	Specific conductance		
Dissolved oxygen	Dissolved oxygen		
Turbidity	Turbidity		
ORP	ORP		
Ferrous Iron			
Ferric Iron			
<b>Metals (Total and Dissolved for Aqueous and Total for Solids)</b>			
Aluminum	Aluminum	Aluminum	Aluminum
Antimony	Antimony	Antimony	Antimony
Arsenic	Arsenic	Arsenic	Arsenic
Barium	Barium	Barium	Barium
Beryllium	Beryllium	Beryllium	Beryllium
Boron	Boron	Boron	Boron
Cadmium	Cadmium	Cadmium	Cadmium
Chromium	Chromium III	Chromium	Chromium
	Chromium VI*		
Cobalt	Cobalt	Cobalt	Cobalt
Copper	Copper	Copper	Copper
Iron	Iron	Iron	Iron
Lead	Lead	Lead	Lead
Manganese	Manganese	Manganese	Manganese
Mercury	Mercury	Mercury	Mercury
Molybdenum	Molybdenum	Molybdenum	Molybdenum
Nickel	Nickel	Nickel	Nickel
Selenium, total recoverable	Selenium, total recoverable	Selenium	Selenium
Silver	Silver	Silver	Silver
Thallium	Thallium	Thallium	Thallium
Uranium	Uranium	Uranium	Uranium
Vanadium	Vanadium	Vanadium	Vanadium
Zinc	Zinc	Zinc	Zinc
<b>Other Analyses</b>			
Chloride			
Nitrate/Nitrite, as N	Nitrate/Nitrite, as N		
Sulfate			
	Hardness		
Total Organic Carbon (TOC)			
Total Dissolved Solids (TDS)	Total Dissolved Solids (TDS)		
Total Suspended Solids (TSS)	Total Suspended Solids (TSS)		

\*Respondents shall analyze for total chromium; speciation of chromium (i.e., CrIII and CrVI) need only be done when concentration of total chromium meets or exceeds the MCL for chromium-VI.

## **APPENDIX B**

### **NORTH MAYBE MINE SETTLEMENT AGREEMENT 2012**

#### **OPEN PIT SUB-OPERABLE UNIT STATEMENT OF WORK**

**STATEMENT OF WORK FOR THE  
NORTH MAYBE MINE OPEN PIT SUB-OPERABLE UNIT  
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY**

**1.0 Introduction**

This statement of work (SOW) provides an overview of Work that will be carried out by the Respondents (Nu-West Mining, Inc. and Nu-West Industries, Inc.) as they implement a Remedial Investigation and Feasibility Study (RI/FS) for the North Maybe Mine (NMM) (the Site) Open Pit Sub-Operable Unit (OPSOU) in southeastern Idaho. The purpose of the RI/FS is to determine the nature and extent of contamination and any threat to public health and welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site. The RI/FS is intended to provide the basis for the lead agency's identification of a Final Remedy for the OPSOU, and ultimately for the entire Site in conjunction with RI/FS work on other Site operable units and sub-operable units.

This SOW is attached to the RI/FS Administrative Settlement Agreement and Order on Consent/Consent Order (Settlement Agreement) for the East Mill Operable Unit of the Site<sup>1</sup>, and is a supporting document for the Settlement Agreement. Technical work described in this SOW is intended to provide more information and direction to the Respondents for the purpose of implementing the Settlement Agreement and is not intended to change the meaning of any Settlement Agreement language. This SOW is also consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP 2003). Any discrepancies between the Settlement Agreement and the SOW are unintended. The Settlement Agreement will control any interpretive disputes.

The United States Department of Agriculture Forest Service (Forest Service) is the Lead Agency for the Site, with the Idaho Department of Environmental Quality (IDEQ), U.S. Fish and Wildlife Service (FWS), and Shoshone-Bannock Tribes designated as Support Agencies. Hereinafter in this SOW, the "Agencies" refers to the Forest Service working in consultation with the Support Agencies.

A map of the immediate vicinity of the Site is attached as Appendix D to the Settlement Agreement.

The Respondents shall prepare a RI/FS Work Plan Addendum to fill remaining data gaps and complete the OPSOU RI/FS using existing data to the maximum extent possible, including data from the Forest Service East Mill Operable Unit RI/FS work, and using the Forest Service

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<sup>1</sup> Operable Units for the Site currently consist of the West Ridge Operable Unit and the East Mill Operable Unit. The Settlement Agreement addresses the East Mill Operable Unit. The East Mill Operable Unit is further divided into 3 sub-operable units. These are 1) the Creeks Sub-Operable Unit; 2) the Open Pit Sub-Operable Unit addressed by this SOW; and 3) the East Mill Dump Sub-Operable Unit. Each of these Sub-Operable Units has its own SOW. Section IV of the Settlement Agreement defines the Site and its operable units and sub-operable units.

approved RI/FS Work Plan (E & E 2011). Sections 3.0 through 8.0 of this SOW describe the specific requirements and Deliverables the Respondents must complete in performing the RI/FS for OPSOU.

## **2.0 Background and Current Status**

The North Maybe Phosphate Mine is located in Caribou County, Idaho, primarily on National Forest System (“NFS”) land. The Forest Service exercises jurisdiction, custody and control over NFS land on behalf of the United States. The North Maybe Mine is located on Federal Leases IDI-04 and IDI-8289, held by Nu-West Mining, Inc. The open pit at the North Maybe Mine from which ore and waste rock was removed (“Mine Pit”) is approximately 2.5 miles long and is surrounded by 10 waste rock dumps, one of which is the East Mill Dump. The East Mill Dump is located on the east side of the north end of the Mine Pit and covers approximately 92 acres.

East Mill Dump was reclaimed from 1981 to 1985. In 1983, a severe thunderstorm washed contaminated sediments from the dump surface into East Mill Creek and downstream into Mill Canyon. The dump was subsequently repaired and sloped to its existing configuration. On the lower portion of the dump, the vegetation was less prolific and erosional rills developed, transporting dump materials into sedimentation ponds that contributed to surface water contamination. In 2008, Nu-West conducted a Time-Critical Removal Action to remove contaminated sediments and repair the sediment control structures to restore settling capacity.

Since 2009, the Forest Service has performed seasonal groundwater and surface water monitoring at the East Mill Operable Unit of the Site.

In 2011, the Forest Service initiated the Remedial Investigation / Feasibility Study for the East Mill Operable Unit of the NMM. The Forest Service sampled soil, sediment, vegetation, groundwater, and surface water as part of the effort to characterize the nature and extent of contamination (E & E 2011). Various field data collected by the Respondents are also available and will be considered part of the existing unit data set.

## **3.0 RI/FS Overview**

### ***Purpose***

The primary purposes of the RI/FS are to (a) provide information needed to determine the nature and extent of contamination and any threat to public health and welfare or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the OPSOU; and (b) develop and evaluate alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants or contaminants at or from the OPSOU. The RI and FS are interactive and may be conducted concurrently so that the data collected in the RI will support the development of remedial alternatives in the FS, which in turn, affect the data needs and the scope of treatability studies, if necessary.

### ***Oversight***

The Agencies will provide oversight of Respondent’s work for compliance with CERCLA, the NCP and other applicable laws.



All Deliverables submitted to the Agencies are subject to Agency approval, including, but not limited to, Deliverables specified in the Work Plan(s) or Settlement Agreement and additional Deliverables that may be required under Work Plan modifications. Respondents shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

### ***Schedule***

Refer to Attachment A for the Deliverables and associated schedules.

### ***Guidance***

The Respondents shall conduct the RI/FS and produce reports that are in accordance with the Settlement Agreement and this SOW, the *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (RI/FS Guidance) (EPA 1988) or subsequent revisions, and any other guidance that the Agencies use in conducting a RI/FS, as well as any additional requirements in this SOW. The RI/FS Guidance describes the report format and the required report content.

### ***Roles and Responsibilities***

The Respondents shall furnish all necessary personnel, materials, and services necessary to perform the RI/FS except as otherwise specified in the Settlement Agreement. At the completion of the RI/FS, the Forest Service will be responsible for preparing a proposed plan consistent with CERCLA sections 113(k) and 117(a). The Forest Service will also be responsible for selecting a remedy and documenting this selection in a Record of Decision (ROD).

### ***Remedy Requirements***

The remedial action alternative selected by the Forest Service will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment of the principal threats. The final RI/FS and risk assessment reports, as adopted by the Agencies, with the administrative record for the OPSOU, will form the basis for the selection of the remedy and will provide the information necessary to support the development of the ROD.

## **4.0 Task 1 – Scoping**

**Subject to future refinement and modifications under the Settlement Agreement and the SOW, the Forest Service has completed the Task 1 scoping and developed the RI/FS Work Plan, including the Health and Safety Plan (HASP), Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) (E & E 2011). The Respondents shall develop a new HASP.**

Scoping is the initial planning process of the RI/FS. In preparing the RI/FS Work Plan, the Forest Service used the objectives of the RI/FS to help evaluate the adequacy of the existing information and to identify any data gaps. Because the work required to complete an RI/FS is not

fully known, it may be necessary for the Respondents to modify the Work Plan during the RI/FS to satisfy RI/FS objectives.

The following activities have been performed by the Agencies as a function of the project planning process.

***a. Present Site Background Information***

The Forest Service gathered, analyzed, and presented the existing Site background information in the approved RI/FS Work Plan. The Forest Service shared existing Site background information with the Support Agencies and Respondents. The Agencies have evaluated the existing information relative to the specific requirements of the RI/FS process.

Collect and analyze existing data and document the need for additional data

The existing Site data has been compiled by the Forest Service and approved by the Agencies for the uses stated in the data usability sections of the RI/FS Work Plan (E & E 2011) and the Data Evaluation Reports (E & E 2012a, 2012b, 2012c). Specifically, this includes presently available data relating to the varieties and quantities of hazardous substances or areas from which hazardous materials were released) at the Site, and past disposal practices. All existing Site data and data collected under the RI/FS, will be maintained and updated by the Respondents in a comprehensive database using readily available commercial software (ex., Microsoft Excel or Microsoft Access). Relevant data that have been appropriately validated and qualified per appropriate U.S. EPA guidance will be used in the RI/FS risk assessments.

For previously unevaluated data, the data will be reviewed by the Agencies to confirm that the data quality objectives for the RI/FS and risk assessment will be met. Only those data that are determined by the Agencies to be of appropriate type and quality to support specific intended uses may be utilized in the RI/FS and risk assessments.

***b. Project Planning***

The Agencies have collected and analyzed existing data and the specific project scope has been delineated. Project planning activities included tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Forest Service, in coordination with the Agencies, have developed and approved the scoping Deliverables listed below.

Update Conceptual Site Model

The Conceptual Site Model (CSM) includes known and suspected sources of contamination, types of contamination and affected media, known and potential routes of migration, and known or potential human and environmental receptors. Additional data may be collected as needed to ensure all exposure pathways and contaminants are adequately characterized, and appropriate technologies and/or treatment options may be evaluated. The CSM for the Site includes various animal species and their habitats that could be impacted by Site-related contamination and shows the relationships among animal species, contaminated media (i.e. soil, water, sediment) and potential exposure pathways. The CSM also identifies potential human receptor populations and potential human exposure pathways. The existing CSM will be revised and updated by the

Respondents based on any new information or findings as the OPSOU RI progresses. This effort, in addition to assisting in identification of locations where sampling is necessary, will assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a conceptual model is provided in the Data Quality Objective (DQO) Guidance (EPA 2000).

Refine and document preliminary remedial action objectives and alternatives

Existing Site information has been analyzed and a general understanding of the potential Site risks has been established by the Forest Service. The Agencies reviewed and refined general remedial action objectives for each actually or potentially contaminated media. These objectives, as revised during the OPSOU RI/FS, will be preliminary remedial action objectives (PRAOs) for the OPSOU.

The Agencies developed the preliminary range of broadly defined potential remedial action alternatives and associated technologies. The range of remedial action alternatives encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

Document the need for treatability studies

If during the OPSOU RI/FS process Respondents or the Agencies identify potential remedial actions involving treatment, Respondents shall conduct treatability studies, except where the Respondents demonstrate to the Agencies' satisfaction that a treatability study is not necessary. When Agencies conclude treatability studies are needed, initial treatability testing activities (such as research and study design) will be documented in technical memoranda and planned to occur concurrently with OPSOU characterization activities.

Begin preliminary identification of potential ARARs

The Forest Service has conducted a preliminary identification of potential state, federal and tribal ARARs (chemical-specific, location-specific and action-specific) to assist in the refinement of remedial action objectives and the initial identification of remedial alternatives and ARARs associated with particular actions. ARAR identification will continue by the Agencies and Respondents as Site conditions, contaminants, and remedial action alternatives are better defined.

***c. Scoping Deliverables***

The Agencies have approved an RI/FS Work Plan, a FSP, and a QAPP (E & E 2011).

RI/FS Work Plan

The Agencies developed an RI/FS Work Plan documenting the decisions and evaluations completed during the scoping process (E & E 2011). The RI/FS Work Plan was developed in conjunction with the FSP, QAPP, and the HASP. The RI/FS Work Plan includes a comprehensive description of the Work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the RI/FS Work Plan includes the rationale for performing the required activities. Specifically, the RI/FS Work Plan presents a statement of the problem(s) and potential problem(s) posed by the Site and the

objectives of the RI/FS. Furthermore, the RI/FS Work Plan includes a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, including current and historical features, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site.

The Forest Service has determined that it is appropriate to conduct a baseline Human Health Risk Assessment (HHRA) and an Ecological Risk Assessment (ERA). Considering this, a key component of the RI/FS Work Plan is a description of the approach and methodology for conducting the HHRA and ERA.

#### Risk Assessment Work Plan

The Respondents will complete the baseline HHRA in accordance with current EPA guidance (EPA, 1989, 1991a, 1991b, 1992a, 1992b, 1992c, 1995, 2001, 2004a, 2005). The HHRA should evaluate the potential for current and future adverse human health effects that may be caused by contaminant release(s) from the OPSOU if no action is taken. The HHRA should consist of two phases: problem formulation and risk quantification. The problem formulation phase will identify the conditions at and surrounding the OPSOU that can influence human exposure from OPSOU-related releases.

The risk quantification phase of the HHRA shall include the four tasks identified below, and should use the information developed during the problem formulation phase of the HHRA:

- Exposure Assessment - Identifies the pathways by which potential human exposures could occur, describes how they are evaluated, and evaluates the magnitude, frequency, and duration of these exposures
- Toxicity Assessment - Summarizes the toxicity of the contaminants of potential concern and the relationship between magnitude of exposure and the occurrence of adverse health effects
- Risk Characterization - Integrates information from the exposure and toxicity assessments to characterize the risks to human health from potential exposure to chemicals in environmental media
- Uncertainty Analysis - Summarizes the basic assumptions used in the HHRA, as well as limitations of data and methodology

Consistent with current EPA guidance (EPA 1997a, 1997b, and 1998), a baseline ERA shall include the following three interrelated phases:

- Problem formulation phase - the process shall begin with the problem formulation because this element defines the objectives and scope of the ecological assessment. Problem formulation identifies ecological resources and attributes at the OPSOU as well as the stressors that could affect these attributes. Two outputs of problem formulation include (1) the conceptual exposure model (CEM) to identify the pathways by which exposure to chemicals of potential ecological concern (COPECs)

- can occur for ecological receptors, and (2) identification of ecological endpoints that provide measures of the health of ecosystems at the OPSOU.
- Analysis phase - the analysis phase shall be directed by the results of the problem formulation. This phase will estimate the magnitude of actual or potential ecological exposures to representative wildlife species (“characterization of ecological exposure”) and identify the types of ecological effects that can result from exposure to OPSOU related chemicals (“characterization of ecological effects”). The outputs of the analysis phase are a profile of potential exposure at the OPSOU and a profile of the toxicological properties of OPSOU -related chemicals (stressor-response profile). These products provide the basis of the risk characterization.
- Ecological risk characterization phase - this final phase of the ERA shall integrate the ecological exposure and effects assessments to estimate the potential for adverse impacts to ecological receptors from exposure to OPSOU COPECs. This phase shall include a discussion of the lines of evidence and the assumptions and limitations of the analyses.

The Risk Assessment Work Plan documents the guidance, data evaluation approach (representativeness, grouping, and processing), exposure quantification methods and assumptions, and sources of toxicity factors to be used in the ERA and HHRA.

The RI/FS Work Plan, FSP, and QAPP describe the details of the OPSOU investigation, data quality objectives, as well as the data analysis methods to be used to define or quantify risks at the OPSOU.

The baseline HHRA and ERA will provide the basis for determining whether a response action is needed. Technical details and professional judgment needed to complete the baseline HHRA and ERA have already been incorporated into the RI/FS Work Plan, FSP, and QAPP. Work Plan, FSP, and QAPP implementation should provide the Remedial Project Manager with the information needed to incorporate risk management decisions into the remedy selection process.

An integral part of the RI/FS Work Plan is a detailed description of the tasks to be performed, information needed for each task, information to be produced during and at the conclusion of each task, and a description of the Deliverables that will be submitted to the Agencies. This includes the Deliverables as set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS Guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), appropriate reporting to the Agencies and work sessions to introduce and review key RI/FS work elements. The Respondents must refer to Attachment B of the RI/FS Guidance for a comprehensive description of the contents of the required RI/FS Work Plan. Because of the iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. The Respondents shall submit a technical memorandum documenting the need for additional data, and identifying the DQOs whenever such requirements are identified. In any event, the Respondents are responsible for fulfilling additional data and analysis needs consistent with the general scope and objectives of the RI/FS. The RI/FS Work Plan must reflect coordination with treatability study requirements, if treatability studies are initiated.

### Field Sampling Plan and Quality Assurance Project Plan

The Agencies have prepared a FSP and QAPP for the RI/FS (E & E 2011). The Respondents are to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs established for the RI/FS and risk assessment.

The FSP defines in detail the sampling and data-gathering methods that the Respondents will use on the project. It includes sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP describes the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs reflect the use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the NCP. In addition, the QAPP addresses the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

The Respondents shall demonstrate, in advance and to the satisfaction of the Agencies, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of potential concern (COPCs) in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the OPSOU by the Agencies. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used for the purposes proposed and QA/QC procedures approved by the Agencies will be used. If the laboratory is not in the CLP program, a laboratory QAPP must be submitted for the Agencies' review and approval. The Agencies may require that the Respondents submit detailed information to demonstrate that the laboratory is qualified to conduct the Work, including information on personnel qualifications, equipment, and material specifications. The Respondents shall assure that the Agencies have access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

As determined appropriate by the Agencies, given OPSOU-specific considerations, the Respondents will ensure that any modifications to the FSP and QAPP are consistent with those developed for other regional phosphate mining sites to allow for valuable comparison and integration of data. The FSP and QAPP were prepared in accordance with EPA Data Quality guidance documents (EPA 2000, 2002a, 2002b, and 2006) as well as the *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2010) and any other appropriate EPA guidance documents such as *Guidance for Choosing a Sampling Design for Environmental Data Collection* (EPA 2002a). The Respondents will ensure these standards are maintained.

### Potential Target Analytes

Potential target analytes include the COPCs listed in Attachment B to this SOW for the various media of interest (soils, vegetation, surface water, and ground water). Other constituents may be added to the preliminary COPC list based on Agency and Respondent review. The number of



samples and media to be analyzed for the full target analyte list is documented in the FSP and QAPP.

The Respondents shall evaluate the analytical data in an annual Data Summary Report (DSR) by comparing the analytical results of each media of interest for each of the COPCs against appropriate screening levels as determined during scoping.

#### Surface Water

As the RI progresses, the Respondents shall review the results of surface water sampling (this includes prior sampling conducted at the OPSOU), shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by the Agencies, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Follow-up sampling of surface water pathways during the seasonal runoff period of the next average annual precipitation year is required to ensure that all release sources and contaminant migration routes have been identified. Follow-up sampling will be defined in greater detail in the RI/FS Work Plan Addendum.

#### Groundwater

As the RI progresses, the Respondents shall review the results of ground water sampling (this includes prior sampling conducted at the OPSOU), shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent ground water sampling events. Upon approval by the Agencies, the COPCs eliminated by this process do not need to be included in the analyses for subsequent ground water sampling events.

#### Soils and Sediments

The sampling results of the analytes listed in Attachment B of this SOW must be screened by comparison to appropriate benchmarks.

#### Vegetation

The sampling results of the analytes listed in Attachment B of this SOW must be screened by comparison to appropriate benchmarks.

#### Health and Safety Plan

A HASP shall be prepared in conformance with the Respondents' health and safety program, and in compliance with Occupational Safety and Health Administration (OSHA) regulations and protocols. It should be noted that the Agencies do not "approve" the Respondents' health and safety plan, but rather the Agencies review it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

## **5.0 TASK 2 - COMMUNITY RELATIONS**

The development and implementation of community relations activities are the responsibility of the Agencies. Although implementation of the Community Involvement Plan is the responsibility of the Agencies, upon the Agencies' request, in a timely manner, the Respondents may assist by providing information on the Site's history, preparing presentation materials, participating in public meetings, and preparing fact sheets for distribution to the general public.

## **6.0 TASK 3 - OPSOU CHARACTERIZATION**

The Agencies have completed much of the OPSOU characterization in accordance with the Agency-approved RI/FS Work Plan, FSP, QAPP, and HASP (E & E 2011). The Spring, Summer, and Fall 2011 Data Evaluation Reports (DERs) identified data gaps that remain for the OPSOU (E & E 2012a, 2012b, & 2012c). The Respondents shall review the Spring, Summer, and Fall 2011 DERs, develop an addendum to the existing approved RI/FS Work Plan, FSP, and QAPP to fulfill data gaps identified at the OPSOU, complete the remaining OPSOU characterization activities, and conduct the baseline risk assessment.

As part of the RI, the Respondents shall perform the activities described in this task, including the preparation of Data Summary Reports (DSRs), the Risk Assessments, and the RI report. The overall objective of the OPSOU RI/FS characterization is to describe areas of the OPSOU that may pose a threat to human health or the environment. This will be accomplished by first determining the OPSOU's physiography (current and historical) geology, and hydrology/hydrogeology, and defining surface and subsurface pathways of migration. The Respondents shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as characterize background concentrations in the affected media. The Respondents shall also investigate the extent of migration of this contamination and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of its nature and extent. Respondents will use this information to determine and project contaminant fate and transport.

During this phase of the RI/FS, the Work Plan, FSP, QAPP, and HASP, including any addenda are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondents shall notify the Agencies at least seven (7) days in advance of the field work regarding the planned dates for the RI/FS field activities. The Agencies may waive the seven day notification requirement as appropriate (e.g. in the case of time-critical sampling such as spring high runoff sampling). Every effort should be made to coordinate field work with the Agencies. In such instances, notification of the Agencies shall occur as soon as practicable in advance of the field activities. The Respondents shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during OPSOU characterization meet the specific QA/QC requirements and the DQOs of the RI as specified in the FSP and QAPP. In view of the unknown Site conditions, activities likely will be iterative, and to satisfy the objectives of the RI/FS it may be necessary for the Respondents to supplement the Work specified in the initial Work Plan. In addition to the Deliverables below, the Respondents shall provide quarterly progress reports (also Deliverables) and participate in work



sessions when requested by the Agencies. During implementation of field activities, the Respondents may be directed to produce bi-weekly progress reports.

**a. Field Investigation**

The field investigation shall include the gathering of data to define the OPSOU physical and biological characteristics, characterize sources of contamination, and the nature and extent of contamination at the OPSOU. Respondents will perform the investigation in accordance with applicable EPA guidance including *Guidance for Choosing a Sampling Design for Environmental Data Collection* (EPA 2002). Any field investigation activities shall be performed by the Respondents in accordance with the Work Plan, FSP, QAPP, and any addenda.

The Respondents shall collect, analyze and evaluate the data to describe: (1) the OPSOU physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Descriptions of the OPSOU's physical characteristics, source characteristics, and extent of contamination analyses are utilized in the evaluation of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to the Agencies in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to the Agencies together with a sensitivity analysis. The Respondents shall collect data required to address data gaps to complete the RI/FS and risk assessment.

The Respondents shall obtain sufficient data, including the potential for contaminant release (e.g., long-term leaching from soil and waste rock materials) and the projection of contaminant fate and transport, for the development and screening of remedial action alternatives, including information to assess treatment technologies.

**b. Data Management Procedures**

Data collected by Nu-West in 2005, 2006, 2007, and 2008 were evaluated for data usability in the approved RI/FS Work Plan and are considered appropriate for use in the RI/FS only to characterize nature and extent of contamination. Data collected by the USFS in 2009 and 2010 were evaluated for data usability in the approved RI/FS Work Plan and are considered appropriate for use in the RI/FS and risk assessments. Data collected by the USFS in 2011 were evaluated for data usability in the approved Data Evaluation Reports and are considered appropriate for use in the RI/FS and risk assessments. Data collected by Nu-West as part of the Time Critical Removal Action in 2009, 2010, and 2011 have not been evaluated for data usability. These data will be evaluated for data usability in accordance with procedures defined in the approved RI Work Plan, FSP, QAPP, and documented in the RI/FS. Data collected going forward that have been appropriately validated and qualified consistent with the approved RI/FS Work Plan, FSP, QAPP, and applicable EPA guidance (e.g., USEPA National Functional Guidelines), will be evaluated for usability in the RI/FS and risk assessments. The Respondents shall

consistently document the quality and validity of additional field and laboratory data collected during the RI, as specified below.

#### Document data collection activities

Information gathered during the OPSOU characterization shall be consistently documented and adequately recorded by the Respondents in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the Work Plan, QAPP, and/or the FSP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

#### Maintain sample management and tracking

The Respondents shall maintain field reports, sample shipment records, analytical results, and quality assurance and quality control (QA/QC) reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. All future sampling and testing data (and available sampling and testing data collected for past investigations), QA/QC documentation, and chain of custody forms that are maintained by the Respondents must be in an electronic format easily accessible by the Agencies. An index of all records pertaining to the above must be maintained and updated after each sampling and/or analysis event with a copy included in the Data Summary Reports (see Attachment A of this SOW under OPSOU Characterization Deliverables). Analytical results developed under the Work Plan must not be included in any OPSOU characterization reports unless accompanied by or cross-referenced to a corresponding laboratory QA/QC report. In addition, the Respondents shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

#### Data validation management

All validated data, and the electronic data deliverable (EDD) shall be made available to the Agencies in electronic format (i.e., computer disc or equivalent). The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event.

The Respondents will use a third party to validate datasets using the general protocol and process described in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (NFG) (EPA, 2010 or subsequent revision), and QA plans that are consistent with relevant guidance.

#### ***c. OPSOU Characterization Deliverables***

The Respondents shall prepare Data Summary Reports following each annual field season and prepare the RI report at the completion of the remedial investigation.

### Data Summary Reports

After completing each annual field season's sampling and analysis, the Respondents shall prepare a concise OPSOU characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place, and describe and display data documenting the location and characteristics of surface and subsurface features and contamination at the OPSOU, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to the Agencies, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

### Remedial Investigation Report (RI)

The Respondents shall prepare and submit a draft RI report to the Agencies for review, comment, modification, and approval. This report shall summarize results of field activities to characterize the OPSOU, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondents shall refer to the RI/FS Guidance for an outline of the report format and contents. Following comment by the Agencies, the Respondents shall prepare a final RI report, which satisfactorily addresses Agencies' comments and incorporates the Agencies' modifications.

### Risk Assessment (RA)

The Respondents shall conduct a Human Health Risk Assessment (HHRA) and an Ecological Risk Assessment (ERA) to assess the potential human health and ecological risks posed by the OPSOU in the absence of any remedial action. The Respondents shall conduct the HHRA and ERA consistent with the approved RI/FS Work Plan and relevant EPA guidance, using exposure point concentrations developed from data collected at the OPSOU. If unacceptable risks are shown, alternatives to address those risks will be evaluated in the Feasibility Study.

The HHRA must include the following components:

- Identification of chemicals present and a list of chemicals of potential concern that are considered to be most important to the human health evaluation.
- Exposure assessment to identify the pathways by which potential human exposure could occur and estimate the magnitude, frequency, and duration of the exposure; and the related uncertainties for contaminant toxicity (e.g. weight of evidence for a chemical's carcinogenicity). Identification of the most sensitive receptor and most susceptible populations will also be included in the RA.
- Toxicity assessment to summarize the toxicity of the selected chemicals and the relationship between magnitude of exposure and adverse human health effects.
- Risk characterization to integrate the toxicity and exposure assessments to estimate

the potential risks to human health from exposure to chemicals in environmental media.

- The HHRA shall be consistent with EPA human health risk assessment guidance (EPA, 1989, 1991a, 1991b, 1992a, 1992b, 1992c, 1995, 2004a, 2005).

The ERA shall be conducted using EPA's eight step process. The ERA will evaluate the likelihood of adverse ecological effects occurring as a result of exposure to physical or chemical stressors. The ERA shall contain detailed information regarding the contact or co-occurrence of stressors with the biological community at the OPSOU. Exposure profiles shall be developed to identify ecological habitats and pathways of exposure. The sources and distribution of stressors in the environment shall also be characterized. The ERA shall be conducted in accordance with EPA ecological risk assessment guidance (EPA 1997a, 1997b, and 1998).

The Respondents shall prepare and submit a draft Baseline RA Report to the Agencies for review and approval. This report shall summarize results of the OPSOU-specific Human Health and Ecological Risk Assessments. Following review by the Agencies, the Respondents shall prepare a final Baseline RA Report which satisfactorily addresses the Agencies' comments and modifications. At the discretion of the Agencies, the RA Report may be incorporated into the RI Report.

## **7.0 TASK 4 - TREATABILITY STUDIES**

If candidate treatment technologies have not been sufficiently demonstrated, or cannot be adequately evaluated for the OPSOU on the basis of available information, treatability testing must be conducted. Treatability testing shall be performed by the Respondents, if determined necessary by the Agencies, to assist in the detailed analysis of alternatives. A separate HASP for the treatability studies may be necessary. In addition, if applicable, testing results and operating conditions shall be used in the detailed design of the selected remedial technology. The following activities shall support any treatability studies.

### ***a. Determination of Candidate Technologies in Need of Testing***

The Respondents shall propose in a technical memorandum, subject to the Agencies' review, comment, modification, and approval, candidate technologies for a treatability studies program. The listing of candidate technologies must cover the range of technologies required for alternatives analysis including innovative technologies (Task 5.a). The specific data requirements for the testing program will be determined and refined during OPSOU characterization and the development and screening of remedial alternatives.

Once a decision has been made to perform treatability studies, the Respondents shall propose, subject to the Agencies' review and approval, the type of treatability testing to use (e.g., bench versus pilot). Because of the time required to design, fabricate, and install pilot-scale equipment, as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the

Respondents shall either submit to the Agencies a treatability testing Work Plan or an amendment to the original OPSOU Work Plan for the Agencies' review and approval.

***b. Treatability Deliverables***

If Respondents conduct treatability testing, the required Deliverables, in addition to the memorandum identifying candidate technologies, include a Work Plan, a FSP, QAPP and a final treatability evaluation report. The Agencies may also require a treatability study HASP, where appropriate.

Treatability testing work plan

The Respondents shall prepare a treatability testing Work Plan or amendment to the original Work Plan for the Agencies' review, comment, modification, and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale Work Plan will describe pilot test installation and start-up, pilot test operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed HASP. If testing is to be performed off-Site, permitting requirements must be addressed.

Treatability study FSP and QAPP

If the QAPP or FSP developed for the RI/FS is not adequate for defining the activities to be performed during the treatability tests, a separate treatability study FSP and QAPP or amendment to the OPSOU FSP and QAPP must be prepared by the Respondents for the Agencies' review and approval. Task 1, Item c. of this SOW provides additional information on the requirements of the treatability study FSP and QAPP.

Treatability study HASP

If the HASP developed for the RI/FS is not adequate for defining the activities to be performed during the treatment tests, a separate health and safety plan or amended HASP must be developed by the Respondents. Task 1, Item c, of this SOW provides additional information on the requirements of the HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondents shall analyze and interpret the testing results in a technical report to the Agencies. Depending on the sequence of activities, this report may be a part of the RI or FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

## 8.0 TASK 5 – FEASIBILITY STUDY

The Feasibility Study comprises two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The results of these two FS components will comprise the draft FS Report. Interim Deliverables associated with these activities are identified in the RI/FS Work Plan. Future Interim Deliverables will be identified in RI/FS Work Plan Addenda.

### *a. Development and Screening of Remedial Alternatives*

The development and screening of remedial alternatives is performed to develop an appropriate range of waste management options that will be evaluated. This range of alternatives must include, as appropriate, options which use treatment to reduce the toxicity, mobility, or volume of wastes, but vary the types of treatment, the amount treated, and the management of long-term residuals or untreated wastes; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative.

The Respondents shall begin to develop and evaluate a range of appropriate waste management options that, at a minimum, ensure protection of human health and the environment given, all current and potential uses of the land, and comply with ARARs. This shall be done concurrent with the RI characterization task. The following activities shall be performed by the Respondents as a function of the development and screening of remedial alternatives.

#### Refine and document remedial action objectives

Based on the risk assessment, the Respondents shall review and, if necessary, modify the OPSOU specific Remedial Action Objectives (RAOs), specifically the preliminary remediation goals (PRGs) established by the Agencies during the scoping phase of the RI/FS Work Plan. The revised PRGs will be documented in a technical memorandum subject to Agency review, comment, modification, and approval. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route). Objectives and action levels from the EPA Regional Screening Levels (RSL) and Area-Wide Risk Management Plan (AWRMP) (IDeq 2004) may be used in the review and modification of the PRGs, considering the OPSOU-specific conditions at the Site, if determined appropriate by the Agencies.

#### Develop general response actions

The Respondents shall develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the remedial action objectives.

#### Identify areas or volumes of media

The Respondents shall identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified in the RAOs. The



chemical, biological and physical characterization of the OPSOU must also be taken into account.

#### Identify, screen, and document remedial technologies

The Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented. General response actions must be refined to specify remedial technology types. Technology process options for each of the technology types shall be identified either concurrent with the identification of technology types, or following the screening of the considered technology types. Process options must be evaluated on the basis of effectiveness, implementability, and cost factors to identify and retain one or, if necessary, more representative processes for each technology type. The technology types and process options must be summarized for inclusion in a technical memorandum. The reasons for eliminating alternatives must be specified.

#### Assemble and document alternatives

The Respondents shall assemble selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives will represent a range of treatment and containment combinations that will address the OPSOU as a whole. The Respondents must prepare a summary of the assembled alternatives and their related action-specific ARARs for inclusion in a technical memorandum. The reasons for eliminating alternatives during the preliminary screening process must be specified.

#### Refine alternatives

The Respondents shall refine the remedial alternatives to identify contaminant volume addressed by the proposed process and sizing of critical unit operations as necessary. Sufficient information must be collected for an adequate comparison of alternatives. Respondents shall also modify PRGs for each contaminant of concern in each medium as necessary to incorporate any new risk assessment information presented in the RA Report. Additionally, action-specific ARARs must be updated as the remedial alternatives are refined.

#### Conduct and document screening evaluation of each alternative

The Respondents may perform a final screening process based on short- and long-term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare a technical memorandum subject to Agency review, comment, modification, and approval, and include in the FS Report, a summary of the results and reasoning employed in screening, arraying alternatives that remain after screening, and identifying the action-specific ARARs for the alternatives that remain after screening.

***b. Detailed Analysis of Remedial Alternatives***

The detailed analysis shall be conducted by the Respondents to provide the Agencies with the information needed to allow for the selection of a remedy. This analysis is the final task to be performed by the Respondents during the FS.

The Respondents shall conduct a detailed analysis of alternatives, which must consist of an analysis of each alternative against the nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison.

The Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 1 and 2 are threshold criteria that must be met (unless a specific ARAR is waived, with respect to Criteria 2); Criteria 3-7 are primary balancing criteria; and Criteria 8 and 9 are modifying criteria evaluated by the Agencies after receiving public comments following release of the RI/FS report and a proposed remedial action plan to the general public. For each alternative, the Respondents must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment. Since the Respondents do not have direct input on Criteria 8 (state or support agency acceptance), and Criteria 9 (community acceptance), these will be addressed by the Agencies.

The Respondents shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification of the preferred alternative for the proposed plan and selection of a remedy in the Record of Decision (ROD) is reserved by the Forest Service in consultation with the Support Agencies. The Respondents shall prepare a technical memorandum subject to Agency review, comment, modification, and approval, and include in the Feasibility Study a summary of the results of the comparative analysis.

***c. Feasibility Study Report***

The Respondents shall prepare a draft FS Report for the Agencies' review and comment. This report, as ultimately adopted or modified by the Agencies, provides a basis for remedy selection by the Forest Service in consultation with the Support Agencies and documents the development and analysis of remedial alternatives. The Respondents shall refer to the RI/FS Guidance for an



outline of the report format and the required report content. The Respondents shall prepare a final FS Report which satisfactorily addresses the Agencies' comments.

#### **9.0 Task 6 - RI/FS Project Management**

The Respondents will prepare and submit quarterly Project Deliverables Status reports (PDSRs) to the Agencies to aid in project planning and resource allocations. These reports will document the status of all in-process Deliverables (including interim Deliverables, technical memoranda, and specific Deliverables identified in this SOW) and the Deliverables projected for submission. These PDSRs will be submitted according to the schedule in Attachment A of this SOW.

## 10.0 REFERENCES

- EPA 1988. *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, U.S. EPA, Office of Emergency and Remedial Response, Interim Final, October, 1988.
- EPA 1989. *Risk Assessment Guidance for Superfund (RAGS), Volume I: Human Health Evaluation Manual. Interim Final*, USEPA, December 1989.
- EPA 1991a. *Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors*, USEPA, 1991.
- EPA-1991b. *Risk Assessment Guidance for Superfund Volume I, Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals)*. Interim. EPA/540/R-92/003. Office of Research and Development, Washington, D.C.
- EPA 1992a. *Supplemental Guidance to RAGS: Calculating the Concentration Term*. USEPA Office of Solid Waste and Emergency Response, publication 9285.7-081, 1992.
- EPA, 1992b. *Guidance for Data Usability in Risk Assessment (Part A)*. OSWER Directive 9285.7-09A Office of Emergency and Remedial Response, Washington, D.C., April 1992.
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- EPA, 1995. *Guidance for Risk Characterization*. U.S.EPA Science Policy Council, Washington, D.C., February 1995.
- EPA 1997a. *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments*. EPA 540-R-97-006, 1997.
- EPA 1997b. *EPA Region 10 Supplemental Ecological Risk Assessment Guidance for Superfund*. EPA 910-R-97-005, 1997.
- EPA 1998. *Guidelines for Ecological Risk Assessment*. EPA/630/R-95/002F, 1998. EPA 2000. *Guidance for the Data Quality Objectives Process* (EPA QA/G4), 2000.
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- EPA 2006. *Guidance on Systematic Planning Using the Data Quality Objectives Process* (EPA QA/G-4). EPA/240/B-06/001, February 2006.

- IDEQ 2004. *Area Wide Risk Management Plan: Removal Action Goals and Objectives, and Action Levels for Addressing Releases and Impacts from Historic Phosphate Mining Operations in Southeast Idaho*, February 2004, IDEQ# WST.RMIN.SEA.W.6005.67068.
- NCP 2003. *The National Oil and Hazardous Substances Pollution Contingency Plan (NCP)*, 40 CFR, Part 300, July 1, 2003.
- EPA 2010. Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. EPA/540/R-10/011
- E & E 2011. Final Comprehensive Planning Documents, North Maybe Mine, East Mill Operable Unit Remedial Investigation/Feasibility Study, September 2011. Ecology & Environment, Inc.
- E & E 2012a. Final Data Evaluation Report, 2011 Peak Flow Surface and Groundwater Sampling Event, North Maybe Mine, East Mill Operable Unit, January 2012. Ecology & Environment, Inc.
- E & E 2012b. Final Data Evaluation Report, July 2011 Soil and Vegetation Sampling Event, North Maybe Mine, East Mill Operable Unit, April 2012. Ecology & Environment, Inc.
- E & E 2012c. Final Data Evaluation Report, 2011 Fall Surface Water, Groundwater, Terrestrial Vegetation, and Sediment Sampling Event, North Maybe Mine, East Mill Operable Unit, May 2012. Ecology & Environment, Inc.

***Statement of Work Attachments***

- A. OPSOU RI/FS SOW Deliverables Schedule***
- B. OPSOU RI/FS COPC List and Analytical Parameters***

**Attachment A**

**OPSOU RI/FS SOW**

***Deliverables Schedule (all days are calendar days)***

**RI/FS Work Plan**

- Completed and approved by Forest Service, reviewed by Support Agencies (E & E 2011).
- Draft RI/FS Work Plan Addendum due within 120 days after Forest Service notification to proceed.
- 30 days for Agencies to submit comments (for planning purposes)
- 15 days after receipt, Respondents submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final Updated RI/FS Work Plan Addendum.

**Data Summary Reports (DSRs):**

- Draft DSRs due within 120 days of completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier
- 30 days for Agencies to submit comments (for planning purposes)
- 15 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final DSRs

**Remedial Investigation (RI) Report:**

- Submit draft RI Report within 150 days after receipt of final laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondents shall provide written notification to the Forest Service identifying receipt date of final laboratory data.
- 45 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final RI

**Risk Assessment (RA) Report:**

- Submit draft RA Report within 60 days after receipt of final laboratory data from the final field season.
- 45 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments

- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days after the above meeting/call, Respondents submit Final RA Report

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of Final RI Report
- 45 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final FS

Data Validation Summaries (DVSs):

- DVSs due within 90 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondents will provide written notification to the Forest Service identifying the date of collection of the last sample from each sampling event.

Project Deliverables Status Reports (PDSRs):

- Submit by the 2nd Friday of January, April, July, and October

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies, Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by the Agencies, shall be due within 30 days Respondents' receipt of notice that said Deliverable is required.
- Final Interim Deliverables due within 30 days of receipt of consolidated Agency comments.

Attachment B			
OPSOU COPC List and Analytical Parameters			
Groundwater	Surface Water	Sediment and Soil	Vegetation / Biota
<b>Field Measurements</b>			
Groundwater Elevation	Discharge		
Temperature	Temperature		
pH	pH		
Specific conductance	Specific conductance		
Dissolved oxygen	Dissolved oxygen		
Turbidity	Turbidity		
ORP	ORP		
Ferrous Iron			
Ferric Iron			
<b>Metals (Total and Dissolved for Aqueous and Total for Solids)</b>			
Aluminum	Aluminum	Aluminum	Aluminum
Antimony	Antimony	Antimony	Antimony
Arsenic	Arsenic	Arsenic	Arsenic
Barium	Barium	Barium	Barium
Beryllium	Beryllium	Beryllium	Beryllium
Boron	Boron	Boron	Boron
Cadmium	Cadmium	Cadmium	Cadmium
Chromium	Chromium III	Chromium	Chromium
	Chromium VI*		
Cobalt	Cobalt	Cobalt	Cobalt
Copper	Copper	Copper	Copper
Iron	Iron	Iron	Iron
Lead	Lead	Lead	Lead
Manganese	Manganese	Manganese	Manganese
Mercury	Mercury	Mercury	Mercury
Molybdenum	Molybdenum	Molybdenum	Molybdenum
Nickel	Nickel	Nickel	Nickel
Selenium, total recoverable	Selenium, total recoverable	Selenium	Selenium
Silver	Silver	Silver	Silver
Thallium	Thallium	Thallium	Thallium
Uranium	Uranium	Uranium	Uranium
Vanadium	Vanadium	Vanadium	Vanadium
Zinc	Zinc	Zinc	Zinc
<b>Other Analyses</b>			
Chloride			
Nitrate/Nitrite, as N	Nitrate/Nitrite, as N		
Sulfate			
	Hardness		
Total Organic Carbon (TOC)			
Total Dissolved Solids (TDS)	Total Dissolved Solids (TDS)		
Total Suspended Solids (TSS)	Total Suspended Solids (TSS)		

\*Respondents shall analyze for total chromium; speciation of chromium (i.e., CrIII and CrVI) need only be done when concentration of total chromium meets or exceeds the MCL for chromium-VI

## APPENDIX C

### NORTH MAYBE MINE SETTLEMENT AGREEMENT 2012

#### CREEKS SUB-OPERABLE UNIT STATEMENT OF WORK



**STATEMENT OF WORK FOR THE  
NORTH MAYBE MINE CREEKS SUB-OPERABLE UNIT  
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY**

**1.0 Introduction**

This statement of work (SOW) provides an overview of Work that will be carried out by the Respondents (Nu-West Mining, Inc. and Nu-West Industries, Inc.) as they implement a Remedial Investigation and Feasibility Study (RI/FS) for the North Maybe Mine (NMM) (the Site) Creeks Sub-Operable Unit (CSOU) in southeastern Idaho. The purpose of the RI/FS is to determine the nature and extent of contamination and any threat to public health and welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site. The RI/FS is intended to provide the basis for the lead agency's identification of a Final Remedy for the CSOU, and ultimately for the entire Site in conjunction with RI/FS work on other Site operable units and sub-operable units.

This SOW is attached to the RI/FS Administrative Settlement Agreement and Order on Consent/Consent Order (Settlement Agreement) for the East Mill Operable Unit of the Site<sup>1</sup>, and is a supporting document for the Settlement Agreement. Technical work described in this SOW is intended to provide more information and direction to the Respondents for the purpose of implementing the Settlement Agreement and is not intended to change the meaning of any Settlement Agreement language. This SOW is also consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP 2003). Any discrepancies between the Settlement Agreement and the SOW are unintended. The Settlement Agreement will control any interpretive disputes.

The United States Department of Agriculture Forest Service (Forest Service) is the Lead Agency for the Site, with the Idaho Department of Environmental Quality (IDEQ), U.S. Fish and Wildlife Service (FWS), and Shoshone-Bannock Tribes designated as Support Agencies. Hereinafter in this SOW, the "Agencies" refers to the Forest Service working in consultation with the Support Agencies.

A map of the immediate vicinity of the Site is attached as Appendix D to the Settlement Agreement.

The Respondents shall prepare a RI/FS Work Plan Addendum to fill remaining data gaps and complete the CSOU RI/FS using existing data to the maximum extent possible, including data from the Forest Service East Mill Operable Unit RI/FS work, and using the Forest Service

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<sup>1</sup> Operable Units for the Site currently consist of the West Ridge Operable Unit and the East Mill Operable Unit. The Settlement Agreement addresses the East Mill Operable Unit. The East Mill Operable Unit is further divided into 3 sub-operable units. These are 1) the Creeks Sub-Operable Unit addressed by this SOW; 2) the Open Pit Sub-Operable Unit; and 3) the East Mill Dump Sub-Operable Unit. Each of these Sub-Operable Units has its own SOW. Section IV of the Settlement Agreement defines the Site and its operable units and sub-operable units.

approved RI/FS Work Plan (E & E 2011). Sections 3.0 through 8.0 of this SOW describe the specific requirements and Deliverables the Respondents must complete in performing the RI/FS for CSOU.

## **2.0 Background and Current Status**

The North Maybe Phosphate Mine is located in Caribou County, Idaho, primarily on National Forest System (“NFS”) land. The Forest Service exercises jurisdiction, custody and control over NFS land on behalf of the United States. The North Maybe Mine is located on Federal Leases IDI-04 and IDI-8289, held by Nu-West Mining, Inc. The open pit at the North Maybe Mine from which ore and waste rock was removed (“Mine Pit”) is approximately 2.5 miles long and is surrounded by 10 waste rock dumps, one of which is the East Mill Dump. The East Mill Dump is located on the east side of the north end of the Mine Pit and covers approximately 92 acres.

East Mill Dump was reclaimed from 1981 to 1985. In 1983, a severe thunderstorm washed contaminated sediments from the dump surface into East Mill Creek and downstream into Mill Canyon. The dump was subsequently repaired and sloped to its existing configuration. On the lower portion of the dump, the vegetation was less prolific and erosional rills developed, transporting dump materials into sedimentation ponds that contributed to surface water contamination. In 2008, Nu-West conducted a Time-Critical Removal Action to remove contaminated sediments and repair the sediment control structures to restore settling capacity.

Since 2009, the Forest Service has performed seasonal groundwater and surface water monitoring at the East Mill Operable Unit of the Site.

In 2011, the Forest Service initiated the Remedial Investigation / Feasibility Study for the East Mill Operable Unit of the NMM. The Forest Service sampled soil, sediment, vegetation, groundwater, and surface water as part of the effort to characterize the nature and extent of contamination (E & E 2011). Various field data collected by the Respondents are also available and will be considered part of the existing unit data set.

## **3.0 RI/FS Overview**

### ***Purpose***

The primary purposes of the RI/FS are to (a) provide information needed to determine the nature and extent of contamination and any threat to public health and welfare or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the CSOU; and (b) develop and evaluate alternatives for remedial action to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants or contaminants at or from the CSOU. The RI and FS are interactive and may be conducted concurrently so that the data collected in the RI will support the development of remedial alternatives in the FS, which in turn, affect the data needs and the scope of treatability studies, if necessary.

***Oversight***

The Agencies will provide oversight of Respondent's work for compliance with CERCLA, the NCP and other applicable laws.

All Deliverables submitted to the Agencies are subject to Agency approval, including, but not limited to, Deliverables specified in the Work Plan(s) or Settlement Agreement and additional Deliverables that may be required under Work Plan modifications. Respondents shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

***Schedule***

Refer to Attachment A for the Deliverables and associated schedules.

***Guidance***

The Respondents shall conduct the RI/FS and produce reports that are in accordance with the Settlement Agreement and this SOW, the *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (RI/FS Guidance) (EPA 1988) or subsequent revisions, and any other guidance that the Agencies use in conducting a RI/FS, as well as any additional requirements in this SOW. The RI/FS Guidance describes the report format and the required report content.

***Roles and Responsibilities***

The Respondents shall furnish all necessary personnel, materials, and services necessary to perform the RI/FS except as otherwise specified in the Settlement Agreement. At the completion of the RI/FS, the Forest Service will be responsible for preparing a proposed plan consistent with CERCLA sections 113(k) and 117(a). The Forest Service will also be responsible for selecting a remedy and documenting this selection in a Record of Decision (ROD).

***Remedy Requirements***

The remedial action alternative selected by the Forest Service will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment of the principal threats. The final RI/FS and risk assessment reports, as adopted by the Agencies, with the administrative record for the CSOU, will form the basis for the selection of the remedy and will provide the information necessary to support the development of the ROD

**4.0 Task 1 – Scoping**

**Subject to future refinement and modifications under the Settlement Agreement and the SOW, the Forest Service has completed the Task 1 scoping and developed the RI/FS Work**

**Plan, including the Health and Safety Plan (HASP), Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP) (E&E 2011). The Respondents shall develop a new HASP**

Scoping is the initial planning process of the RI/FS. In preparing the RI/FS Work Plan, the Forest Service used the objectives of the RI/FS to help evaluate the adequacy of the existing information and to identify any data gaps. Because the work required to complete an RI/FS is not fully known, it may be necessary for the Respondents to modify the Work Plan during the RI/FS to satisfy RI/FS objectives.

The following activities have been performed by the Agencies as a function of the project planning process.

***a. Present Site Background Information***

The Forest Service gathered, analyzed, and presented the existing Site background information in the approved RI/FS Work Plan. The Forest Service shared existing Site background information with the Support Agencies and Respondents. The Agencies have evaluated the existing information relative to the specific requirements of the RI/FS process.

Collect and analyze existing data and document the need for additional data

The existing Site data has been compiled by the Forest Service and approved by the Agencies for the uses stated in the data usability sections of the RI/FS Work Plan (E & E 2011) and the Data Evaluation Reports (E & E 2012a, 2012b, 2012c). Specifically, this includes presently available data relating to the varieties and quantities of hazardous substances or areas from which hazardous materials were released) at the Site, and past disposal practices. All existing Site data and data collected under the RI/FS, will be maintained and updated by the Respondents in a comprehensive database using readily available commercial software (ex., Microsoft Excel or Microsoft Access). Relevant data that have been appropriately validated and qualified per appropriate U.S. EPA guidance will be used in the RI/FS risk assessments.

For previously unevaluated data, the data will be reviewed by the Agencies to confirm that the data quality objectives for the RI/FS and risk assessment will be met. Only those data that are determined by the Agencies to be of appropriate type and quality to support specific intended uses may be utilized in the RI/FS and risk assessments.

***b. Project Planning***

The Agencies have collected and analyzed existing data and the specific project scope has been delineated. Project planning activities included tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Forest Service, in coordination with the Agencies, have developed and approved the scoping Deliverables listed below.

Update Conceptual Site Model

The Conceptual Site Model (CSM) includes known and suspected sources of contamination, types of contamination and affected media, known and potential routes of migration, and known or potential human and environmental receptors. Additional data may be collected as needed to

ensure all exposure pathways and contaminants are adequately characterized, and appropriate technologies and/or treatment options may be evaluated. The CSM for the Site includes various animal species and their habitats that could be impacted by Site-related contamination and shows the relationships among animal species, contaminated media (i.e. soil, water, sediment) and potential exposure pathways. The CSM also identifies potential human receptor populations and potential human exposure pathways. The existing CSM will be revised and updated by the Respondents based on any new information or findings as the CSOU RI progresses. This effort, in addition to assisting in identification of locations where sampling is necessary, will assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a conceptual model is provided in the Data Quality Objective (DQO) Guidance (EPA 2000).

Refine and document preliminary remedial action objectives and alternatives

Existing Site information has been analyzed and a general understanding of the potential Site risks has been established by the Forest Service. The Agencies reviewed and refined general remedial action objectives for each actually or potentially contaminated media. These objectives, as revised during the CSOU RI/FS, will be preliminary remedial action objectives (PRAOs) for the CSOU.

The Agencies developed the preliminary range of broadly defined potential remedial action alternatives and associated technologies. The range of remedial action alternatives encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

Document the need for treatability studies

If during the CSOU RI/FS process Respondents or the Agencies identify potential remedial actions involving treatment, Respondents shall conduct treatability studies, except where the Respondents demonstrate to the Agencies' satisfaction that a treatability study is not necessary. When Agencies conclude treatability studies are needed, initial treatability testing activities (such as research and study design) will be documented in technical memoranda and planned to occur concurrently with CSOU characterization activities.

Begin preliminary identification of potential ARARs

The Forest Service has conducted a preliminary identification of potential state, federal and tribal ARARs (chemical-specific, location-specific and action-specific) to assist in the refinement of remedial action objectives and the initial identification of remedial alternatives and ARARs associated with particular actions. ARAR identification will continue by the Agencies and Respondents as Site conditions, contaminants, and remedial action alternatives are better defined.

### ***c. Scoping Deliverables***

The Agencies have approved an RI/FS Work Plan, a FSP, and a QAPP (E & E 2011).

### RI/FS Work Plan

The Agencies developed an RI/FS Work Plan documenting the decisions and evaluations completed during the scoping process (E & E 2011). The RI/FS Work Plan was developed in conjunction with the FSP, QAPP, and the HASP. The RI/FS Work Plan includes a comprehensive description of the Work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the RI/FS Work Plan includes the rationale for performing the required activities. Specifically, the RI/FS Work Plan presents a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the RI/FS Work Plan includes a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, including current and historical features, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site.

The Forest Service has determined that it is appropriate to conduct a baseline Human Health Risk Assessment (HHRA) and an Ecological Risk Assessment (ERA). Considering this, a key component of the RI/FS Work Plan is a description of the approach and methodology for conducting the HHRA and ERA.

### Risk Assessment Work Plan

The Respondents will complete the baseline HHRA in accordance with current EPA guidance (EPA, 1989, 1991a, 1991b, 1992a, 1992b, 1992c, 1995, 2001, 2004a, 2005). The HHRA should evaluate the potential for current and future adverse human health effects that may be caused by contaminant release(s) from the CSOU if no action is taken. The HHRA should consist of two phases: problem formulation and risk quantification. The problem formulation phase will identify the conditions at and surrounding the CSOU that can influence human exposure from CSOU-related releases.

The risk quantification phase of the HHRA shall include the four tasks identified below, and should use the information developed during the problem formulation phase of the HHRA:

- Exposure Assessment - Identifies the pathways by which potential human exposures could occur, describes how they are evaluated, and evaluates the magnitude, frequency, and duration of these exposures
- Toxicity Assessment - Summarizes the toxicity of the contaminants of potential concern and the relationship between magnitude of exposure and the occurrence of adverse health effects
- Risk Characterization - Integrates information from the exposure and toxicity assessments to characterize the risks to human health from potential exposure to chemicals in environmental media
- Uncertainty Analysis - Summarizes the basic assumptions used in the HHRA, as well as limitations of data and methodology



Consistent with current EPA guidance (EPA 1997a, 1997b, and 1998), a baseline ERA shall include the following three interrelated phases:

- Problem formulation phase - the process shall begin with the problem formulation because this element defines the objectives and scope of the ecological assessment. Problem formulation identifies ecological resources and attributes at the CSOU as well as the stressors that could affect these attributes. Two outputs of problem formulation include (1) the conceptual exposure model (CEM) to identify the pathways by which exposure to chemicals of potential ecological concern (COPECs) can occur for ecological receptors, and (2) identification of ecological endpoints that provide measures of the health of ecosystems at the CSOU.
- Analysis phase - the analysis phase shall be directed by the results of the problem formulation. This phase will estimate the magnitude of actual or potential ecological exposures to representative wildlife species (“characterization of ecological exposure”) and identify the types of ecological effects that can result from exposure to CSOU related chemicals (“characterization of ecological effects”). The outputs of the analysis phase are a profile of potential exposure at the CSOU and a profile of the toxicological properties of CSOU -related chemicals (stressor-response profile). These products provide the basis of the risk characterization.
- Ecological risk characterization phase - this final phase of the ERA shall integrate the ecological exposure and effects assessments to estimate the potential for adverse impacts to ecological receptors from exposure to CSOU COPECs. This phase shall include a discussion of the lines of evidence and the assumptions and limitations of the analyses.

The Risk Assessment Work Plan documents the guidance, data evaluation approach (representativeness, grouping, and processing), exposure quantification methods and assumptions, and sources of toxicity factors to be used in the ERA and HHRA.

The RI/FS Work Plan, FSP, and QAPP describe the details of the CSOU investigation, data quality objectives, as well as the data analysis methods to be used to define or quantify risks at the CSOU.

The baseline HHRA and ERA will provide the basis for determining whether a response action is needed. Technical details and professional judgment needed to complete the baseline HHRA and ERA have already been incorporated into the RI/FS Work Plan, FSP, and QAPP. Work Plan, FSP, and QAPP implementation should provide the Remedial Project Manager with the information needed to incorporate risk management decisions into the remedy selection process.

An integral part of the RI/FS Work Plan is a detailed description of the tasks to be performed, information needed for each task, information to be produced during and at the conclusion of each task, and a description of the Deliverables that will be submitted to the Agencies. This includes the Deliverables as set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS Guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), appropriate

reporting to the Agencies and work sessions to introduce and review key RI/FS work elements. The Respondents must refer to Attachment B of the RI/FS Guidance for a comprehensive description of the contents of the required RI/FS Work Plan. Because of the iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. The Respondents shall submit a technical memorandum documenting the need for additional data, and identifying the DQOs whenever such requirements are identified. In any event, the Respondents are responsible for fulfilling additional data and analysis needs consistent with the general scope and objectives of the RI/FS. The RI/FS Work Plan must reflect coordination with treatability study requirements, if treatability studies are initiated.

#### Field Sampling Plan and Quality Assurance Project Plan

The Agencies have prepared a FSP and QAPP for the RI/FS (E & E 2011). The Respondents are to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs established for the RI/FS and risk assessment.

The FSP defines in detail the sampling and data-gathering methods that the Respondents will use on the project. It includes sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP describes the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs reflect the use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the NCP. In addition, the QAPP addresses the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

The Respondents shall demonstrate, in advance and to the satisfaction of the Agencies, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of potential concern (COPCs) in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the CSOU by the Agencies. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used for the purposes proposed and QA/QC procedures approved by the Agencies will be used. If the laboratory is not in the CLP program, a laboratory QAPP must be submitted for the Agencies' review and approval. The Agencies may require that the Respondents submit detailed information to demonstrate that the laboratory is qualified to conduct the Work, including information on personnel qualifications, equipment, and material specifications. The Respondents shall assure that the Agencies have access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

As determined appropriate by the Agencies, given CSOU-specific considerations, the Respondents will ensure that any modifications to the FSP and QAPP are consistent with those developed for other regional phosphate mining sites to allow for valuable comparison and integration of data. The FSP and QAPP were prepared in accordance with EPA Data Quality guidance documents (EPA 2000, 2002a, 2002b, and 2006) as well as the *Contract Laboratory*



*Program National Functional Guidelines for Inorganic Data Review* (EPA 2010) and any other appropriate EPA guidance documents such as *Guidance for Choosing a Sampling Design for Environmental Data Collection* (EPA 2002a). The Respondents will ensure these standards are maintained.

#### Potential Target Analytes

Potential target analytes include the COPCs listed in Attachment B to this SOW for the various media of interest (soils, vegetation, surface water, and ground water). Other constituents may be added to the preliminary COPC list based on Agency and Respondent review. The number of samples and media to be analyzed for the full target analyte list is documented in the FSP and QAPP.

The Respondents shall evaluate the analytical data in an annual Data Summary Report (DSR) by comparing the analytical results of each media of interest for each of the COPCs against appropriate screening levels as determined during scoping.

#### Surface Water

As the RI progresses, the Respondents shall review the results of surface water sampling (this includes prior sampling conducted at the CSOU), shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by the Agencies, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Follow-up sampling of surface water pathways during the seasonal runoff period of the next average annual precipitation year is required to ensure that all release sources and contaminant migration routes have been identified. Follow-up sampling will be defined in greater detail in the RI/FS Work Plan Addendum.

#### Groundwater

As the RI progresses, the Respondents shall review the results of ground water sampling (this includes prior sampling conducted at the CSOU), shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent ground water sampling events. Upon approval by the Agencies, the COPCs eliminated by this process do not need to be included in the analyses for subsequent ground water sampling events.

#### Soils and Sediments

The sampling results of the analytes listed in Attachment B of this SOW must be screened by comparison to appropriate benchmarks.

#### Vegetation

The sampling results of the analytes listed in Attachment B of this SOW must be screened by comparison to appropriate benchmarks.

### Health and Safety Plan

A HASP shall be prepared in conformance with the Respondents' health and safety program, and in compliance with Occupational Safety and Health Administration (OSHA) regulations and protocols. It should be noted that the Agencies do not "approve" the Respondents' health and safety plan, but rather the Agencies review it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

## **5.0 TASK 2 - COMMUNITY RELATIONS**

The development and implementation of community relations activities are the responsibility of the Agencies. Although implementation of the Community Involvement Plan is the responsibility of the Agencies, upon the Agencies' request, in a timely manner, the Respondents may assist by providing information on the Site's history, preparing presentation materials, participating in public meetings, and preparing fact sheets for distribution to the general public.

## **6.0 TASK 3 - CSOU CHARACTERIZATION**

The Agencies have completed much of the CSOU characterization in accordance with the Agency-approved RI/FS Work Plan, FSP, QAPP, and HASP (E & E 2011). The Spring, Summer, and Fall 2011 Data Evaluation Reports (DERs) identified data gaps that remain for the CSOU (E & E 2012a, 2012b, & 2012c). The Respondents shall review the Spring, Summer, and Fall 2011 DERs, develop an addendum to the existing approved RI/FS Work Plan, FSP, and QAPP to fulfill data gaps identified at the CSOU, complete the remaining CSOU characterization activities, and conduct the baseline risk assessment.

As part of the RI, the Respondents shall perform the activities described in this task, including the preparation of Data Summary Reports (DSRs), the Risk Assessments, and the RI report. The overall objective of the CSOU RI/FS characterization is to describe areas of the CSOU that may pose a threat to human health or the environment. This will be accomplished by first determining the CSOU's physiography (current and historical) geology, and hydrology/hydrogeology, and defining surface and subsurface pathways of migration. The Respondents shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as characterize background concentrations in the affected media. The Respondents shall also investigate the extent of migration of this contamination and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of its nature and extent. Respondents will use this information to determine and project contaminant fate and transport.

During this phase of the RI/FS, the Work Plan, FSP, QAPP, and HASP, including any addenda are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondents shall notify the Agencies at least seven (7) days in advance of the field work regarding the planned dates for the RI/FS field activities. The Agencies may waive the seven day notification requirement as appropriate (e.g. in the case of time-critical sampling such as spring high runoff sampling). Every effort should be made to coordinate field work with the Agencies. In such instances, notification of the Agencies shall

occur as soon as practicable in advance of the field activities. The Respondents shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during CSOU characterization meet the specific QA/QC requirements and the DQOs of the RI as specified in the FSP and QAPP. In view of the unknown Site conditions, activities likely will be iterative, and to satisfy the objectives of the RI/FS it may be necessary for the Respondents to supplement the Work specified in the initial Work Plan. In addition to the Deliverables below, the Respondents shall provide quarterly progress reports (also Deliverables) and participate in work sessions when requested by the Agencies. During implementation of field activities, the Respondents may be directed to produce bi-weekly progress reports.

**a. Field Investigation**

The field investigation shall include the gathering of data to define the CSOU physical and biological characteristics, characterize sources of contamination, and the nature and extent of contamination at the CSOU. Respondents will perform the investigation in accordance with applicable EPA guidance including *Guidance for Choosing a Sampling Design for Environmental Data Collection* (EPA 2002). Any field investigation activities shall be performed by the Respondents in accordance with the Work Plan, FSP, QAPP, and any addenda.

The Respondents shall collect, analyze and evaluate the data to describe: (1) the CSOU physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Descriptions of the CSOU's physical characteristics, source characteristics, and extent of contamination analyses are utilized in the evaluation of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to the Agencies in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to the Agencies together with a sensitivity analysis. The Respondents shall collect data required to address data gaps to complete the RI/FS and risk assessment.

The Respondents shall obtain sufficient data, including the potential for contaminant release (e.g., long-term leaching from soil and waste rock materials) and the projection of contaminant fate and transport, for the development and screening of remedial action alternatives, including information to assess treatment technologies

**b. Data Management Procedures**

Data collected by Nu-West in 2005, 2006, 2007, and 2008 were evaluated for data usability in the approved RI/FS Work Plan and are considered appropriate for use in the RI/FS only to characterize nature and extent of contamination. Data collected by the USFS in 2009 and 2010 were evaluated for data usability in the approved RI/FS Work Plan and are considered appropriate for use in the RI/FS and risk assessments. Data collected by the USFS in 2011 were evaluated for data usability in the approved Data Evaluation Reports and are considered appropriate for use in the RI/FS and risk assessments. Data collected by Nu-West as part of the

Time Critical Removal Action in 2009, 2010, and 2011 have not been evaluated for data usability. These data will be evaluated for data usability in accordance with procedures defined in the approved RI Work Plan, FSP, QAPP, and documented in the RI/FS. Data collected going forward that have been appropriately validated and qualified consistent with the approved RI/FS Work Plan, FSP, QAPP, and applicable EPA guidance (e.g., USEPA National Functional Guidelines), will be evaluated for usability in the RI/FS and risk assessments. The Respondents shall consistently document the quality and validity of additional field and laboratory data collected during the RI, as specified below.

#### Document data collection activities

Information gathered during the CSOU characterization shall be consistently documented and adequately recorded by the Respondents in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the Work Plan, QAPP, and/or the FSP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

#### Maintain sample management and tracking

The Respondents shall maintain field reports, sample shipment records, analytical results, and quality assurance and quality control (QA/QC) reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. All future sampling and testing data (and available sampling and testing data collected for past investigations), QA/QC documentation, and chain of custody forms that are maintained by the Respondents must be in an electronic format easily accessible by the Agencies. An index of all records pertaining to the above must be maintained and updated after each sampling and/or analysis event with a copy included in the Data Summary Reports (see Attachment A of this SOW under CSOU Characterization Deliverables). Analytical results developed under the Work Plan must not be included in any CSOU characterization reports unless accompanied by or cross-referenced to a corresponding laboratory QA/QC report. In addition, the Respondents shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

#### Data validation management

All validated data, and the electronic data deliverable (EDD) shall be made available to the Agencies in electronic format (i.e., computer disc or equivalent). The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event.

The Respondents will use a third party to validate datasets using the general protocol and process described in the *USEPA Contract Laboratory Program National Functional Guidelines* for

*Inorganic Data Review* (NFG) (EPA, 2010 or subsequent revision), and QA plans that are consistent with relevant guidance.

**c. CSOU Characterization Deliverables**

The Respondents shall prepare Data Summary Reports following each annual field season and prepare the RI report at the completion of the remedial investigation.

Data Summary Reports

After completing each annual field season's sampling and analysis, the Respondents shall prepare a concise CSOU characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place, and describe and display data documenting the location and characteristics of surface and subsurface features and contamination at the CSOU, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to the Agencies, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report (RI)

The Respondents shall prepare and submit a draft RI report to the Agencies for review, comment, modification, and approval. This report shall summarize results of field activities to characterize the CSOU, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondents shall refer to the RI/FS Guidance for an outline of the report format and contents. Following comment by the Agencies, the Respondents shall prepare a final RI report, which satisfactorily addresses Agencies' comments and incorporates the Agencies' modifications.

Risk Assessment (RA)

The Respondents shall conduct a Human Health Risk Assessment (HHRA) and an Ecological Risk Assessment (ERA) to assess the potential human health and ecological risks posed by the CSOU in the absence of any remedial action. The Respondents shall conduct the HHRA and ERA consistent with the approved RI/FS Work Plan and relevant EPA guidance, using exposure point concentrations developed from data collected at the CSOU. If unacceptable risks are shown, alternatives to address those risks will be evaluated in the Feasibility Study.

The HHRA must include the following components:

- Identification of chemicals present and a list of chemicals of potential concern that are considered to be most important to the human health evaluation.
- Exposure assessment to identify the pathways by which potential human exposure

could occur and estimate the magnitude, frequency, and duration of the exposure; and the related uncertainties for contaminant toxicity (e.g. weight of evidence for a chemical's carcinogenicity). Identification of the most sensitive receptor and most susceptible populations will also be included in the RA.

- Toxicity assessment to summarize the toxicity of the selected chemicals and the relationship between magnitude of exposure and adverse human health effects.
- Risk characterization to integrate the toxicity and exposure assessments to estimate the potential risks to human health from exposure to chemicals in environmental media.
- The HHRA shall be consistent with EPA human health risk assessment guidance (EPA, 1989, 1991a, 1991b, 1992a, 1992b, 1992c, 1995, 2004a, 2005).

The ERA shall be conducted using EPA's eight step process. The ERA will evaluate the likelihood of adverse ecological effects occurring as a result of exposure to physical or chemical stressors. The ERA shall contain detailed information regarding the contact or co-occurrence of stressors with the biological community at the CSOU. Exposure profiles shall be developed to identify ecological habitats and pathways of exposure. The sources and distribution of stressors in the environment shall also be characterized. The ERA shall be conducted in accordance with EPA ecological risk assessment guidance (EPA 1997a, 1997b, and 1998).

The Respondents shall prepare and submit a draft Baseline RA Report to the Agencies for review and approval. This report shall summarize results of the CSOU-specific Human Health and Ecological Risk Assessments. Following review by the Agencies, the Respondents shall prepare a final Baseline RA Report which satisfactorily addresses the Agencies' comments and modifications. At the discretion of the Agencies, the RA Report may be incorporated into the RI Report.

## **7.0 TASK 4 - TREATABILITY STUDIES**

If candidate treatment technologies have not been sufficiently demonstrated, or cannot be adequately evaluated for the CSOU on the basis of available information, treatability testing must be conducted. Treatability testing shall be performed by the Respondents, if determined necessary by the Agencies, to assist in the detailed analysis of alternatives. A separate HASP for the treatability studies may be necessary. In addition, if applicable, testing results and operating conditions shall be used in the detailed design of the selected remedial technology. The following activities shall support any treatability studies.

### ***a. Determination of Candidate Technologies in Need of Testing***

The Respondents shall propose in a technical memorandum, subject to the Agencies' review, comment, modification, and approval, candidate technologies for a treatability studies program. The listing of candidate technologies must cover the range of technologies required for alternatives analysis including innovative technologies (Task 5.a). The specific data requirements



for the testing program will be determined and refined during CSOU characterization and the development and screening of remedial alternatives.

Once a decision has been made to perform treatability studies, the Respondents shall propose, subject to the Agencies' review and approval, the type of treatability testing to use (e.g., bench versus pilot). Because of the time required to design, fabricate, and install pilot-scale equipment, as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondents shall either submit to the Agencies a treatability testing Work Plan or an amendment to the original CSOU Work Plan for the Agencies' review and approval.

***b. Treatability Deliverables***

If Respondents conduct treatability testing, the required Deliverables, in addition to the memorandum identifying candidate technologies, include a Work Plan, a FSP, QAPP and a final treatability evaluation report. The Agencies may also require a treatability study HASP, where appropriate.

Treatability testing work plan

The Respondents shall prepare a treatability testing Work Plan or amendment to the original Work Plan for the Agencies' review, comment, modification, and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale Work Plan will describe pilot test installation and start-up, pilot test operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed HASP. If testing is to be performed off-Site, permitting requirements must be addressed.

Treatability study FSP and QAPP

If the QAPP or FSP developed for the RI/FS is not adequate for defining the activities to be performed during the treatability tests, a separate treatability study FSP and QAPP or amendment to the CSOU FSP and QAPP must be prepared by the Respondents for the Agencies' review and approval. Task 1, Item c. of this SOW provides additional information on the requirements of the treatability study FSP and QAPP.

Treatability study HASP

If the HASP developed for the RI/FS is not adequate for defining the activities to be performed during the treatment tests, a separate health and safety plan or amended HASP must be developed by the Respondents. Task 1, Item c, of this SOW provides additional information on the requirements of the HASP.

### Treatability study evaluation report

Following completion of treatability testing, the Respondents shall analyze and interpret the testing results in a technical report to the Agencies. Depending on the sequence of activities, this report may be a part of the RI or FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

## **8.0 TASK 5 – FEASIBILITY STUDY**

The Feasibility Study comprises two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The results of these two FS components will comprise the draft FS Report. Interim Deliverables associated with these activities are identified in the RI/FS Work Plan. Future Interim Deliverables will be identified in RI/FS Work Plan Addenda.

### ***a. Development and Screening of Remedial Alternatives***

The development and screening of remedial alternatives is performed to develop an appropriate range of waste management options that will be evaluated. This range of alternatives must include, as appropriate, options which use treatment to reduce the toxicity, mobility, or volume of wastes, but vary the types of treatment, the amount treated, and the management of long-term residuals or untreated wastes; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative.

The Respondents shall begin to develop and evaluate a range of appropriate waste management options that, at a minimum, ensure protection of human health and the environment, given all current and potential uses of the land, and comply with ARARs. This shall be done concurrent with the RI characterization task. The following activities shall be performed by the Respondents as a function of the development and screening of remedial alternatives.

### Refine and document remedial action objectives

Based on the risk assessment, the Respondents shall review and, if necessary, modify the CSOU specific Remedial Action Objectives (RAOs), specifically the preliminary remediation goals (PRGs) established by the Agencies during the scoping phase of the RI/FS Work Plan. The revised PRGs will be documented in a technical memorandum subject to Agency review, comment, modification, and approval. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route). Objectives and action levels from the EPA Regional Screening Levels (RSL) and Area-Wide Risk Management Plan (AWRMP) (IDeq 2004) may be used in the review and modification of the PRGs, considering the CSOU-specific conditions at the Site, if determined appropriate by the Agencies.



Develop general response actions

The Respondents shall develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the remedial action objectives.

Identify areas or volumes of media

The Respondents shall identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified in the RAOs. The chemical, biological, and physical characterization of the CSOU must also be taken into account.

Identify, screen, and document remedial technologies

The Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented. General response actions must be refined to specify remedial technology types. Technology process options for each of the technology types shall be identified either concurrent with the identification of technology types, or following the screening of the considered technology types. Process options must be evaluated on the basis of effectiveness, implementability, and cost factors to identify and retain one or, if necessary, more representative processes for each technology type. The technology types and process options must be summarized for inclusion in a technical memorandum. The reasons for eliminating alternatives must be specified.

Assemble and document alternatives

The Respondents shall assemble selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives will represent a range of treatment and containment combinations that will address the CSOU as a whole. The Respondents must prepare a summary of the assembled alternatives and their related action-specific ARARs for inclusion in a technical memorandum. The reasons for eliminating alternatives during the preliminary screening process must be specified.

Refine alternatives

The Respondents shall refine the remedial alternatives to identify contaminant volume addressed by the proposed process and sizing of critical unit operations as necessary. Sufficient information must be collected for an adequate comparison of alternatives. Respondents shall also modify PRGs for each contaminant of concern in each medium as necessary to incorporate any new risk assessment information presented in the RA Report. Additionally, action-specific ARARs must be updated as the remedial alternatives are refined.

Conduct and document screening evaluation of each alternative

The Respondents may perform a final screening process based on short- and long-term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary,

the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare a technical memorandum subject to Agency review, comment, modification, and approval, and include in the FS Report, a summary of the results and reasoning employed in screening, arraying alternatives that remain after screening, and identifying the action-specific ARARs for the alternatives that remain after screening.

***b. Detailed Analysis of Remedial Alternatives***

The detailed analysis shall be conducted by the Respondents to provide the Agencies with the information needed to allow for the selection of a remedy. This analysis is the final task to be performed by the Respondents during the FS.

The Respondents shall conduct a detailed analysis of alternatives, which must consist of an analysis of each alternative against the nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison.

The Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 1 and 2 are threshold criteria that must be met (unless a specific ARAR is waived, with respect to Criteria 2); Criteria 3-7 are primary balancing criteria; and Criteria 8 and 9 are modifying criteria evaluated by the Agencies after receiving public comments following release of the RI/FS report and a proposed remedial action plan to the general public. For each alternative, the Respondents must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment. Since the Respondents do not have direct input on Criteria 8 (state or support agency acceptance), and Criteria 9 (community acceptance), these will be addressed by the Agencies.

The Respondents shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification of the preferred alternative for the proposed plan and selection of a remedy in the Record of Decision (ROD) is reserved by the Forest Service in consultation with the Support Agencies. The Respondents shall prepare a technical memorandum subject to

Agency review, comment, modification, and approval, and include in the Feasibility Study a summary of the results of the comparative analysis.

***c. Feasibility Study Report***

The Respondents shall prepare a draft FS Report for the Agencies' review and comment. This report, as ultimately adopted or modified by the Agencies, provides a basis for remedy selection by the Forest Service in consultation with the Support Agencies and documents the development and analysis of remedial alternatives. The Respondents shall refer to the RI/FS Guidance for an outline of the report format and the required report content. The Respondents shall prepare a final FS Report which satisfactorily addresses the Agencies' comments.

**9.0 Task 6 - RI/FS Project Management**

The Respondents will prepare and submit quarterly Project Deliverables Status reports (PDSRs) to the Agencies to aid in project planning and resource allocations. These reports will document the status of all in-process Deliverables (including interim Deliverables, technical memoranda, and specific Deliverables identified in this SOW) and the Deliverables projected for submission. These PDSRs will be submitted according to the schedule in Attachment A of this SOW.

## 10.0 REFERENCES

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- EPA 1991a. *Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors*, USEPA, 1991.
- EPA-1991b. *Risk Assessment Guidance for Superfund Volume I, Human Health Evaluation Manual (Part B, Development of Risk-based Preliminary Remediation Goals)*. Interim. EPA/540/R-92/003. Office of Research and Development, Washington, D.C.
- EPA 1992a. *Supplemental Guidance to RAGS: Calculating the Concentration Term*. USEPA Office of Solid Waste and Emergency Response, publication 9285.7-081, 1992.
- EPA, 1992b. *Guidance for Data Usability in Risk Assessment (Part A)*. OSWER Directive 9285.7-09A Office of Emergency and Remedial Response, Washington, D.C., April 1992.
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- EPA 1998. *Guidelines for Ecological Risk Assessment*. EPA/630/R-95/002F, 1998. EPA 2000. *Guidance for the Data Quality Objectives Process (EPA QA/G4)*, 2000.
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- EPA 2004b. *Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*. EPA/540/R-04/004.
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- EPA 2006. *Guidance on Systematic Planning Using the Data Quality Objectives Process (EPA QA/G-4)*. EPA/240/B-06/001, February 2006.

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- NCP 2003. *The National Oil and Hazardous Substances Pollution Contingency Plan (NCP)*, 40 CFR, Part 300, July 1, 2003.
- EPA 2010. Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. EPA/540/R-10/011
- E & E 2011. Final Comprehensive Planning Documents, North Maybe Mine, East Mill Operable Unit Remedial Investigation/Feasibility Study, September 2011. Ecology & Environment, Inc.
- E & E 2012a. Final Data Evaluation Report, 2011 Peak Flow Surface and Groundwater Sampling Event, North Maybe Mine, East Mill Operable Unit, January 2012. Ecology & Environment, Inc.
- E & E 2012b. Final Data Evaluation Report, July 2011 Soil and Vegetation Sampling Event, North Maybe Mine, East Mill Operable Unit, April 2012. Ecology & Environment, Inc.
- E & E 2012c. Final Data Evaluation Report, 2011 Fall Surface Water, Groundwater, Terrestrial Vegetation, and Sediment Sampling Event, North Maybe Mine, East Mill Operable Unit, May 2012. Ecology & Environment, Inc.

***Statement of Work Attachments***

- A. CSOU RI/FS SOW Deliverables Schedule***
- B. CSOU RI/FS COPC List and Analytical Parameters***

**Attachment A**

**CSOU RI/FS SOW**

***Deliverables Schedule (all days are calendar days)***

RI/FS Work Plan

- Completed and approved by Forest Service, reviewed by Support Agencies (E & E 2011).
- Draft RI/FS Work Plan Addendum due within 120 days after Forest Service notification to proceed.
- 30 days for Agencies to submit comments (for planning purposes)
- 15 days after receipt, Respondents submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final Updated RI/FS Work Plan Addendum.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days of completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier
- 30 days for Agencies to submit comments (for planning purposes)
- 5 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final DSRs

Remedial Investigation (RI) Report:

- Submit draft RI Report within 150 days after receipt of final laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondents shall provide written notification to the Forest Service identifying receipt date of final laboratory data.
- 45 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final RI

Risk Assessment (RA) Report:

- Submit draft RA Report within 60 days after receipt of final laboratory data from the final field season.

- 45 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days after the above meeting/call, Respondents submit Final RA Report

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of Final RI Report
- 45 days for Agencies to submit comments (for planning purposes)
- 21 days after receipt, Respondents to submit response to Agencies' comments
- Within 21 days after Respondents submit their response, the Agencies and Respondents will hold a Meeting/Conference call to discuss responses
- Within 30 days of above meeting/call, Respondents submit Final FS

Data Validation Summaries (DVSs):

- DVSs due within 90 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondents will provide written notification to the Forest Service identifying the date of collection of the last sample from each sampling event.

Project Deliverables Status Reports (PDSRs):

- Submit by the 2nd Friday of January, April, July, and October

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies, Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by the Agencies, shall be due within 30 days Respondents' receipt of notice that said Deliverable is required.
- Final Interim Deliverables due within 30 days of receipt of consolidated Agency comments.



Attachment B			
CSOU COPC List and Analytical Parameters			
Groundwater	Surface Water	Sediment and Soil	Vegetation / Biota
<b>Field Measurements</b>			
Groundwater Elevation	Discharge		
Temperature	Temperature		
pH	pH		
Specific conductance	Specific conductance		
Dissolved oxygen	Dissolved oxygen		
Turbidity	Turbidity		
ORP	ORP		
Ferrous Iron			
Ferric Iron			
<b>Metals (Total and Dissolved for Aqueous and Total for Solids)</b>			
Aluminum	Aluminum	Aluminum	Aluminum
Antimony	Antimony	Antimony	Antimony
Arsenic	Arsenic	Arsenic	Arsenic
Barium	Barium	Barium	Barium
Beryllium	Beryllium	Beryllium	Beryllium
Boron	Boron	Boron	Boron
Cadmium	Cadmium	Cadmium	Cadmium
Chromium	Chromium III	Chromium	Chromium
	Chromium VI*		
Cobalt	Cobalt	Cobalt	Cobalt
Copper	Copper	Copper	Copper
Iron	Iron	Iron	Iron
Lead	Lead	Lead	Lead
Manganese	Manganese	Manganese	Manganese
Mercury	Mercury	Mercury	Mercury
Molybdenum	Molybdenum	Molybdenum	Molybdenum
Nickel	Nickel	Nickel	Nickel
Selenium, total recoverable	Selenium, total recoverable	Selenium	Selenium
Silver	Silver	Silver	Silver
Thallium	Thallium	Thallium	Thallium
Uranium	Uranium	Uranium	Uranium
Vanadium	Vanadium	Vanadium	Vanadium
Zinc	Zinc	Zinc	Zinc
<b>Other Analyses</b>			
Chloride			
Nitrate/Nitrite, as N	Nitrate/Nitrite, as N		
Sulfate			
	Hardness		
Total Organic Carbon (TOC)			
Total Dissolved Solids (TDS)	Total Dissolved Solids (TDS)		
Total Suspended Solids (TSS)	Total Suspended Solids (TSS)		

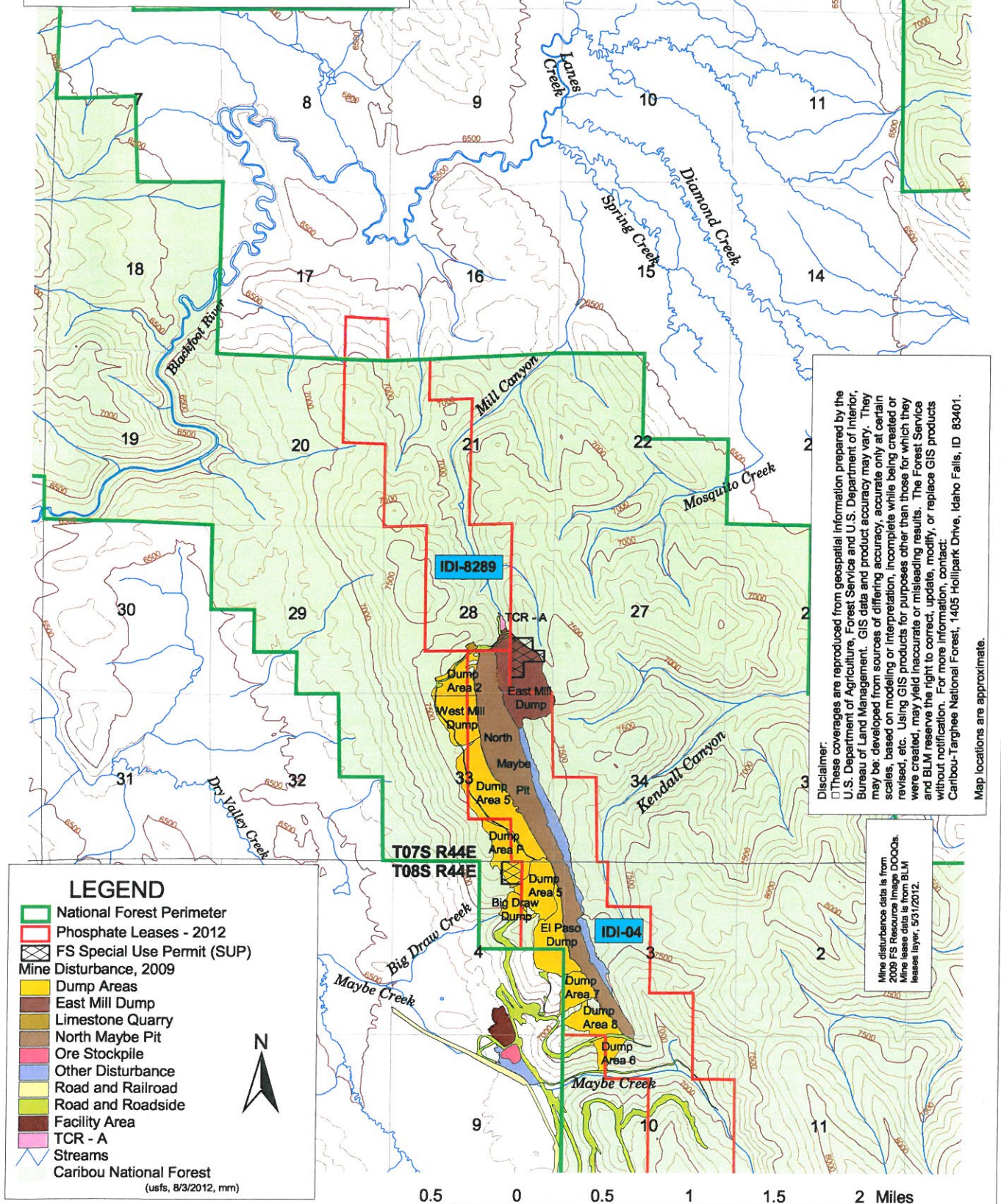
\*Respondents shall analyze for total chromium; specifications of chromium (i.e., CrIII and CrVI) need only be done when concentration of total chromium meets or exceeds the MCL for chromium-VI.

## APPENDIX D

NORTH MAYBE MINE SETTLEMENT AGREEMENT 2012

NORTH MAYBE MINE AREA MAP

# N. Maybe Mine Area



EAST MILL DUMP SUB-OPERABLE  
UNIT REMEDIAL DESIGN/REMEDIAL  
ACTION  
CONSENT DECREE

APPENDIX C





United States  
Department of  
Agriculture

Forest  
Service

Caribou-Targhee  
National Forest

1405 Hollipark Drive  
Idaho Falls, ID 83401  
208-524-7500

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**UNITED STATES FOREST SERVICE**

**REGION 4**

**INTERIM RECORD OF DECISION  
NORTH MAYBE MINE  
EAST MILL OPERABLE UNIT  
EAST MILL DUMP SUB-OPERABLE UNIT  
SODA SPRINGS, IDAHO**

**September 1, 2022**

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- A Idaho Department of Environmental Quality Concurrence with the Selected Remedy
- B Cost Estimate Details for Alternative 7
- C Responsiveness Summary
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## ABBREVIATIONS AND ACRONYMS

ARARs	Applicable or Relevant and Appropriate Requirements
bgs	Below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIP	Community Involvement Plan
COPC	Contaminant (chemical) of potential concern
CSM	Conceptual Site Model
yd3	Cubic Yard
EJ	Environmental Justice
ELCR	Excess lifetime cancer risk
EMOU	East Mill Operable Unit
EMDSOU	East Mill Dump Sub-Operable Unit
EPC	Exposure point concentration
ft2	Square foot
FR	Federal Register
FFS	Focused Feasibility Study
GCL	Geosynthetic Composite Liner
HI	Hazard Index
HQ	Hazard Quotient
IDEQ	Idaho Department of Environmental Quality
IEUBK	Integrated Exposure Uptake Biokinetic Model
IC	Institutional Control
kg	Kilogram
L/day	Liter per day
MCL	Maximum Contaminant Level
µg/L	Microgram per liter
mg	Milligram
mg/kg	Milligram per kilogram
mg/kg-day	Milligram per kilogram per day
mg/L	Milligram per liter
MNA	Monitored Natural Attenuation
MW	Monitoring Well
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
NMM	North Maybe Mine
OU	Operable Unit
O&M	Operations and Maintenance
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
ROD	Record of Decision
RD	Reference Dose
RI	Remedial Investigation
RI/FFS	Remedial Investigation and Focused Feasibility Study
RME	Reasonable Maximum Exposure
SARA	Superfund Amendments and Reauthorization Act
SCS	Sediment Control Structure
SLERA	Screening Level Ecological Risk Assessment
TCLP	Toxicity Characteristic Leaching Procedure
USDA	United States Department of Agriculture
USFS	United States Forest Service
UAO	Unilateral Administrative Order
95% UCL	95% Upper confidence limit
WROU	West Ridge Operable Unit

## **PART 1: THE DECLARATION**

### **1.0 SITE NAME AND LOCATION**

The North Maybe Mine (NMM) Site (CERCLIS ID: IDN001002956) is located about 26 road miles northeast of Soda Springs, Idaho, in Caribou County.

To facilitate Site management, the Site is divided into two operable units: the West Ridge Operable Unit (WROU) and the East Mill Operable Unit (EMOU). The East Mill Operable Unit is further subdivided into three sub-operable units: the Open Pits Sub-Operable Unit (OPSOU), East Mill Dump Sub-Operable Unit (EMDSOU), and the Creeks Sub-Operable Unit (CSOU). This Interim Record of Decision is for the EMDSOU. The Records of Decision for CSOU and the OPSOU are expected to be issued in the future and will address remaining contamination at NMM EMOU.

### **2.0 STATEMENT OF BASIS AND PURPOSE**

This decision document presents the "Selected Remedy" for the NMM EMDSOU Site (Figure 1). The Selected Remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 United States Code §9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, as amended. The Selected Remedy is Alternative 7 (Geosynthetic Cap) which is described in detail in Section 19.0 (Selected Remedy) of this Interim Record of Decision (ROD).

This decision is based on the Administrative Record for NMM EMDSOU, which was developed in accordance with Section 113 (k) of CERCLA, 42 United States Code §9613(k). This Administrative Record file is available for review at the United States Forest Service (Forest Service) Soda Springs Ranger District office in Soda Springs, Idaho. The Administrative Record Index (Appendix D) identifies each of the items comprising the Administrative Record upon which the selection of the Remedial Action is based. The Idaho Department of Environmental Quality (DEQ), as a support agency, provided assistance during development of the remedial investigation (RI) and feasibility study (FS). The State of Idaho concurs with the Selected Remedy.

### **3.0 ASSESSMENT OF THE SITE**

The response action selected in this Interim ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances,

pollutants, or contaminants into the environment. Such a release or threat of release may present an imminent and substantial endangerment to public health, welfare, or the environment.

#### 4.0 DESCRIPTION OF THE SELECTED REMEDY

This Interim ROD selects an interim remedy for NMM EMDSOU. The Selected Remedy for the Site is a combination of engineered source controls and other approaches and components that will work together to achieve remedial action objectives (RAOs). A key element of the combined remedy is controlling the release of contaminants from the waste rock dump by grading, and shaping waste rock; and constructing an approximately 2-foot-thick engineered cover system. Isolating the waste rock by constructing the cover system addresses direct contact risk with contaminants and vegetative uptake, reduces infiltration of water, and minimizes release of contaminants to surface water and groundwater.

The combined remedy includes several other elements to evaluate and optimize the performance of source controls and treatment technologies and to ensure protectiveness. The combined remedy includes institutional controls (ICs), operation and maintenance (O&M) requirements, and long-term effectiveness monitoring (LTM) requirements.

The selected remedy is Alternative 7 (Geosynthetic Cap). The components of this alternative are described in detail in Section 19.0 (Selected Remedy) of this Interim ROD. Briefly, the major components of this alternative are:

- **Engineered Cover System.** EMDSOU will be graded and shaped to ensure geotechnical stability and to promote runoff. An infiltration-limiting and direct contact-limiting engineered geosynthetic cap system will be applied to the North Area of EMDSOU.
- **Sediment Control Structure.** During the construction phase, the sediment from the existing sediment control structure (SCS) will be placed within the North Area prior to cap construction. A new SCS will be constructed to control release of sediment to downstream waterbodies.
- **O&M.** An O&M plan will be developed and implemented to ensure the integrity, proper functioning and performance of all engineering controls (for example, geosynthetic cover system).
- **MNA.** Monitored Natural Attenuation (MNA) of residual Constituents of Potential Concern (COPCs) in groundwater.

- **LTM.** Monitoring will be conducted to assess the effectiveness of various components of the remedy and progress toward achieving RAOs.
- **ICs and Access Restrictions.** ICs will be applied to protect the remedy and prevent human exposure by limiting land and resource use. In addition, fences, gates, and physical barriers will be built to prevent damage to engineered and vegetated components of the remedy. ICs include access and use restrictions and informational signage.

The overall timeline for construction of Alternative 7 (Geosynthetic Cap) is estimated to be approximately three years. The cost of implementing the selected remedy is approximately \$14,698,600.

The geosynthetic cap would limit exposure to EMDSOU materials and minimize COPC loading to underlying groundwater by reducing the amount of infiltration that percolates through the EMDSOU. Additionally, the clean soil on the cover would be re-seeded with vegetation that does not accumulate selenium. The geosynthetic cap would also reduce stormwater contact with EMDSOU materials on the North Area ground surface, thus reducing the COPC load in surface water that results from stormwater runoff.

## **5.0 STATUTORY DETERMINATIONS**

The Selected Remedy attains the mandates of CERCLA §121, and the regulatory requirements of the NCP. This remedy is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost-effective, and utilizes permanent solutions.

The remedy does not satisfy the statutory preference for treatment as a principal element of the remedy because wastes will be contained in place. The source materials, however, can be reliably contained by using engineering controls.

Land use and ground water restrictions are necessary because the Selected Remedy will result in hazardous substances remaining on-site in soils at depths below 1.5 feet and will initially result in hazardous substances in the ground water and surface water which are above levels that allow for unlimited use and unrestricted exposure. A statutory review will be conducted within five years after completion of the remedial action to ensure that the remedy continues to provide adequate protection of human health and the environment. This review will be conducted not less than every five years after the date of the completion of the remedial action.

## 6.0 DATA CERTIFICATION CHECKLIST

The following information is included in The Declaration (Part 1) and the Decision Summary (Part 2) of this Interim ROD, while additional information can be found in the Administrative Record file for this Site:

- Chemicals of Potential Concern (COPCs) (see Section 12.2 – Conceptual Site Model);
- Baseline risk represented by the COPCs (see Section 14.0 –Summary of Site Risks);
- Remediation goals (i.e., cleanup goals) established for the COPCs and the basis for the goals (see Section 15.0 – Remedial Action Objectives);
- How source materials constituting principal threats are addressed (18.0 - Principal Threat Wastes);
- Current and reasonably anticipated future land use assumptions and current and potential future beneficial uses of ground water used in the Baseline Human Health Risk Assessment and this Interim ROD (see Sections 13.1 - Current and Potential Future Land Uses, 13.2 - Current and Potential Future Ground Water Uses, 19.4.1 -Available Land Uses, and 19.4.2 -Available Ground Water Uses);
- Potential land and ground water use that will be available at the Site as a result of the Selected Remedy (see Sections 13.1 - Current and Potential Future Land Uses, 13.2 - Current and Potential Future Ground Water Uses, 19.4.1 - Available Land Uses, and 19.4.2 - Available Ground Water Uses);
- Estimated capital, lifetime operation and maintenance (O&M), and total present worth costs; discount rates; and the number of years over which the remedy cost estimates are projected (see Sections 16.2.7 - Alternative 7 [Geosynthetic Cap], 19.3 - Cost Estimate for the Selected Remedy; and Appendix B - Cost Estimate Details for Alternative 7); and
- Key factor(s) that led to selecting the remedy (see Section 14.3 - Basis for Remedial Action).

## 7.0 AUTHORIZING SIGNATURE

This Interim ROD documents the Selected Interim Remedy for contaminated soil and ground water at the NMM EMDSOU Site. This remedy was selected by the Forest Service with the concurrence of the Idaho Department of Environmental Quality (Appendix A – Idaho Department of Environmental Quality Concurrence with the Selected Remedy). The

Regional Forester has been delegated the authority to approve and sign this Interim ROD.

A handwritten signature in blue ink, appearing to read 'Mary Farnsworth', is written over a horizontal line.

MARY FARNSWORTH  
Regional Forester  
USDA Forest Service Intermountain Region

Date 9/19/22

## **PART 2: THE DECISION SUMMARY**

This Decision Summary provides a description of the Site-specific factors and analysis that led to the selection of the soil and ground water remedies for the Site. It includes background information about the Site, the nature and extent of contamination found at the Site, the assessment of human health and environmental risks posed by the contaminants at the Site, and the identification and evaluation of remedial action alternatives for the Site.

This Site is divided into two operable units. The West Ridge Operable Unit (WROU) and the East Mill Operable Unit (EMOU) as follows:

- WROU - lies west of the NMM pit and consists of the West Mill Dump (Dump 2 and 4), Dump 5 North and South, Dump F, the El Paso Dump, Big Draw Dump, Dump 6, and Dumps 7 and 8.
- EMOU – consists of all portions of NMM not included in the WROU. NMM EMOU is subdivided into the following sub-operable units as follows:
  - Open Pit Sub-Operable Unit (OPSOU) – Area encompassing the open pit on NMM.
  - East Mill Dump Sub-Operable Unit (EMDSOU) – Area encompassing the extent of the East Mill Dump and the sediment control structure.
  - Creeks Sub-Operable Unit (CSOU) – The areal extent of contamination from the EMOU that is not located within OPSOU or EMDSOU including East Mill Creek.

### **8.0 SITE NAME, LOCATION, AND BRIEF DESCRIPTION**

The North Maybe Mine (NMM), East Mill Operable Unit (EMOU), East Mill Dump Sub-Operable Unit (EMDSOU) is a former open-pit phosphate mine located in Soda Springs, Idaho (Caribou County, CERCLIS ID# IDN001002956). The Site is the location of a former phosphate ore mine. Operation of the mine generated waste rock enriched with various inorganic contaminants, including selenium, arsenic, uranium, and other elements. Contaminants were released in soils, surface water, groundwater, sediment, and vegetation. The Site is located about 26 road miles northeast of Soda Springs, Idaho, in Caribou County. NMM includes an open pit approximately 2.5 miles long and reclaimed haul roads, surrounded by 10 overburden piles, one of which is EMDSOU.

The Site is not listed on the National Priorities List (NPL). The RI/FS and remedy selection followed the structured process established by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the National Oil Pollution and Hazardous Substances Contingency Plan (NCP) to guide the cleanup of contaminated sites. As discussed in the Proposed Plan for the Site (USFS, 2021), the process includes various steps



leading from discovery of a site through investigation, remedy selection, and implementation of a remedy. The NCP includes procedures, expectations, and program management principles to guide the process.

The Forest Service is the lead agency for the Site. The IDEQ, U.S. Fish and Wildlife Service (USFWS), and the Shoshone-Bannock Tribes are support agencies. The Potentially Responsible Parties (PRPs) identified for the Site did participate in the development of the RI/FFS for EMDSOU and are anticipated to participate in the remedial action described in this Interim ROD.

## **9.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES**

This section of the Interim ROD provides the history of the Site and a brief discussion of the Forest Service removal, remedial, and enforcement activities.

### **9.1 History of Site Activities**

The mine operational history is summarized from A History of Phosphate Mining in Southeastern Idaho (Lee 2000) and other available historical documents, as follows:

1950: The North Maybe Mine is part of Federal Lease I-04 (Lease), which was originally issued by the United States to Western Fertilizer Association (WFA) in 1950.

1950 – 1959: WFA conducted exploration and underground mining. Underground mining was completed in 1951 at the bottom of Maybe Canyon. A tunnel was excavated nearly 200 feet to the north of the portal, from which more than 1,000 tons of phosphate rock were removed. Exploration across the lease continued until early 1959.

1959 to 1967: In 1959, WFA assigned the Lease to Central Farmers Fertilizer Company. Central Farmers Fertilizer Company assigned the Lease to El Paso Natural Gas Products Company in 1964. El Paso Natural Gas Products Company conducted mining operations beginning in 1965 and ending in 1967. Records indicate that Wells Cargo, Inc. was the mining contractor for El Paso Natural Gas Products Company.

1968 to 1969: The North Maybe Mine was idle.

1970 to 1971: El Paso Natural Gas Products Company assigned the Lease to a related entity, El Paso Products Service Company. The North Maybe Mine was idle during 1970 and 1971.

1972: El Paso Products Service Company conducted mining operations and assigned the Lease to Agricultural Products Corporation (APC).

1972 to 1977: APC operated the North Maybe Mine using Washington Construction as the mining contractor. APC merged into Beker Industries in 1974 and Beker Industries continued to mine the property through 1977. Reclamation of the south end of the North Maybe Mine began in 1976. Operations at North Maybe Mine ceased in 1977.

1978: Beker Industries assigned 50 percent of the lease to Western Co-Operative Fertilizer-U.S. Inc. (WCFL). Beker Industries and WCFL created the entity known as the Conda Partnership and each party assigned its 50 percent interest in the lease to the Conda Partnership. Beker served as the managing partner and WCFL was the sole non-operating partner.

1979 to 1984: Mining operations were conducted by the Conda Partnership using Washington Construction as the mining contractor. The Alternative 1982-84 Plan for Maybe Canyon Phosphate Lease I-04 (Conda Partnership 1981) proposed to complete mine operations from 1982 to 1984.

1985 to 1992: The North Maybe Mine was idle. In 1987, Nu-West purchased Beker's assets and obtained a 50 percent interest in the Conda Partnership. The new partnership returned North Maybe Mine to full production by 1988.

1992: Nu-West purchased all of the WCFL stock, which included the other 50 percent of Conda Partnership.

1993: The Conda Partnership mined the North Maybe Mine Open Pit to completion. Conda Mining, a subsidiary of Washington Construction, was the mining contractor.

1994 to 1995: In 1995, the Conda Partnership disbanded, and all mine properties were transferred to Nu-West, who completed the North Maybe Mine reclamation.

During the life of the North Maybe Mine, approximately 15 million wet tons of ore and 52 million bank cubic yards of overburden were mined.

The Maybe Canyon shop and office complex operated from 1964 to 1993 and was shared by the operations of both the North Maybe Mine and the South Maybe Canyon Mine. The facility was located off-lease on Nu-West property, just west of the North Maybe Mine (Figure 1) and has since been removed.

No ore processing occurred at the Site. Ore was hauled by rail to a processing plant near the town of Soda Springs. The key features of the Site are presented in Figure 2 (located at the

end of this document).

## **9.2 History of Enforcement and Investigation Actions**

Investigations to assess the impacts of phosphate mining in southeastern Idaho on human health and the environment began after several horses were diagnosed with selenosis (i.e., selenium poisoning) in 1996 and were subsequently euthanized.

In 2001, DEQ assumed leadership of an area-wide investigation of contamination from phosphate mining, with participation by other state and federal agencies and the mining companies with operations in southeast Idaho. These area-wide investigations led the agencies to conclude that site-specific investigations were warranted on the larger historic and active open-pit mines located in the mining district, including the NMM and others.

These conclusions subsequently led to negotiations with Nu-West to conduct site-specific investigations at the historical mines, including the NMM. In October 2013, DEQ, U.S. Fish and Wildlife Service (USFWS), the Forest Service, the Shoshone-Bannock Tribes, and Nu-West (the latter as Respondent) entered into a mine-specific legal agreement calling for Nu-West to conduct investigations and develop a Remedial Investigation (RI) and Focused Feasibility Study (FFS) reports for the NMM EMDSOU Site. The Forest Service was designated the lead agency to oversee this work.

The majority of the area disturbed by mining is owned by United States and administered by the Forest Service. Nearby adjoining lands are privately owned ranching and farming properties and a small piece of State land.

## **10.0 COMMUNITY PARTICIPATION**

This section of the Interim ROD describes the Forest Service community involvement activities. The Forest Service has been engaged in dialogue and collaboration with the affected community and strived to advocate and strengthen early and meaningful community participation during the remedial activities at the Site. These community participation activities during the remedy selection process meet the public participation requirements in CERCLA and the NCP.

### **10.1 Community Involvement Plan**

The Community Involvement Plan (CIP) for the Site was updated in February 2021. This CIP specifies the community involvement activities that the Forest Service has undertaken, and will continue to undertake, during the remedial activities planned for the Site (USFS 2021).

## **10.2 Community Meeting for the Proposed Plan for NMM EMDSOU**

An online community meeting was held on July 14, 2021, for approximately five community members. At this meeting, representatives from the Forest Service answered questions about the Preferred Alternative for the Site. The Preferred Alternative presented at the meeting was Alternative 7. The meeting was recorded and transcribed. The transcript is included in the Administrative Record file for the Site, which is maintained at the Information Repository located at the Soda Springs Ranger District office located at 410 E Hooper Ave, Soda Springs, Idaho.

Paid notices were placed in the Caribou County Sun (the Soda Springs newspaper) and the Idaho State Journal (the Pocatello newspaper) in July 2021 to announce issuance of the Proposed Plan and provide information on public involvement opportunities.

The RI/FFS Report (NuWest 2021), Screening-Level Human Health Risk Assessment (NuWest 2017), Screening-Level Ecological Risk Assessment (NuWest 2017a), and the Proposed Plan (USFS 2021a) for the Site were made available to the public during the public comment period for the EMDSOU Proposed Plan. These documents are currently located in the Administrative Record file for the Site. A public comment period was held from July 1, 2021 to July 31, 2021. Responses to the comments received during this period are included in the Responsiveness Summary (Part 3) of this Interim ROD.

## **10.3 Fact Sheets**

Numerous fact sheets were prepared during the planning and implementation of the RI/FS. These fact sheets were placed at the Site's repository and distributed to those community members on the mailing list.

## **10.4 Local Site Repository**

The purpose of the local Site Repository is to provide the public a location near the community to review and copy background and current information about the Site. The Site's repository is located near the Site at:

Soda Springs Ranger District  
410 East Hooper Ave.  
Soda Springs, ID 83276-1496  
Telephone: (208) 547-4356

## **11.0 SCOPE AND ROLE OF THE OPERABLE UNIT**

In 2013, Forest Service entered into a settlement agreement with Nu-West calling for the production of an RI/FS for NMM EMOU.

As with many Superfund sites, the problems at the NMM are complex. As a result, Forest Service has organized the Site into two operable units (OUs):

- West Ridge Operable Unit: WROU includes the dumps to the west of the NMM open pit and includes the former shop area, tipple, and haul roads. The RI and associated human health and ecological risk assessments are approved. The Feasibility Study (FS) is currently being drafted by a different PRP.
- EMOU comprises the open pit and areas east of the open pit. East Mill Operable Unit was further subdivided into three Sub-Operable Units:
  - Open Pits Sub-Operable Unit: Comprises the NMM open pit. The RI is complete and the RI Report and associated human health and ecological risk assessments are under review.
  - East Mill Dump Sub-Operable Unit: Comprises the East Mill Dump and its associated sediment control structure located east of the NMM open pit on the headwaters of the East Mill Creek. The RI/FFS is complete for EMDSOU and its remedy is the topic of this Interim ROD.
  - Creeks Sub-Operable Unit: Comprises all areas not associated with WROU, EMDSOU, and OPSOU including East Mill Creek. Remedial Investigation work is on hold pending construction of the EMDSOU Interim Remedy.

A map of the Site showing the location and size of the EMOU, WROU, and EMDSOU relative to each other is shown in Figure 1. The following sections describe the overall cleanup strategy for the Site.

### **11.1 RESPONSE ACTION FOR EMDSOU**

This Interim ROD selects an Interim Remedy for the NMM EMOU EMDSOU. The Selected Remedy for NMM EMDSOU is a combination of engineered source controls, treatment technologies, and other approaches and components that will work together to achieve the remedial action objectives (RAOs). A key element of the remedy is controlling the release of contaminants from EMDSOU. This will be accomplished by consolidating, grading, and shaping the waste rock and constructing a two-foot-thick engineered cover system over approximately 70 acres of EMDSOU. Isolating the waste rock by constructing the cover system addresses direct

contact risks with contaminants and vegetative uptake, reduces deep infiltration of water, and minimizes release of contaminants to surface water and groundwater.

## **11.2 RESPONSE ACTION FOR EMOU OPSOU AND CSOU**

A final remedy for EMOU OPSOU and CSOU is not being selected in this Interim ROD because the RI/FS is not complete for the remaining sub-operable units. The Human Health Risk Assessment is under review for OPSOU. The Remedial Investigation report and Ecological Risk Assessment are under review for OPSOU.

The Remedial Investigation for CSOU is still underway. The risk assessments and RI/FS will be developed once conditions in East Mill Creek have stabilized after the remedy is constructed for EMDSOU.

## **11.3 RESPONSE ACTION FOR WROU**

A final remedy for WROU is not being selected in this Interim ROD. The Remedial Investigation Report, Human Health Risk Assessment, and Ecological Risk Assessment are complete for WROU. A Feasibility Study and Proposed Plan will be developed for this portion of the Site and a final remedy selected in a separate Interim ROD.

## **12.0 SITE CHARACTERISTICS**

This section of the Interim ROD provides a brief comprehensive overview of the Site's soils, geology, surface water hydrology, and hydrogeology; the sampling strategy chosen for the Site; the Conceptual Site Model; and the nature and extent of contamination at the Site. Detailed information about the Site's characteristics can be found in the RI/FFS Report for NMM EMDSOU (Nu-West 2020).

### **12.1 Overview of the Site**

NMM is subdivided into two Operable Units; EMOU and the WROU. NMM EMOU is further subdivided into three sub-operable units: OPSOU, EMDSOU, and the Creeks Sub-Operable Unit.

#### **12.1.1 Site Geology and Hydrogeology**

The Site is located on Dry Ridge, a prominent topographic feature associated with the upper Meade overthrust plate, formed during eastward tectonic compression occurring in the Cretaceous Period and Paleocene Epoch and resulting in an area of significant thrust compression,

faulting, and folding. These forces resulted in generally northwest- to southeast-trending anticlines and synclines that dominate the area. The resistant beds of the Rex Chert Member generally form the top of a secondary hogback ridge on which the North Maybe Mine is located. The summit of Dry Ridge is east of the North Maybe Mine and formed by Thaynes Formation and Dinwoody Formation bedrock.

The Site is underlain by colluvium, Dinwoody Formation, and Cherty Shale Member bedrock. Groundwater is present in each stratigraphic unit, although flow magnitude and direction vary widely among units as a function of recharge and discharge locations and magnitude, hydraulic conductivity, and geologic structure such as faulting, folding, and plunging. Bedrock groundwater flowing along bedding planes may move along strike to the north and down dip to the east. However, significant down-dip flow is not expected due to decreasing hydraulic conductivity that occurs at depth. Instead, groundwater flow through weathered bedrock and fractures, including fractures that enable flow across units, are likely the more significant flow paths.

### **12.1.2 Site Surface Water Hydrology**

The sediment control structure (SCS), located at the toe of the EMDSOU, was constructed in 2008 to collect groundwater seepage and surface water runoff, and serves to minimize the release of sediment to East Mill Creek. An armored sediment control/spillway structure controls the outflow of water from the SCS to East Mill Creek. The SCS is a shallow impoundment basin (generally less than 10 feet deep) surrounded by transitional habitat characterized by sparse groundcover primarily composed of terrestrial grasses. While the SCS serves to minimize the release of sediment to East Mill Creek, the EMDSOU and East Mill Creek are interconnected. Potential exposure of contamination to aquatic life in East Mill Creek will be addressed by the CSOU RI/FS after implementation of the selected EMDSOU remedial alternative.

## **12.2 Conceptual Site Model**

A hydrogeological conceptual Site model for NMM EMDSOU was developed to show the relationship between the sources of contaminants at the Site, mechanisms for release of contaminants, and surface water and groundwater transport pathways to various environmental media and receptors (Figure 3). The model provides a framework to assess relative risks from contaminants and develop more detailed Site investigations and cleanup strategies. The following information describes elements of the conceptual Site model.

### **12.2.1 Nature and Extent of Soil and Vegetation Contamination**



Approximately 12.6 million cubic yards of surface material/waste rock are influenced and affected by mine waste and associated with contamination. Selenium is observed to have significant uptake into vegetation growing on waste rock dumps. Generally, this occurs through the uptake from soil or waste rock through the root system and into plant tissue.

The following metals were identified as COPC at NMM EMDSOU in soil, vegetation, and beef: aluminum, antimony, arsenic, cadmium, cobalt, iron, manganese, nickel, selenium, thallium, uranium, and vanadium.

#### **12.2.2 Nature and Extent of Surface Water Contamination**

East Mill Creek, sedimentation ponds, and seeps are influenced and affected by mine waste and associated with contamination. Dissolution or leaching (from contact with rain or snowmelt) of contaminants from center waste shales are present in source areas, and the subsequent migration (movement) of dissolved constituents in surface water (runoff and seeps).

The following metals were identified as COPC at NMM EMDSOU surface water: arsenic, hexavalent chromium, molybdenum, selenium, thallium, uranium, and vanadium.

#### **12.2.3 Nature and Extent of Ground Water Contamination**

The alluvial aquifer directly under EMDSOU is influenced and affected by mine waste and associated with groundwater contamination. Dissolution or leaching (from contact with rain or snowmelt) of contaminants from center waste shales is present in source areas, and the subsequent migration (movement) of dissolved constituents in groundwater has been observed.

The following metals were identified as COPC at NMM EMDSOU groundwater: aluminum, antimony, arsenic, cadmium, chromium, cobalt, iron, lead, manganese, molybdenum, nickel, selenium, thallium, uranium, and vanadium.

#### **12.2.4 Nature and Extent of Sediment Contamination**

Sediments in the EMDSOU SCS are influenced and affected by mine waste and associated with contaminants. Erosion of contaminated particles from waste rock dumps, transport off the dump(s), and subsequent deposition in ephemeral and intermittent streams, resulting in impacts to both stream sediment and riparian soil downgradient of source areas.

The following metals were identified as COPC at NMM EMDSOU sediment: aluminum, arsenic, cadmium, cobalt, iron, selenium, thallium, and vanadium.



### **13.0 CURRENT AND POTENTIAL FUTURE LAND AND WATER USES**

This section of the Interim ROD discusses the current and reasonably anticipated future land uses, and current and potential ground water and surface water uses at the Site. This section also discusses the basis for future use assumptions.

#### **13.1 Current and Potential Future Land Uses**

The NMM Site is located in a rural and sparsely populated area. The nearest town is Soda Springs, located about 26 miles away. Seasonal ranching is the dominant land use in the vicinity of the Site. There are many active and inactive phosphate mines in the area. The surrounding area is also used for public recreation, including hunting on private and public lands, and fishing on the Upper Blackfoot River.

The NMM Site includes the former mine area and contaminated portions of adjacent properties. Currently, vehicular access is restricted to NMM EMDSOU. Current land uses of the adjoining private properties include seasonal ranching (grazing of sheep and cattle). There is likely some limited recreational and Tribal use (hunting, gathering, and ceremonial use) of the lands at the Site as well. There are no residences at, or near, the NMM EMDSOU.

The reasonably anticipated future uses of the land at the Site include seasonal ranching (grazing of sheep on EMDSOU), recreation, and Tribal use. Residential use of the land at the Site is unlikely because residential use is not allowed on Forest Service lands.

#### **13.2 Current and Potential Future Use of Surface Water and Groundwater**

EMDSOU is constructed on the headwaters of East Mill Creek. East Mill Creek flows approximately 2.5 miles to its confluence with the Blackfoot River.

Current uses of the surface water on and adjoining the Site include seasonal ranching (watering of sheep on adjacent East Mill Creek), recreation, and Tribal use of the surface water at the Site as well. No groundwater uses at or adjacent to EMDSOU are currently present.

The reasonably anticipated future uses of surface water at the Site include seasonal ranching (watering of sheep on East Mill Creek), recreation, and Tribal use. Residential use of the surface water and groundwater at the Site is unlikely because residential use is not allowed on National Forest System land.

### **14.0 SUMMARY OF SITE RISKS**

This section of the Interim ROD provides a summary of the Site's human health and ecological risks. A Screening Level Human Health Risk Assessment (Nu-West 2017) for the Site was completed in 2017, which estimated the probability and magnitude of potential adverse human health and environmental effects from exposure to contaminants associated with the Site, assuming no remedial action will be taken. A Screening Level Ecological Risk Assessment (Nu-West 2017a) for the Site was completed in 2017.

#### **14.1 Summary of Screening Level Human Health Risk Assessment**

The risk assessment estimates what risks the Site poses if no action is taken. It provides the basis for taking action and identifies the contaminants and exposure pathways that need to be addressed by the remedial action. This section of the Interim ROD summarizes the results of the screening level risk assessment for this Site.

Human health risks were estimated for various exposure scenarios, based on current and reasonably anticipated future land uses, including current and future Native Americans (for example, elk hunting and harvesting vegetation by the Shoshone-Bannock Tribes), current and future maintenance or Forest Service workers, current and future recreational users, and current and future members of the general population. These scenarios evaluated the exposure to mining-related contaminants in environmental media (soil, sediment, vegetation, surface water, and groundwater) at the Site (Figure 4).

In addition, radiological risk from exposure to uranium decay products was evaluated.

The following chemicals exceeded their respective human health screening value for non-radionuclide contaminants (by media) at NMM EMDSOU:

- Surface water exceedances – arsenic, chromium VI, molybdenum, selenium, thallium, uranium, and vanadium
- Groundwater exceedances – aluminum, antimony, arsenic, cadmium, chromium, cobalt, iron, lead, manganese, molybdenum, nickel, selenium, thallium, uranium, and vanadium
- Sediment – aluminum, arsenic, cadmium, cobalt, iron, selenium, thallium and vanadium
- Soil, Vegetation, exceedances – aluminum, antimony, arsenic, cadmium, cobalt, iron, manganese, nickel, selenium, thallium, uranium, and vanadium

#### **Radiological Risk Estimates**

The following chemicals exceeded their respective human health screening value for radionuclide contaminants (by media):

- Soil exceedances – U-238 and Ra-226
- Sediment exceedances – U-238 and RA-226

#### **14.2 Summary of Screening Level Ecological Risk Assessment**

Ecological risk estimates were calculated for the most plausible ecological exposure pathways based on contaminant release and transport, available habitat, biota types present, and available food sources (Figure 5).

The following two exposure areas at the EMDSOU were identified and evaluated:

- EMDSOU Upland Area
- EMDSOU Sediment Control Structure

Risks were estimated for these exposure areas by calculating hazard quotients (HQs) for each receptor group. HQs are the ratio of the dose to a toxicity reference value appropriate for the assessment endpoint (AE). The HQ is not a predictor of risk. An HQ less than 1 suggests that there is little potential for ecological risk for a given constituent of potential ecological concern (COPEC) receptor combination, and it may be excluded from further consideration. If an HQ is equal to (unity) or greater than 1, then there is potential for ecological risk for the given receptor-AE.

##### **EMDSOU Upland Area**

This terrestrial exposure area includes the EMDSOU, which is a disturbed area that has undergone reclamation and is characterized as hillside/sloping terrain with grasses, herbaceous plants, and low shrubs as the predominant ground cover. Although habitat is somewhat limited relative to undisturbed native habitat in nearby areas, the presence of terrestrial ecological receptors is expected and was evaluated in the Screening Level Ecological Risk Assessment (SLERA). The SLERA concluded that ecological risk for terrestrial plants and soil invertebrates and amphibians in the EMDSOU upland area cannot be excluded. Further, the SLERA also concludes that risk to amphibians and wildlife receptors (terrestrial and aquatic birds and mammals) in the EMDSOU upland area cannot be excluded.

Risk to receptors at the EMDSOU upland area is due to 17 soil COPECs: antimony, arsenic, boron, cadmium, chromium (total), copper, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, uranium, vanadium, and zinc.

### **EMDSOU Sediment Control Structure**

This perennial aquatic exposure area is located at the toe of the EMDSOU and collects surface runoff and groundwater seepage originating from the EMDSOU. The structure serves to control sediment release to areas downstream in East Mill Creek. The aquatic habitat in the Sediment Control Structure (SCS) is currently limited due to alterations to the control structure in 2008, but an aquatic community has been observed in the basin and is expected to develop over time. Fish are absent from the Sediment Control Structure, which is physically separated from East Mill Creek and not expected to be part of the Sediment Control Structure aquatic community. Current and expected receptors in the Sediment Control Structure are evaluated in the SLERA. The SLERA concludes that ecological risk for small to moderate ranging aquatic-feeding wildlife receptors using the Sediment Control Structure for food and water cannot be excluded.

Risks to receptors in the aquatic environment are possible from exposure to 10 surface water COPECs: aluminum, barium, boron, cadmium, chromium (total and hexavalent), selenium, silver, uranium, and vanadium.

Risks to receptors in the aquatic environment are possible from exposure to 14 sediment COPECs: aluminum, arsenic, barium, cadmium, chromium (total), copper, lead, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.

As described above, the SLERA for the Site identified several COPECs in surface soil, sediment, and surface water. Therefore, the possibility of adverse risks for ecological receptors cannot be excluded under current conditions and remediation may be warranted.

### **14.3 Basis for Remedial Action**

The response action selected in this Interim ROD is necessary to protect the public health or welfare or the environment from actual or threatened releases of hazardous substances, pollutants, or contaminants into the environment. Such a release or threat of release may present an imminent and substantial endangerment to the public health, welfare, or the environment. The response action is necessary for the Site because of the following:

- **Human Health Risk:** The concentration of chemicals exceeded their respective human health screening value for non-radionuclide contaminants in soil, sediment, vegetation,

surface water, and groundwater. Soil and sediment radionuclide concentrations also exceed their respective human health screening values.

- **Ecological Risk:** Soil individual receptor-specific HQ estimates greater than 1 were associated with terrestrial plants, terrestrial invertebrates, terrestrial birds, and small terrestrial mammals. Aquatic community individual receptor-specific HQ estimates greater than 1 were associated with aquatic organisms and amphibians in the SCS. Benthic community and wildlife individual receptor-specific HQ estimates greater than 1 were associated with benthic invertebrates, tree swallow, and raccoon.

## 15.0 REMEDIAL ACTION OBJECTIVES

The Remedial Action Objectives (RAOs) for NMM EMDSOU provide a general description of what the Superfund cleanup is designed to accomplish. These goals serve as the design basis for the Selected Remedy identified in this Interim ROD.

### 15.1 Remedial Action Objectives for the Site

For EMDSOU materials (overburden rock, soil, and sediment), the RAOs are:

- Prevent direct contact of EMDSOU materials to human and ecological receptors that would result in unacceptable risk.
- Reduce or eliminate erosion and transport of EMDSOU materials to East Mill Creek that would result in unacceptable risk to human and ecological receptors.

For vegetation, the RAOs are:

- Prevent exposure of human and ecological receptors to vegetation on the EMDSOU that would result in unacceptable risk.

For groundwater and surface water, the RAOs are:

- Minimize COPC loading from EMDSOU materials to surface water and groundwater discharging to East Mill Creek.
- Minimize infiltration and associated COPC loading from EMDSOU materials to groundwater.
- Minimize ingestion, direct contact, or food-chain exposure of EMDSOU COPC

impacted surface water by ecological receptors.

## **15.2 Basis and Rationale for Remedial Action Objectives**

The basis for the RAOs for the soil, sediment, and vegetation is to clean up the Site to multiple use standards (the anticipated future land use for the Site). Multiple use includes: recreation, grazing, wildlife, and tribal uses.

The basis for the RAOs for the ground water and surface water is to prevent infiltration of water on the surface of the EMDSOU to reduce load of selenium and other hazardous substances into East Mill Creek.

## **15.3 Risks Addressed by the Remedial Action Objectives**

Table 1 presents the cleanup levels for surface water and groundwater; these are based primarily on the Applicable or Relevant and Appropriate Requirements (ARARs). By setting cleanup levels for surface water and groundwater to ARARs, the remedy will reduce Site-related risks for selenium and other hazardous substances to levels acceptable for human and ecological receptors.

## **16.0 DESCRIPTION OF ALTERNATIVES**

Initially, a broad range of alternatives were identified and screened, in accordance with the NCP. These alternatives included a variety of remedial technologies and process options that were potentially useful to address the RAOs for contaminated media. Cleanup methods and technologies were evaluated for each of the following media: soils and waste rock, vegetation, sediment, surface water, and groundwater.

A total of eight alternatives were developed for the Site (Nu-West 2020). Alternative 7 describes the Selected Remedy presented in this Interim ROD. Alternative 7 was the preferred alternative presented to the public in the Proposed Plan (USFS 2021). The Alternatives considered in the NMM EMDSOU RI/FFS were:

- a. Alternative 1 - No Action;
- b. Alternative 2 – Limited Action including institutional controls;
- c. Alternative 3 – Simple soil cover, institutional controls, and excavation of sediment

in the SCS;

- d. Alternative 4 – Simple soil cover combined with groundwater collection and treatment and institutional controls;
- e. Alternative 5 – Evapotranspiration Cover, monitored natural attenuation (MNA) of COPCs in groundwater, and institutional controls;
- f. Alternative 6 – Clay Cap, institutional controls, and MNA of COPCs in groundwater;
- g. Alternative 7 – Geosynthetic Cap, institutional controls, and MNA of COPCs in groundwater;
- h. Alternative 8 – Overburden Pile Material Excavation and Disposal

#### **16.1 Common Elements of Each Remedial Alternative**

Many of the remedial alternatives share basic remediation elements. While the No Further Action alternative does not include remediation and Alternative 8 involves removal of all EMDSOU materials, the remaining alternatives have a range of institutional controls in common, and the containment-based engineered cover system remedies have additional engineered elements in common.

##### **Regrading**

Specifically, before construction of any engineered cover system, the EMDSOU will require regrading to promote drainage and constructability. The grading and surface preparation requirements may be different for each of the various engineered cover systems, which could be a significant factor in the construction activities and overall cost. Details of Site grading and preparation will be established in the remedial design phase and are discussed in a qualitative manner for each alternative described below.

It is important to note that the stability analysis presented in the EMDSOU FFS indicates a potential for small scale sloughing of the high wall and the waste material perched above into the open pit. Given this potential, it may be necessary to move overburden away from the rim of the open pit to address highwall stability issues. Collection of additional geotechnical stability data in support of the remedial design may be necessary and would be undertaken in conjunction

with pre-design data collection activities. Details for any potential reconfigured rim and associated grading and/or removal of overburden, as well as any necessary road reconstruction or repair, will be developed in the remedial design. In addition, any engineered cover system (i.e., Alternatives 3-7) will eliminate the sediment exposure pathway. The design criteria for the development of the remedy design will require that the sediment in the existing SCS be consolidated under the engineered cover as noted in the EMDSOU RI/FFS and the footprint of the removed SCS be covered by the engineered cover system.

### **Institutional Controls**

All alternatives will require institutional controls as a component of the remedy to ensure protection of human health and the environment is maintained. Institutional controls will also be important for protecting the integrity and performance of containment-based remedies during and after construction. Additionally, institutional controls will require preparation of an Institutional Controls Implementation and Assurance Plan. The specific institutional control measures required include access and use restrictions, communication and distribution of relevant information, and enforcement of the institutional control measures (Nu-West 2020).

### **Key ARARs**

This section identifies ARARs that drive the RAOs and response options. These key ARARs are those that provide a basis for developing an alternative or that help distinguish between alternatives. Additional information on all ARARs is presented in Appendix E, including information on type (i.e., chemical-, location-, and action-specific) and status (i.e., applicable or relevant and appropriate), a synopsis of the requirement, and a summary of the action to be taken to attain requirements.

Key ARARs include the following:

- Idaho Water Quality Standards, including water quality criteria
- National Recommended Water Quality Criteria established under the Clean Water Act (CWA)
- National Primary Drinking Water Regulations, including MCLs, established under the Safe Drinking Water Act
- Idaho Ground Water Quality Rule
- Rules for the Control of Air Pollution in Idaho: Rules for Control of Fugitive Dust
- RCRA: Criteria for Municipal Solid Waste (MSW) Landfills
- RCRA: Criteria for Hazardous Waste TSD facilities
- Migratory Bird Treaty Act



- Archaeological Resources Protection Act
- Protection of Wetlands
- Caribou-Targhee Revised Forest Plan

### **Operation and Maintenance**

Operation and Maintenance (O&M) is an integral component of all alternatives and ensures the proper functioning and integrity of engineering controls, such as the cover system and the proper functioning of treatment facilities, and sediment control best management practices (BMP). Each alternative includes a variety of O&M requirements. The specific O&M requirements vary depending on the cleanup method or technology and will be refined during remedial design.

### **Long-term Monitoring**

Monitoring is also an integral component of all alternatives to assess the effectiveness of the remedy. The monitoring program will include periodic inspections of engineered facilities, and sampling and analysis of groundwater, surface, water, sediment, vegetation, and soil.

## **16.2 Distinguishing Features of Each Remedial Alternative**

### **16.2.1 Alternative 1 - No Action**

Alternative 1 (No Action), which is required by the NCP (§300.430(e)(6)), is the baseline alternative against which the effectiveness of all other remedial alternatives are judged. Principal threat wastes will continue to remain in the soils at the Site and no attempts will be made to monitor or control ground water contaminant migration from the Site. This alternative will not comply with the ARARs for the Site. The magnitude of risks at the Site is likely to remain the same since contaminated soils and ground water that pose a risk to human health will remain on the Site. There is no treatment, containment, MNA, or IC component for this alternative. Because contaminated soil and ground water will remain at the Site, a review of the effectiveness and protectiveness of this alternative will be conducted every 5 years as required by SARA.

### **16.2.2 Alternative 2 – Limited Action**

Alternative 2 includes institutional controls, such as access and use restrictions for the EMDSOU and maintaining the institutional control restriction on groundwater well drilling and groundwater use. Human exposure to COPCs would be reduced by restricting human access to

the Site. Exposure of ecological receptors to COPCs in surface soil, vegetation, and surface water and would not be addressed by Alternative 2. Mobility of COPCs in surface water and groundwater and control of the source of COPCs to downstream and downgradient SOUs would not be addressed by Alternative 2.

### **16.2.3 Alternative 3 – Simple Soil Cover**

Alternative 3 consists of a direct contact-limiting engineered simple soil cover system applied to the North Area, excavation of sediment from the SCS and placement within the North Area prior to constructing the cover, access and use restrictions, informational signage, and natural attenuation of residual COPCs in groundwater. Alternative 3 would cost more than Alternative 2 but less than Alternative 4. Alternative 3 would take approximately two years to construct.

The simple soil cover would replace existing vegetation within the North Area following placement of clean growth media, thus reducing the potential for COPC exposure from surface soil and new vegetation would grow on the clean soil cover. The simple soil cover would reduce stormwater contact with EMDSOU materials on the North Area ground surface, thus reducing the COPC load in surface water that results from stormwater runoff. Snowmelt and stormwater that infiltrate into the simple soil cover may evapotranspire before reaching underlying EMDSOU materials or infiltrate into EMDSOU materials and continue to act as a migration mechanism for COPCs into underlying groundwater.

### **16.2.4 Alternative 4 – Simple Soil Cover Combined with Groundwater Collection and Treatment**

Alternative 4 consists of a direct contact-limiting engineered simple soil cover system applied to the North Area, excavation of sediment from the SCS and placement within the North Area prior to cover construction, groundwater pumping, treatment of extracted groundwater, discharge of treated groundwater, access and use restrictions, and informational signage. Alternative 4 would cost more than Alternatives 3 & 6, but less than Alternatives 5 & 7. Alternative 4 would take approximately two years for construction and an additional three years to calibrate the groundwater collection and treatment system.

Groundwater underlying the North Area would be hydraulically captured from a network of extraction wells, impounded in a storage tank, and treated through an onsite water treatment system consisting of media filtration and RO.

The simple soil cover would replace existing vegetation within the North Area following placement of clean growth media, thus reducing the potential for COPC exposure from surface soil and new vegetation would grow on the clean soil cover. The simple soil cover would reduce stormwater contact with EMDSOU materials on the North Area ground surface, thus reducing the COPC load in surface water that results from stormwater runoff. Snowmelt and stormwater that infiltrate into the simple soil cover may evapotranspire before reaching underlying EMDSOU materials or infiltrate into the EMDSOU. Groundwater impacted by COPCs underlying the North Area would be treated indefinitely.

#### **16.2.5 Alternative 5 – Evapotranspiration Cover (ET)**

Alternative 5 consists of an infiltration-limiting and direct contact-limiting engineered ET cover system applied to the North Area, excavation of sediment from the SCS and placement within the North Area prior to cap construction, access and use restrictions, informational signage, and natural attenuation of residual COPCs in groundwater. Alternative 5 would take approximately three years to construct.

The ET cover would limit exposure to EMDSOU materials, replace vegetation so that new vegetation would grow on the clean soil cover, and minimize COPC loading to underlying groundwater. The ET cover would also reduce stormwater contact with EMDSOU materials on the North Area ground surface, Alternative 5 will reduce more COPC load in surface water than Alternatives 3 & 4, however, it will allow some infiltration and COPC loading to occur.

#### **16.2.6 Alternative 6 – Clay Cap**

Alternative 6 consists of an infiltration-limiting and direct contact-limiting engineered natural clay cap system applied to the North Area, excavation of sediment from the SCS and placement within the North Area prior to cap construction, access and use restrictions, informational signage, and natural attenuation of residual COPCs in groundwater. Alternative 6 would cost more than Alternative 3 but less than Alternative 5. Alternative 6 would take approximately two years to construct.

The clay cap would limit exposure to EMDSOU materials, replace vegetation so that new vegetation would grow on the clean soil cover, and minimize COPC loading to underlying groundwater by reducing the amount of infiltration that percolates through the EMDSOU materials. The clay cap would also reduce stormwater contact with EMDSOU materials on the North Area ground surface, thus reducing the COPC load in surface water that results from stormwater runoff.

### **16.2.7 Alternative 7 - Geosynthetic Cap**

Alternative 7 consists of an infiltration-limiting and direct contact-limiting engineered geosynthetic cap system applied to the North Area, excavation of sediment from the SCS and placement within the North Area prior to cap construction, access and use restrictions, informational signage, and monitored natural attenuation (MNA) of residual COPCs in groundwater. Alternative 7 would take approximately three years to construct.

The geosynthetic cap would limit exposure to EMDSOU materials, replace vegetation so that new vegetation would grow on the clean soil cover, and minimize COPC loading to underlying groundwater by reducing the amount of infiltration that percolates through the EMDSOU. The geosynthetic cap would also reduce stormwater contact with EMDSOU materials on the North Area ground surface, thus reducing the COPC load in surface water that results from stormwater runoff.

### **16.2.8 Alternative 8 – Overburden Pile Material Excavation and Disposal**

Alternative 8 consists of excavation and off-site disposal of all EMDSOU materials and vegetation, excavation and disposal of sediment from the SCS, and natural attenuation of residual COPCs in groundwater. Alternative 8 would take approximately five years to construct.

Alternative 8 would result in the removal of EMDSOU materials and vegetation and would eliminate the surface water contact that results in COPC leaching. In addition, with the removal of the COPC source materials, it is anticipated that groundwater COPCs would attenuate within a predictable timeframe following source removal.

## **17.0 COMPARATIVE ANALYSIS OF ALTERNATIVES**

Initial screening of each of the eight alternatives was completed to refine and reduce the number of alternatives that were analyzed in detail. The initial screening of alternatives is generally based on three criteria: (1) effectiveness; (2) implementability; and (3) cost. Based on the initial screening, alternatives that have a low or moderate effectiveness (except Alternative 1) are eliminated because these alternatives are known to be incapable of achieving some or all of the RAOs, and therefore, may not be protective of human health or the environment. Alternatives with low, moderate, and high implementability screening results were retained if coupled with high effectiveness screening results. This process eliminated Alternatives 2 through 6 from further consideration.

Alternatives 7 and 8 were retained for detailed analysis based on their effectiveness at

achieving RAOs for all Site media. In addition, Alternative 1 does not protect human health or the environment, but was retained per the NCP requirement to include No Further Action in the detailed analysis for reference.

The Forest Service used the nine remedy selection criteria outlined in the NCP to evaluate remedial alternatives for the cleanup of a release. These nine criteria are categorized into three groups: threshold, balancing, and modifying. The threshold criteria must be met in order for an alternative to be eligible for selection. The threshold criteria are: overall protection of human health and the environment and compliance with ARARs. The balancing criteria are used to weigh major tradeoffs among alternatives. The five balancing criteria are: long-term effectiveness and permanence; reduction of toxicity, mobility or volume through treatment; short-term effectiveness; implementability; and cost. The modifying criteria are: state acceptance and community acceptance. Table 2 (Evaluation Criteria for Superfund Remedial Alternatives) briefly describes the nine evaluation criteria.

After the initial screening of technologies and evaluation of alternatives, three remedial alternatives remained in the FS (Nu-West 2020). Table 3 (Comparison of Remedial Alternatives) summarizes how these alternatives comply with the nine evaluation criteria specified in the NCP §300.430(t)(5)(i). Following is a comparative analysis of the remedial alternatives.

### **17.1 Overall Protection of Human Health and the Environment – Threshold Criterion**

Overall protection of human health and the environment addresses whether each alternative provides adequate protection of human health and the environment and describes how risks posed through each exposure pathway are eliminated, reduced, or controlled, through treatment, engineering controls, and/or ICs.

Alternative 1 is required by the NCP to provide an environmental baseline against which the effects of the remedial alternatives can be compared. Alternative 1 leaves the Site in its current condition. As such, Alternative 1 does not address migration of COPCs from the EMDSOU or otherwise mitigate the associated risks to human health and the environment, and the potential risks identified in the SLHHRA and SLERA (Nu-West 2017 and 2017a) would not be addressed. EMDSOU materials in the head-waters of East Mill Creek would continue to leach COPCs through contact with precipitation and in-filtration waters and migration of COPCs would not be addressed. The EMDSOU surface materials would continue to erode and potential for direct exposure to COPC impacted surface soils and vegetation would persist. Based on this analysis, Alternative 1 is not protective of human health or the environment. As a result, Alternative 1 does not meet the threshold. As concluded in the SLHHRA and SLERA (Nu-West 2017 and 2017a) the possibility of risks to human health and various ecological receptors cannot

be excluded. Based on these findings, an active remedy is indicated to provide protection of human health and the environment. Detailed comparative analysis and scoring of each of the retained alternatives relative to this criterion are presented in the EMDSOU RI/FFS.

Alternative 7 achieves human health and ecological risk reductions by reducing exposure to COPCs in the North Area by preventing contact with contaminated soils and vegetation. Placing a low-permeability geosynthetic cap on the North Area would also limit the amount of precipitation that contacts COPC-containing EMDSOU materials that may runoff or infiltrate.

Alternative 8 removes the overburden piles, thus reducing human and ecological receptor exposure to COPC-impacted soils and vegetation. Furthermore, Alternative 8 removes the source of COPCs and reduces the further transport of COPCs to surface water and groundwater.

## **17.2 Compliance with ARARs – Threshold Criterion**

Section 121(d) of CERCLA and the NCP §300.430(t)(1)(ii)(B) require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate Federal and State requirements, standards, criteria, and limitations which are collectively referred to as "ARARs," unless such ARARs are waived under CERCLA §121(d)(4).

Applicable requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. Only those State standards that are identified by a state in a timely manner and that are more stringent than Federal requirements may be applicable. Relevant and appropriate requirements are those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well-suited to the particular site.

Although chemical-specific ARAR waivers would be implemented for groundwater and surface water within the EMDSOU, Alternatives 7 and 8 would act as source control measures and are important for protecting downstream and down gradient media. Alternative 7 would reduce infiltration in the North Area; therefore, long-term loading of COPCs that have historically been leaching from the EMDSOU, migrating downgradient, and discharging to East Mill Creek would be reduced. Alternative 8 would remove EMDSOU materials, the source of COPCs, from the Site, which would also reduce COPC loading downgradient of the Site. Alternatives 7 and 8

are capable of complying with the action- and location-specific ARARs. As a result, Alternatives 7 and 8 meet this threshold criterion.

### **17.3 Long-Term Effectiveness and Permanence – Balancing Criterion**

Long-term effectiveness and permanence refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once cleanup levels have been met. This criterion includes the consideration of residual risk that will remain on-site following remediation and the adequacy and reliability of controls.

Comparison of the long-term effectiveness and performance of Alternatives 7 and 8 is important to evaluate the protectiveness of human health and the environment by the preferred alternative. The reduction in exposure to COPC-impacted media and reliability of controls are the basis for the long-term effectiveness and performance evaluation. This includes evaluation of two components: the risks remaining from untreated waste or treatment residuals following the conclusion of remedial activities; and the degree of post-remedial Site control activities that may be required to monitor the Site following construction of the remedial alternative to sustain the integrity of the action. Detailed comparative analysis of the retained alternatives relative to this criterion are presented in Table 17-2 of the EMDSOU RI/FFS.

Because Alternative 8 results in the removal of COPC source materials from the Site, Alternative 8 achieves the highest degree of long-term effectiveness and permanence relative to the other retained alternatives.

Alternative 7 provides source control by preventing infiltration with a geosynthetic cap; however, it is susceptible to erosion of cover materials during significant storm events. Long-term maintenance and repairs of the caps can mitigate damage and degradation of the caps. Performance of geosynthetic barriers relies on installation quality and proper Site maintenance. In cases of isolated damage (e.g., from deep-rooting trees, vandalism, burrowing animals), repairs may be necessary and can be costly.

Alternatives 7 and 8 both provide a reduction in erosion and transport of COPC-impacted EMDSOU materials to East Mill Creek by capping the North Area. Potential remedies for contaminants that exceed acceptable risks in East Mill Creek beyond the SCS will be evaluated after implementation of the selected EMDSOU remedial alternative.

As a result, Alternative 7 is considered highly effective at achieving this criterion, reflecting the relatively high long-term effectiveness and performance associated with a capping remedy.



#### **17.4 Reduction in Toxicity, Mobility, and Volume through Treatment – Balancing Criterion**

Reduction of toxicity, mobility, or volume through treatment refers to the anticipated performance of the treatment technologies that may be included as part of a remedy.

Alternative 8 provides the maximum reduction in mobility and volume of COPCs relative to the other alternatives. Alternative 8 eliminates the COPC leaching pathway by removing the COPC source materials. The reduction in COPC concentrations in groundwater occurs through natural attenuation, which is similar for Alternatives 7 and 8.

Alternative 7 addresses the mobility and volume of COPCs that may be transported from the Site using a low-permeability geosynthetic cap. Alternative 7 achieves reduction to the volume of impacted surface water runoff and groundwater contacting the North Area by reducing the amount of precipitation and infiltration contacting EMDSOU materials, which would similarly reduce COPC mobility through surface water and groundwater. Alternative 7 is considered to be moderately effective in achieving the elements of the criterion.

Neither Alternative 7 or 8 reduces toxicity, mobility, or volume through treatment.

#### **17.5 Short-Term Effectiveness – Balancing Criterion**

Short-term effectiveness addresses the period of time needed to implement the remedy and any adverse impacts that may be posed to workers, the community, and the environment during construction and operation of the remedy until cleanup levels are achieved. The following factors are considered for each alternative:

- **Protection of the Community.** Because the EMDSOU is located outside of a community, the potential short-term impacts on the community would primarily be related to additional traffic and roadway use in regional roads during the construction phase. The construction-related traffic for Alternative 7 would result in disruption to the community. The most disruptive alternative is Alternative 8, which includes transporting more than 700,000 truckloads of material to a disposal location, which has the potential to create more disruption to the community than the other alternatives.
- **Protection of Workers.** Alternatives 7 and 8 include significant earth work, and the potential hazards associated with implementing these remedies are related to operation of heavy equipment, working on steep slopes, safety concerns associated with limited slope stability, and dust exposure. Alternatives 7 and 8 have risks associated with construction



activities (Site grading and excavation activities) that would disturb the existing soil and could result in dust exposure for Site workers. Dust monitoring can be effective in identifying potential exposure and assessing the effectiveness of control measures during construction. Increases in equipment size, quantity of heavy equipment operating, and duration of heavy equipment operation are all factors in risks associated with construction using heavy equipment. These factors are directly related to the area of the remedial footprint in Alternative 7 and the volume of material to be excavated in Alternative 8, with the result being that Alternative 7 is the active remedy most protective of workers. Alternative 8 is further complicated by the significant increase in truck traffic and extended duration associated with the transport and disposal of excavated materials; this alternative presents the most hazards for workers, and therefore, is the least protective of workers.

- **Environmental Impacts.** Comparison of the potential for adverse environmental impacts that may result from implementation of the alternatives are considered. Alternatives 7 and 8 have increasingly significant short-term environmental impacts relative to each other that are associated with operation of heavy equipment for Site grading, cap construction, and/or excavation activities. Additionally, the adverse environmental impacts associated with excavation of borrow material at the borrow source, trucking of borrow material to the Site, and/or hauling of EMDSOU materials offsite would increase between Alternatives 7 and 8. Additionally, because Alternative 8 includes transport and disposal of COPC-containing materials to a new location, the potential would exist for COPC impacts to occur at the new location if proper disposal controls are not established. The potential for accidental spills of COPC-containing material during transport would also exist for Alternative 8. Alternative 8 has the highest potential for environmental impacts relative to the other alternatives.
- **Time Until RAOs are Achieved.** Alternatives 7 and 8 have similar timeframes for achieving the RAOs following the end of active construction activities for each remedy, but the active durations would increase with the level of effort included in each successive alternative. For both alternatives, the time would be contingent upon the duration required to implement the active portion of the remedial action (cap construction or material removal), estimated to range between approximately two to five construction seasons, and the time required for groundwater COPCs to attenuate through MNA following source control achieved by the active portion of the remedy.

## **17.6 Implementability – Balancing Criterion**

Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as availability of services and materials, administrative feasibility, and coordination with other governmental entities are also considered. These implementability considerations for Alternatives 7 and 8 are discussed below.

- **Technical Feasibility.** The technical feasibility of Alternative 7 is high. The major components of the alternative (site grading, geosynthetic liner construction, cover placement, MNA, and institutional controls) are frequently implemented at other regional sites. The recent successful implementation of a geosynthetic cap and soil cover at the South Maybe Canyon Mine (SMCM) Cross Valley Fill (CVF) indicates that the necessary equipment and experienced workers are available to undertake such a project, including contractors to construct geosynthetic liners. Borrow sources have been identified in the region and are sufficient for Alternative 7. Alternatives 7 and 8 would not interfere with further actions, should they be needed. While the technical feasibility for Alternative 7 is high, the technical feasibility for Alternative 8 is low relative to the other alternatives. Alternative 8 is less implementable due to excessive transport needs and limitations of nearby disposal facilities.
- **Administrative Feasibility.** Because the Site lies on public (Forest Service-administered) property, the administrative feasibility of Alternatives 7 and 8 depends on the approval of the Forest Service and adherence to conditions established in the Revised Forest Plan (Forest Service 2003a). Alternatives 7 and 8 must meet the substantive requirements of applicable permits. Alternative 7 is likely to be administratively feasible as most operations will be conducted onsite; however, Alternative 8 includes additional impacts to the community (haul trucks traveling to an offsite disposal facility), as well as the offsite disposal locations if offsite disposal is selected, and may have additional concerns with respect to administrative approvals for hauling and disposal; therefore, Alternative 8 is less administratively feasible than Alternative 7.

The technical and administrative feasibility is moderately high for Alternative 7. Alternative 8 requires excessive transport needs and includes potential impacts to the community as well as the offsite receiving locations and is considered not as effective at achieving the implementability criterion.

### **17.7 Cost – Balancing Criterion**

Total present worth of capital and maintenance and repair (M&R) and construction cost were calculated for each remedial alternative (Appendix H of the EMDSOU RI/FFS). The projected cost estimates include capital, construction, and M&R costs.

- The total cost for Alternative 7 is estimated to be \$14,698, 600. This represents the lowest cost alternative for an active remedy.
- The total cost for Alternative 8 was estimated for onsite activities only (e.g., excavation) and does not include transport and offsite disposal costs. Excavation costs alone estimated for Alternative 8 exceed \$100,000,000. The additional transport costs for either onsite or

offsite disposal and any disposal costs would add to this estimated baseline cost, which is more than an order of magnitude higher than Alternative 7.

#### **17.8 State and Tribal Acceptance – Modifying Criterion**

The State of Idaho, represented by the IDEQ, agrees with the Forest Service's decision to implement Alternative 7 (Geosynthetic Cap). The IDEQ acknowledged their support for this decision by letter to the Forest Service dated June 2022 (Appendix A). The IDEQ provided technical support to the Forest Service during the implementation of the RI/FFS, Proposed Plan, and this Interim ROD. Further, the Forest Service received a letter from the Idaho Department of Fish and Game dated July 21, 2021 which also provided support for Alternative 7.

The Forest Service offered to meet with the Shoshone-Bannock Tribes after they were provided a copy of the Proposed Plan for NMM EMDSOU. No meeting was requested and no objections were provided by the Tribes.

#### **17.9 Community Acceptance – Modifying Criterion**

The Forest Service conducted a public meeting on July 14, 2021, to present the Proposed Plan (USFS 2021b) to the public. The Forest Service presented Alternative 7 (Geosynthetic Cap) as the preferred alternative for the Site. The Forest Service received a letter from the City of Soda Springs, dated July 15, 2021, which provided support for Alternative 7.

The Forest Service received one set of comments from a coalition of environmental groups, dated July 30, 2021, requesting rejection of all Alternatives and cleanup of EMDSOU to background levels. After thorough review, the Forest Service largely disagreed with this set of comments. Responses to the comments are provided in the Responsiveness Summary.

### **18.0 PRINCIPAL THREAT WASTES**

The NCP establishes an expectation that NMM EMDSOU will use treatment to address the principal threats posed by a site wherever practicable (NCP §300.430(a)(1)(iii)(A)). Identifying principal threat wastes combines concepts of both hazard and risk. In general, principal threat wastes are those source materials considered to be highly toxic or highly mobile which generally cannot be contained in a reliable manner or would present a significant risk to human health or the environment should exposure occur. Conversely, non-principal threat wastes are those source materials that generally can be reliably contained and that would present only a low risk in the event of exposure. The manner in which principal threats are addressed generally will determine whether the statutory preference for treatment as a principal element is satisfied.

The soils contaminated with metals at EMDSOU are not considered to be "principal threat wastes" because metals concentrations do not pose a significant risk to human health or the environment and can be reliably contained.

## **19.0 SELECTED REMEDY**

The Forest Service's Selected Remedy for this Site is Alternative 7 (Geosynthetic Cap). Under this alternative, soils above action levels are regraded and capped with a geosynthetic liner system (to prevent infiltration of water) with a cover of soil and revegetated. The ground water will be addressed by MNA.

### **19.1 Summary of the Rationale for the Selected Remedy**

Alternative 7 is protective of human health and the environment, meets Federal and State ARARs for soil, vegetation, and sediment. Alternative 7 also meets the RAOs through attainment of cleanup levels for soil, vegetation, and sediment as well. Since this is an Interim Remedy ARARs are waived for surface water and groundwater. ARARs will be achieved in a final remedy for EMOU. This alternative was selected over the other alternatives because the methods are proven, easily implemented, and it is expected to achieve long-term permanence and risk reduction through prevention of infiltration, with an anticipated reduction in selenium concentration by 95% and is expected to allow the property to be used for the reasonably anticipated future land use, which is recreational, wildlife, grazing, and tribal. Because the waste material will remain on-site with a waiver for ARARs, O&M activities and five-year reviews of the remedy be required.

Construction and maintenance of a stable cover system will prevent exposure of human and ecological receptors to hazardous substances in vegetation on the surface of the EMDSOU.

Segregation of EMDSOU cover runoff from emergent flows emanating from within the EMDSOU will be completed by capturing and isolating precipitation runoff from the EMDSOU surface to reduce flow from within the fill. Smaller emergent flows will be easier to manage if further treatment is determined to be necessary.

Minimize infiltration on the surface of the EMDSOU to reduce the load (concentration multiplied by volume) of selenium and other hazardous substances into East Mill Creek. During spring flow the selected remedy is expected to reduce selenium loads downstream of the North Slope toe to less 5 pounds per day.

This remedial action at the EMDSOU represents an interim measure of the North Maybe Mine Site as a whole. As such, waivers of chemical ARARs for groundwater and surface water

will be necessary until remedial actions are undertaken and compliance points are established for the North Maybe Mine Site.

## **19.2 Description of the Selected Remedy**

Following is a description of each component of the Selected Remedy. Although the Forest Service does not expect significant changes to this remedy, it may change slightly as a result of the remedial design and construction processes. Any changes to the remedy described in this Interim ROD would be documented using a technical memorandum in the Administrative Record, an Explanation of Significant Differences, or a ROD Amendment, as appropriate and consistent with the applicable regulations.

### **19.2.1 Cap and Cover of EMDSOU**

Site preparation will include the following:

- conducting a Site survey,
- set up of Site trailers,
- clearing and grubbing of borrow sources and affected areas on and around NMM EMDSOU,
- developing a water source for soil conditioning,
- maintenance of access roads to EMDSOU,
- installation of erosional controls,
- dust control,
- security/access control,
- and project signage.

Site preparation will be followed by subgrade preparation of EMDSOU where approximately a cut of 42,000 yd<sup>3</sup> and fill of approximately 17,000 yd<sup>3</sup> of EMDSOU waste rock on the Top Deck will be regraded to promote surface water drainage to the North Slope toe. Another cut of approximately 149,090 yd<sup>3</sup> and fill of approximately 127,000 to regrade the slopes of EMDSOU to promote surface water drainage to the North Slope Toe of EMDSOU.

A Geosynthetic cover system will be constructed on the North Slope and Top Deck of EMDSOU (approximately 70 acres). This will include the following activities:

- Production and placement of approximately 4-inch-thick sub-cushion layer using existing waste rock. Includes subgrade preparation prior to geosynthetic liner placement.
- Purchase and placement of geosynthetic drainage composite over approximately 70 acres.

- Excavation, haul, and placement of an 18-inch-thick general fill layer over the geosynthetic drainage composite. Approximately 170,000 yd<sup>3</sup> of general fill would be excavated from an adjacent borrow area.
- Excavation, haul, and placement of a six-inch-thick topsoil layer over the general fill. Approximately 57,000 of topsoil would be excavated from an adjacent borrow area.
- Cover terminations would be constructed around the perimeter of EMDSOU capping area, including transition to native soil.

An estimated 7,700 linear feet of new access roads would be constructed with North slope drainage features including: underdrains, toe drains (to support geosynthetic stability), and approximately 12 benches/swales along the North Slope with a large collection down-chute (lined with riprap). Top Deck drainage features would include: underdrains to support geosynthetic stability, two swales, and two 400 linear foot collection channels with periodic check dams lined with riprap.

EMDSOU (approximately 70 acres) and the soil borrow area (approximately 24 acres) will be reclaimed with a Forest Service approved native vegetation mix.

#### **19.2.2 Monitored Natural Attenuation of the Ground Water**

MNA will be applied as part of the Selected Remedy for EMDSOU. MNA will be discontinued when the concentration of metals in the surface water and ground water at the EMDSOU toe is less than the federal MCL.

#### **Monitoring Program**

The monitoring program developed for the Site, during the remedial design and remedial action, will specify the location, frequency, and type of samples and measurements necessary to evaluate whether the remedy is performing as expected and is capable of attaining remediation objectives. The monitoring program will be designed to accomplish the following:

- a. Demonstrate that natural attenuation is occurring according to expectations,
- b. Detect changes in environmental conditions that may reduce the efficacy of any of the natural attenuation processes,
- c. Identify any potentially toxic and/or mobile transformation products,
- d. Verify that the plume(s) is not expanding (either downgradient, laterally, or vertically),

- e. Verify no unacceptable impact to downgradient receptors,
- t. Detect new releases of contaminants to the environment that could impact the effectiveness of the natural attenuation remedy,
- g. Demonstrate the efficacy of the ICs that were put in place to protect potential receptors, and
- h. Verify attainment of remediation objectives.

### **19.2.3 Operations and Maintenance**

O&M activities, for MNA, will only involve the ground water remedy portion of the Selected Remedy. O&M activities for the cover will involve annual inspections of the cover system and monitoring of surface water. An O&M Plan will be developed for MNA and the cover system.

### **19.2.4 Institutional Controls for the Soils and Ground Water**

ICs such as grazing restrictions will also be implemented to ensure that ground water from beneath the Site is not used as a source of drinking water during the implementation of MNA for the Site. The Forest Service will be responsible for enforcing these ICs.

## **19.3 Cost Estimate for the Selected Remedy**

Appendix B (Cost Estimate Details for Alternative 7) details the estimated costs to implement and construct Alternative 7. The estimated total cost to implement and construct the Selected Remedy presented in this Interim ROD is \$14,698,600. The information in this cost estimate for the Selected Remedy is based on the best available information regarding the anticipated scope of the remedial alternative.

Changes in the cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. Major changes may be documented in the form of a technical memorandum in the Administrative Record file, an Explanation of Significant Differences, or a ROD amendment. This is an order-of-magnitude engineering cost estimate that is expected to be within +50 to -30 percent of the actual project cost.

## **19.4 Expected Outcomes of the Selected Remedy**



Following are the expected outcomes of the Selected Remedy in terms of resulting land, surface water, vegetation, and ground water uses, the cleanup levels and the risk reduction achieved as a result of the response action, and the anticipated community impacts.

#### **19.4.1 Available Land Uses**

An expected outcome of the Selected Remedy is that the soils at the Site will no longer present an unacceptable risk to ecological receptors because all of the metals contaminated soils will be covered by a cap and cover system within two years and revegetated with native vegetation. NMM EMDSOU will continue to be unavailable for recreation in the short term as it is within the Husky 1/North Dry Ridge phosphate mining lease. NMM EMDSOU will continue to be unavailable for livestock grazing to protect the integrity of the cap and cover system.

#### **19.4.2 Available Surface Water and Ground Water Uses**

The remedy will also be protective of ground water because all of the source areas will be covered with a cap and cover system preventing infiltration of water into mining waste at NMM EMDSOU. MNA will reduce the remaining ground water concentrations after construction is complete. Since this is an Interim Remedy a waiver will be necessary for surface water and groundwater as cleanup levels will not be met at EMDSOU. It is not likely that the EMDSOU will be used as a potable source of surface water or groundwater in the future.

#### **19.4.3 Final Cleanup Levels**

Table 1 (Cleanup Levels by Media) shows the risk at the cleanup levels for surface water and ground water.

Reduction of contaminant concentrations in the surface water and ground water to below the drinking water MCL will return the surface water and ground water to beneficial use and will reduce the cancer risk level of  $1.0 \times 10^{-3}$  to below the acceptable risk level of  $1 \times 10^{-4}$ . As this is an Interim Remedy it is not anticipated that surface water and groundwater ARARs will be met at EMDSOU. CERCLA §121(d) states that remedial actions must attain or exceed ARARs. Therefore, waivers will be necessary for surface water and groundwater until the RI is complete for NMM CSOU and OPSOU when a site-wide remedy will be selected that will meet all surface water and groundwater ARARs.



Cleanup levels for soil, sediment, and vegetation were not selected as these media will be encapsulated by the cap and cover system utilizing uncontaminated fill, topsoil, and rock from approved borrow sources.

#### **19.4.4 Anticipated Community Impacts**

The Selected Remedy will provide community revitalization impacts because it will allow the Site to be returned to multiple use within 2 years after the start of the remedial action and reduce surface water impacts to downstream receptors. Additionally, the Selected Remedy is the remedy preferred by the public.

### **20.0 STATUTORY DETERMINATIONS**

Under CERCLA §121 and the NCP §300.430, the Forest Service must select remedies that are protective of human health and the environment, comply with ARARs (unless a statutory waiver is justified), are cost-effective, and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In addition, CERCLA includes a preference for remedies that employ treatment that permanently and significantly reduces the volume, toxicity, or mobility of hazardous wastes as a principal element and a bias against off-site disposal of untreated wastes. The following sections discuss how the Selected Remedy meets these statutory requirements.

#### **20.1 Protection of Human Health and the Environment**

The Selected Remedy will prevent infiltration of water into EMDSOU thus significantly reducing surface water and groundwater contamination at the Site. It is anticipated that this action will reduce selenium surface water and groundwater contamination by 95% within two years after the start of construction.

The Selected Remedy for the soil and vegetation at this Site will also be protective of human health and the environment within two years after the start of construction. The cap and cover system will prevent contact with impacted soil and vegetation at EMDSOU for humans and wildlife.

ICs will be implemented to protect the integrity of the remedy.

There are no short-term threats associated with the Selected Remedy that cannot be controlled. In addition, no adverse cross-media impacts are expected from the Selected Remedy.

## 20.2 Compliance with ARARs

The NCP §§300.430(f)(5)(ii)(B) and (C) require that a ROD describe the Federal and State ARARs that the Selected Remedy will attain or provide justification for any waivers. ARARs include substantive provisions of any promulgated Federal or more stringent State environmental standards, requirements, criteria, or limitations that are determined to be legally ARARs for a CERCLA site or action. Applicable requirements are those cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal or State law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. Relevant and appropriate requirements are requirements that, while not legally "applicable" to circumstances at a particular CERCLA site, address problems or situations sufficiently similar to those encountered at the Site that their use is well-suited.

The Selected Remedy of a cap and cover system for metals contaminated soils, and the MNA for the ground water will comply with all Federal and any more stringent State ARARs that are applicable to soils and vegetation at the Site. As this is an Interim Remedy it is not anticipated that surface water and groundwater ARARs will be met at EMDSOU. CERCLA §121(d) states that remedial actions must attain or exceed ARARs. Therefore, waivers will be necessary for surface water and groundwater until the RI is complete for NMM CSOU and OPSOU when a site wide remedy will be selected that will meet all surface water and groundwater ARARs. The location-specific, chemical-specific, and activity-specific ARARs applicable to the Site are presented in Appendix E (Summary of ARARs) and summarize how Alternative 3 will comply with ARARs and where waivers will be necessary.

## 20.3 Cost-Effectiveness

The Selected Remedy is cost-effective because the remedy's costs are proportional to its overall effectiveness (see 40 CFR §300.430(f)(1)(ii)(D)). This determination was made by evaluating the "overall effectiveness" of those alternatives that satisfied the threshold criteria (i.e., that are protective of human health and the environment and comply with all Federal and any more stringent State ARARs, or as appropriate, waive ARARs). Overall effectiveness was evaluated by assessing three of the five balancing criteria in combination (long-term effectiveness and permanence; reduction in toxicity, mobility, and volume through treatment; and short-term effectiveness). The overall effectiveness of each alternative was then compared to each alternative's costs to determine cost-effectiveness. The relationship of the overall effectiveness of this remedial alternative was determined to be proportional to its costs and hence represents a reasonable value for the money to be spent.

The estimated present worth cost of the Selected Remedy is \$14,698,600. Alternative 8 is an order of magnitude higher in costs than all of the other alternatives evaluated in the FFS and results in a much higher degree of protectiveness. However, the Selected Remedy offers a significant degree of protectiveness and overall effectiveness at a much lower cost. The benefits of the Selected Remedy compared to the other alternatives are much higher than the increase in costs.

#### **20.4 Utilization of Permanent Solutions to the Maximum Extent Practicable**

The Forest Service has determined that the Selected Remedy represents the maximum extent to which permanent solutions and treatment technologies can be utilized in a practicable manner at the Site. Of those alternatives that are protective of human health and the environment and comply with ARARs, the Forest Service has determined that the Selected Remedy provides the best balance of trade-offs in terms of the five balancing criteria, while also considering the statutory preference for treatment as a principal element, bias against off-Site treatment and disposal, and considering State and community acceptance.

The Selected Remedy prevents contact to metals contaminated soils and vegetation at EMDSOU. The Selected Remedy satisfies the criteria for long-term effectiveness by reducing selenium in surface water and groundwater by 95%. The Selected Remedy does not present short-term risks different from the other treatment alternatives. There are no special implementability issues that sets the Selected Remedy apart from any of the other alternatives evaluated.

#### **20.5 Preference for Treatment as a Principal Element**

The Forest Service has determined that the cap and cover system of metals contaminated soils will not meet the statutory preference for the selection of a remedy that involves treatment as a principal element. The cap and cover system will contain metals contaminated waste by preventing infiltration of water, thereby reducing the volume and toxicity of surface water and groundwater.

#### **20.6 Five-Year Review Requirements**

Section 121(c) of CERCLA and the NCP §300.430(f)(5)(iii)(C) provide the statutory and legal bases for conducting five-year reviews. Because this remedy will result in hazardous substances remaining on-site in the ground water and in the soils (below 2 feet bgs) above levels that allow for unlimited use and unrestricted exposure, a statutory review will be

conducted within five years after completion of the remedial action to ensure that the remedy is, or will continue to be, protective of human health and the environment.

## **21.0 STATE ROLE**

The Idaho Department of Environmental Quality, on behalf of the State of Idaho, has reviewed the various alternatives and has indicated its support for the Selected Remedy. The State has also reviewed the NMM EMDSOU RI/FFS (NuWest 2021), SLHHRA (NuWest 2017), and SLERA (NuWest 2017a), to determine if the Selected Remedy is in compliance with applicable or relevant and appropriate State environmental and facility siting laws and regulations. No Comments from the State of Idaho were received during the public comment period. The State of Idaho concurs with the Selected Remedy for the Site (Appendix A- IDEQ Concurrence with the Selected Remedy).

## **PART 3: RESPONSIVENESS SUMMARY**

## **22.0 RESPONSIVENESS SUMMARY**

The Responsiveness Summary (Appendix C) summarizes information about the views of the public and the support agency regarding both the remedial alternatives and general concerns about the Site submitted during the public comment period. This summary also documents, in the record, how public comments were integrated into the decision-making process.

The Administrative Record file for the Site, located at the Soda Springs Ranger District office, contains all of the information and documents supporting this Interim ROD. This Administrative Record file includes a transcript of the public meeting held by the Forest Service on July 14, 2021, to describe the preferred alternative (USFS 2021b).

The Forest Service received one letter of opposition and two letters of support during the public meeting and public comment period of the preferred alternative (Alternative 7) presented in the Proposed Plan. The concerns of the community have been considered in the selection of Alternative 7 as the Selected Remedy for the Site. The Responsiveness Summary (Appendix C) summarizes the comments received and the Forest Service's responses to these comments.



## 23.0 REFERENCES

### Key Guidance Documents:

The Revised Forest Plan for the Caribou National Forest (February 2003)

The National Contingency Plan regulations, found at 40 CFR Section 300, and the statutory requirements of CERCLA—especially Section 121 of CERCLA, 42 U.S.C. Section 9621—are the mandatory requirements that the Forest Service must follow in selecting a remedy.

“Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA,” Interim Final, OSWER No. 9355.3-01 (EPA October 1988)

“A Guide to Selecting Remedial Superfund Actions,” OSWER No. 9355.0-27FS (EPA April 1990)

“A Guide to Principal Threat and Low Level Threat Wastes,” OSWER No. 9380.3-06FS (EPA November 1991)

“Rules of Thumb for Superfund Remedy Selection,” OSWER No. 9355.0-69 (EPA August 1997)

“Incorporating Citizen Concerns into Superfund Decision Making,” OSWER No. 9230.0-18 (EPA January 1991)

“The Role of Cost in the Superfund Remedy Selection Process,” OSWER No. 9200.3-23FS (EPA September 1996)

### NMM EMDSOU investigation activities and reports include:

Forest Service, 2021. Community Involvement Plan, North Maybe Mine. Prepared by U.S. Forest Service.

Forest Service 2021a. Proposed Plan, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by U.S. Forest Service.

Forest Service 2021b. Public Meeting, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by the U.S. Forest Service

Nu-West. 2021. Final Remedial Investigation/ Focused Feasibility Study (RI/FFS) Report, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by Arcadis.

NuWest 2017. Final Screening Level Human Health Risk Assessment, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by Arcadis.

NuWest 2017a. Final Screening Level Ecological Risk Assessment, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by Arcadis.

**TABLES**



Table 1 – Cleanup Levels by Media

Contaminant	Surface Water Cleanup Level (mg/L)	Groundwater Cleanup Level (ug/L)
Antimony	0.006	0.006
Arsenic	0.01	0.05
Cadmium	0.005	0.005
Chromium (total)	0.1	0.1
Copper	1.3	1.3
Lead	0.015	0.015
Mercury	0.002	0.002
Selenium	0.05	0.05
Thallium	0.002	0.002

## Notes:

Surface Water Cleanup Values: US Safe Drinking Water Act - Maximum Contaminant Levels

Groundwater Cleanup Values: IDAPA 58.01.11 – Ground water Quality Rule

Table 2 - Evaluation Criteria for Superfund Remedial Alternatives

Category		Criteria	General Description	Factors to Consider
Threshold Criteria	1	Overall Protection of Human Health and the Environment	Evaluates how the alternative, as a whole, achieves and maintains protection of human health and the environment.	Effectiveness for elimination, reduction, or control of site risks posed through each exposure pathway. Consider whether unacceptable short-term or cross-media impacts would occur.
	2	Compliance with ARARs	Evaluates how the alternative complies with ARARs, or if a waiver is required and how it is justified	Compliance with action-specific, location-specific, and chemical-specific ARARs. Compliance with other criteria, advisories, and guidance.
Balancing Criteria	3	Long-Term Effectiveness & Permanence	Evaluates the long-term effectiveness of alternatives in maintaining protection of human health and the environment after the response objectives have been met.	Magnitude of residual risk. Adequacy and reliability of controls.
	4	Reduction of Toxicity, Mobility, and Volume through Treatment	Evaluates the anticipated performance of the specific treatment technologies than an alternative may incorporate.	-Treatment process used and materials treated. -Amount of hazardous materials destroyed or treated. -Degree of expected reductions in toxicity, mobility, and volume. -Degree to which treatment is irreversible. -Type and quantity of residuals remaining after treatment. -Degree to which treatment reduces principal threats.
	5	Short-Term Effectiveness	Examines the effectiveness of alternatives in protecting human health and the environment during construction and implementation of a remedy until the response objectives have been achieved.	-Protection of the local community during remedial actions. -Protection of workers during remedial actions. -Environmental impacts of remedial action activities. -Time until remedial action objectives are achieved.
	6	Implementability	Evaluates the technical and administrative feasibility of alternatives and the availability of services, equipment, and skilled manpower	-Ability to construct and operate the technology. -Reliability of the technology. -Ease of undertaking additional remedial actions if necessary. -Ability to monitor effectiveness of remedy. -Coordination with other agencies. -Availability of offsite treatment, storage, and disposal services and capacity. -Availability of necessary equipment and specialists. -Availability of prospective technologies.
	7	Cost	Assesses the capital, maintenance, and repair costs of each alternative.	-Capital costs -Maintenance and repair costs -Present worth costs -Accuracy of cost estimates: +50% to -30% -Performance period: 30 years
Modifying Criteria	8	State Acceptance	Assesses the state's or support agency's preferences among or concerns about the alternatives	Sought from the regulatory stakeholders.
	9	Community Acceptance	Assesses the community's preferences among or concerns about the alternatives	Sought through the public review period for the EMDSOU Proposed Plan

Acronyms and Abbreviations:

ARAR – Applicable or Relevant and Appropriate Requirements

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

Sources:

- NCP 300.430;
- 55FR 8849;
- USEPA. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA. EPA/540/G-89/004. October 1988.

Table 3 - Comparison of Remedial Alternatives

Evaluation Criteria			Alternative 7: Geosynthetic Cap	Alternative 8: EMD Material Excavation and Disposal	
Threshold Criteria					
1	Overall Protection of Human Health and the Environment	Human Health Protection	Reduce direct contact with and/or ingestion of impacted environmental media (i.e., overburden rock, soil, sediment, vegetation, and surface water) by human receptors	Generally protective of human receptors. Reduces risk of direct contact with impacted environmental media. Conditions in the South Area do not pose risk to human receptors.	Overburden pile removal eliminates EMD materials from the Site and prevents human contact with or ingestion of COPC impacted environmental media.
		Environmental Protection	Reduce direct contact with and/or ingestion of impacted environmental media (i.e. overburden rock, soil, sediment, vegetation, and surface water) by ecological receptors.	Generally protective of ecological receptors. Reduces risk of direct contact with impacted environmental media. Conditions in the South Area do not pose risk to ecological receptors.	Overburden pile removal eliminates COPC-impacted source material from the Site and prevents ecological receptor contact with or ingestion of COPC impacted environmental media.
			Reduce COPC transport through erosion and/or loading to surface water and/or groundwater	Reduces the potential for COPC transport through erosion and loading to surface water. Reduces COPC loading to groundwater by reducing infiltration into overburden pile. Conditions in the South Area do not contribute to COPC loading to surface water and/or groundwater.	Removes EMD materials from the Site and prevents transport of COPCs
	Yes/No		Yes	Yes	
2	Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)		Chemical-Specific ARARs	Requires ARAR waivers. Waivers of chemical ARARs for groundwater and surface water will be necessary until remedial actions are undertaken and compliance points are established for the North Maybe Mine.	Requires ARAR waivers. Waivers of chemical ARARs for groundwater and surface water will be necessary until remedial actions are undertaken and compliance points are established for the North Maybe Mine.
			Location-Specific ARARs	Complies with ARARs	Complies with ARARs
			Action-Specific ARARs	Complies with ARARs	Complies with ARARs
	Yes/No		Yes	Yes	
Balancing Criteria					
3	Long-term Effectiveness and Permanence	Magnitude of Residual Risk	Reduction of risk to human and ecological receptors due to direct contact with and/or ingestion of impacted environmental media (i.e., overburden rock, soil, sediment, vegetation, and surface water)	Effective in reducing human exposure to impacted media. Evaluation of residual conditions indicates acceptable human health exposure will be established following placement of the geosynthetic cap on the North Area and no action on the South Area.	Source materials removed from Site leaving minimal residual risk.
			Reduction of risk due to COPC transport	Effective at reducing infiltration and COPC loading to groundwater.	Risk of COPC transport eliminated by removal of COPC source from the Site.
	Adequacy and Reliability of Controls	Demonstrable and reliable performance.	Geosynthetic cap performance less susceptible than natural material caps to environmental degradation and defect formation over time.	Removal of source materials would reliably remove COPC impacts from the Site.	
		Effectiveness at Achieving Criterion		Moderate	High
4	Reduction of Toxicity, Mobility or Volume Through Treatment		Treatment process used	None.	None
			Reduction of toxicity, mobility, or volume through treatment.	Reduction of mobility of COPCs achieved by preventing stormwater contact with North Area and by preventing infiltration to EMD materials. Contact with COPC-impacted media (i.e., soil, vegetation) prevented by North Area cap. Reduction in the toxicity, mobility, and volume of COPC-impacted groundwater achieved by reducing volume of precipitation infiltrating into EMD materials.	COPC source removed from the Site.
	Effectiveness at Achieving Criterion		Moderate	High	
5	Short-Term Effectiveness	Protection of community during remedial action	Construction-related traffic on regional roads during North Area cap placement activities may affect local communities	Heavy traffic on regional roads and potentially through communities with loads of impacted soils. Potential for accidental spills or releases of overburden material during transport.	
		Protection of workers during remedial action	Monitoring of dust during soil cover placement in North Area would be necessary to protect workers. Safety controls on heavy equipment would be important for protection of workers	Extensive use of heavy machinery and labor could be hazardous. Potential for destabilization of overburden pile during excavation would require careful planning and monitoring	
		Environmental impacts	Disturbances at soil borrow locations. Emissions from trucking and heavy equipment used for grading and soil cover placement	Potential for impacts at disposal location	
		Time until RAOs are achieved	Liner can be installed relatively quickly with lower risk to infiltration while vegetation is being established.	Excavation, transport, and disposal of overburden material likely to take several years. Restoration of the Site following overburden pile removal likely to be established within a year following overburden pile removal.	
	Effectiveness at Achieving Criterion		Moderate	Not Effective	

Table 3 continued

Evaluation Criteria		Alternative 7: Geosynthetic Cap	Alternative 8: EMD Material Excavation and Disposal	
Balancing Criteria (con't)				
6	Implementability	Ability to construct and operate	Requires moderate regrading of North Area to construct. Placement of liner is readily implementable using standard methods. Placement of liner will require a high level of CQA.	Requires significant equipment to haul large quantities of material to disposal location. Requires identification of suitable disposal location that can accommodate disposal of the materials.
		Ease of doing more if needed	Would not limit further actions.	Would not limit further actions.
		Ability to monitor effectiveness	Effectiveness monitored by periodic cover inspections, ongoing groundwater and surface water monitoring, and 5-year review of current site status.	Effectiveness monitored by ongoing groundwater and surface water monitoring, and 5-year review of current site status.
		Ability to obtain approvals and coordinate with other agencies	Coordination among appropriate legal services, regulatory stakeholders, and property owner would be required.	Same as Alternative 7.
		Availability of equipment, materials, specialists, and offsite support services	Equipment, materials, specialists, and offsite support services required to implement all components of this alternative are readily available. Proper placement and construction of geosynthetic liner is critical and will require careful quality assurance during construction.	Equipment, materials, specialists, and offsite support services required to implement all components of this alternative are readily available, however, this alternative requires identification of a suitable disposal location.
		Availability of technologies	Soil grading and geosynthetic cap placement is a common technique that is readily implemented.	Soil excavation and disposal are common technologies that are readily available, however, disposal quantities are likely to exceed landfill capacity and there are no suitable landfills in close proximity to the Site. Onsite disposal may be considered as disposal option.
Effectiveness at Achieving Criterion		Moderately high	Not Effective	
7	Cost	Total present worth of capital and maintenance and repair focused feasibility study-level construction costs	Total present-worth cost: \$14,698,600	Total present-worth cost: >\$100,000,000
	Relative Cost	Moderate Cost	High Cost	
Modifying Criteria				
8	State Acceptance	The U.S. Forest Service will seek regulatory stakeholder input on the Proposed Plan.	Same as Alternative 7.	
9	Community Acceptance	Comments received during the public comment period will be incorporated into the Record of Decision in a responsiveness summary.	Same as Alternative 7.	
Alternative Comparative Ranking				
Summary and Identification of Preferred Alternative		Preferred Alternative	Implementability and cost prohibitions	

**Acronyms and Abbreviations:**

ARAR = applicable or relevant and appropriate requirements

COPIC = constituent of potential concern

EMD = East Mill Dump

RAO = remedial action objective



**FIGURES**

### Figure 1 Site Location

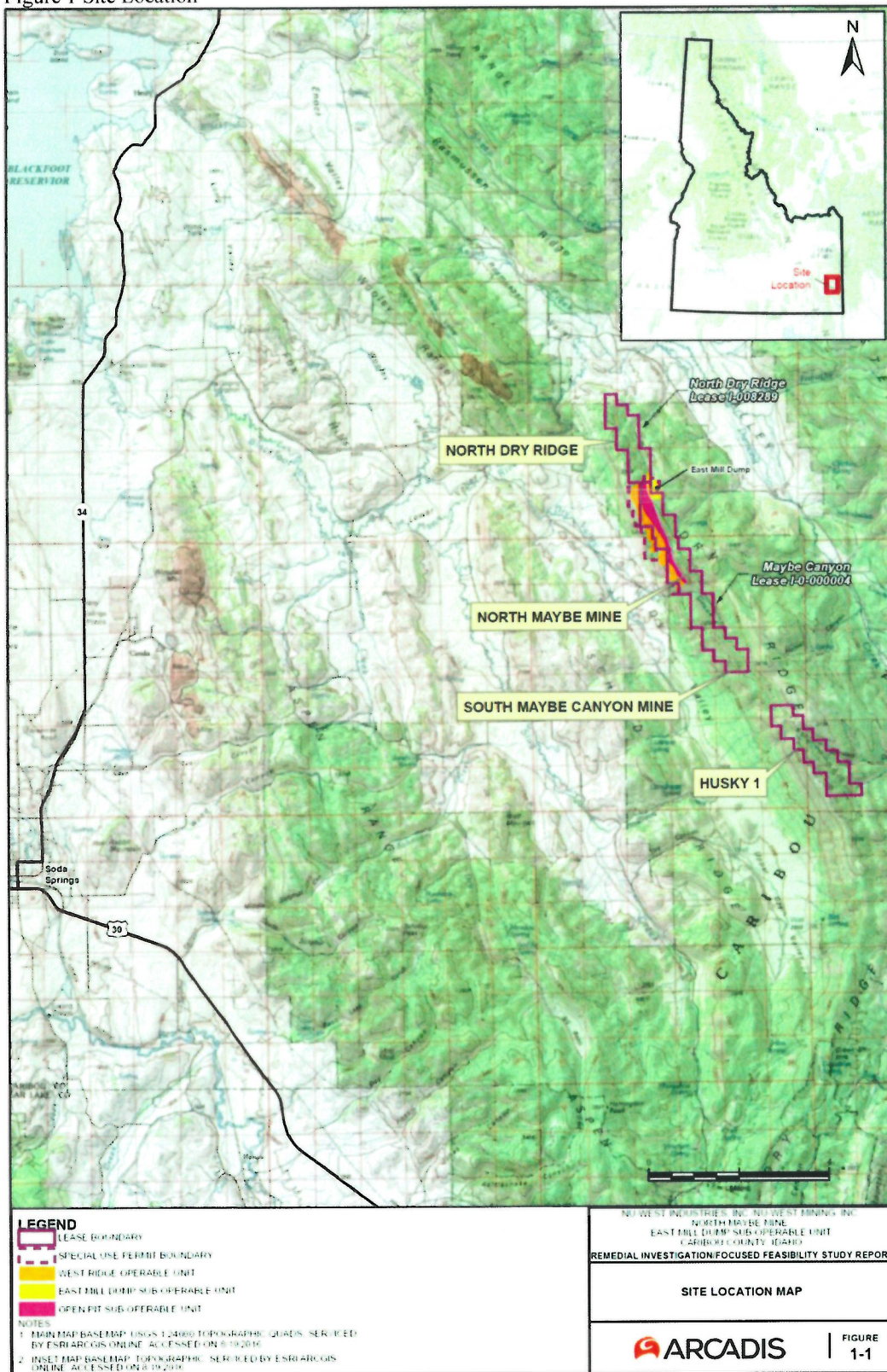




Figure 2 Site Features

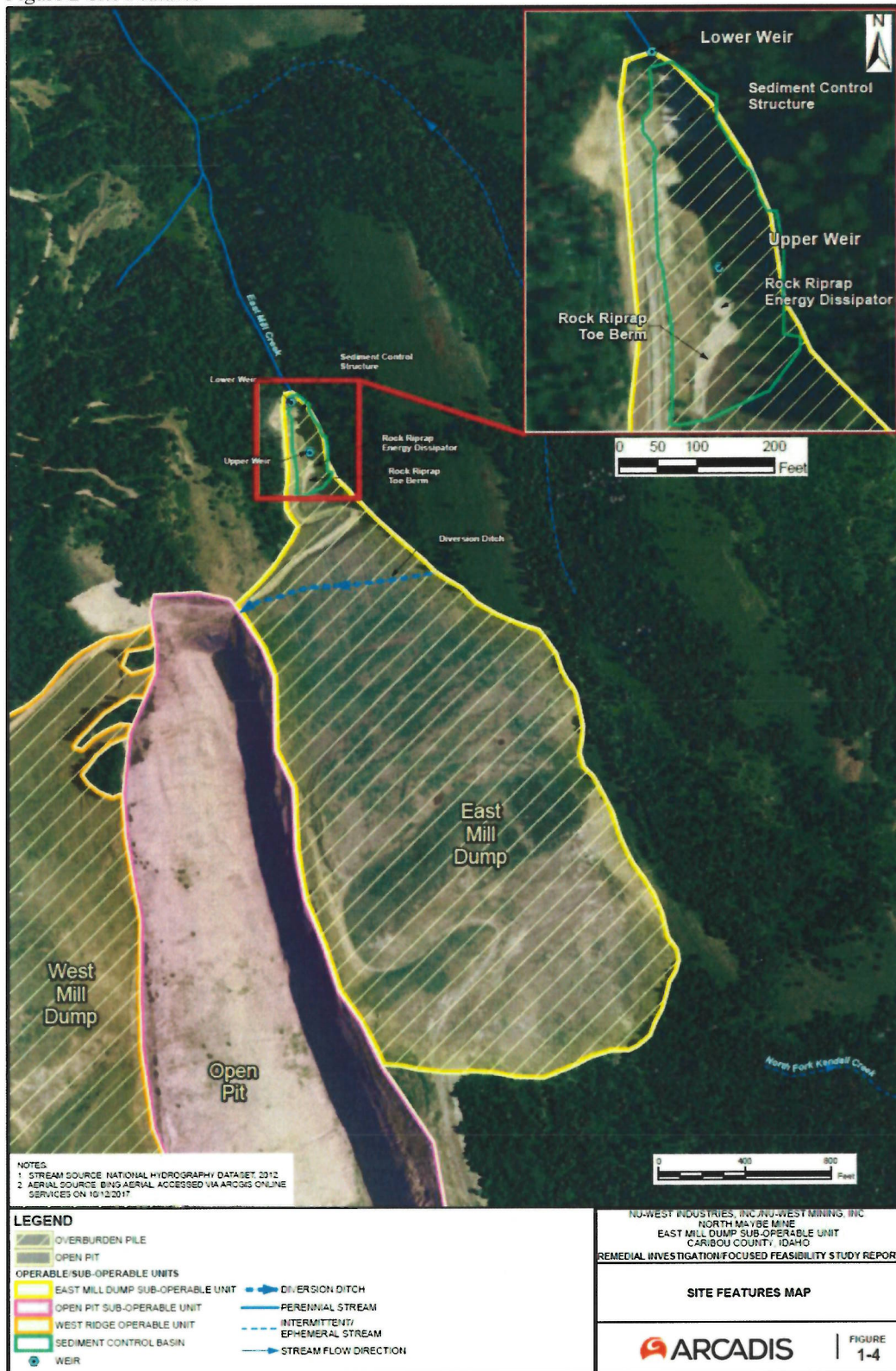
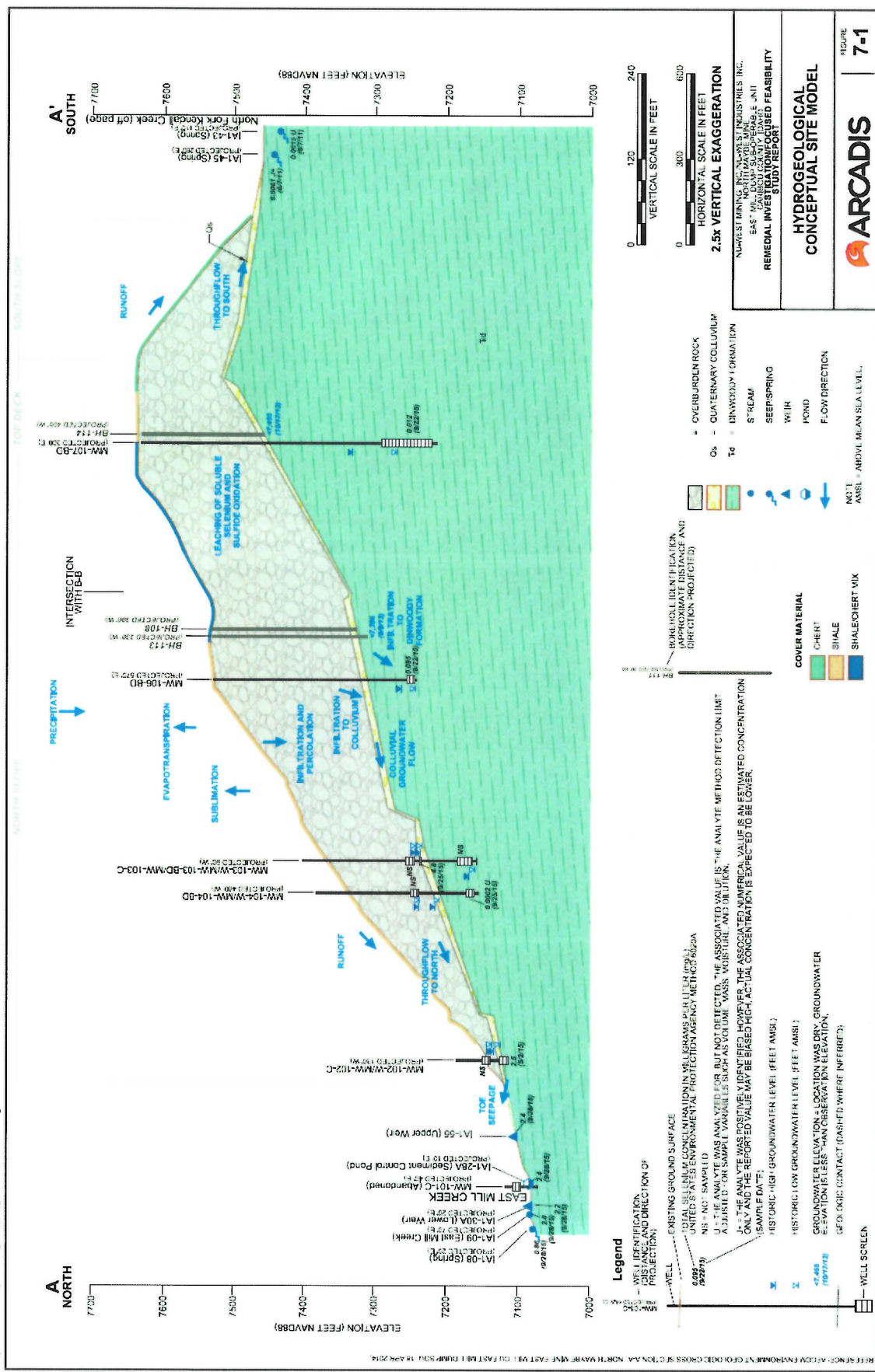


Figure 3 Hydrogeological Conceptual Site Model





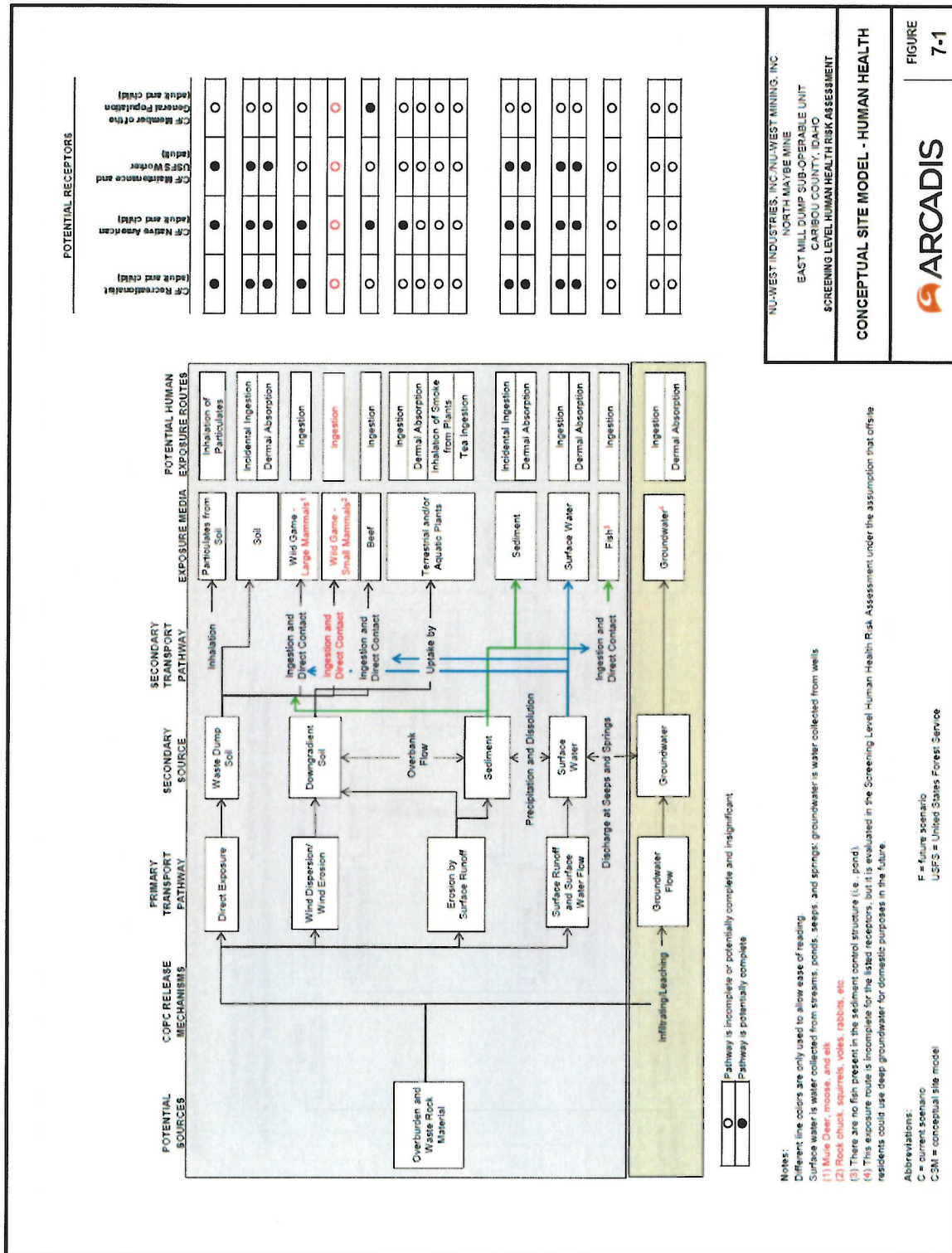


Figure 4 Screening Level Human Health Risk Assessment Conceptual Site Model



## **APPENDIX A**

Idaho Department of Environmental Quality Concurrence with the Selected  
Remedy

Brad Little, Governor  
Jess Byrne, Director

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1410 N Hilton Street, Boise, ID 83706  
(208) 373-0502

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August 11, 2022

Electronic Delivery: Brian.Deeken@usda.gov

Mary Farnsworth  
Regional Forester  
US Forest Service, Intermountain Region  
324 25<sup>th</sup> Street  
Ogden, UT 84401

RE: Concurrence with the Interim Record of Decision, North Maybe Mine, East Mill Operable Unit,  
East Mill Dump Sub-Operable Unit, Soda Springs Idaho, July 20, 2022

Dear Ms. Farnsworth,

The Idaho Department of Environmental Quality (DEQ) has reviewed the Interim Record of Decision, North Maybe Mine, East Mill Operable Unit, East Mill Dump Sub-Operable Unit, Soda Springs Idaho, July 20, 2022, issued by the United States Forest Service, Region 4 representing the selected remedy for the North Maybe Mine East Mill Dump Sub-Operable Unit.

The Idaho Department of Environmental Quality, on behalf of the State of Idaho, has reviewed the various alternatives and supports the Selected Remedy, Alternative 7, Geosynthetic Cap.

The State has also reviewed the NMM EMDSOU RIFFS (NuWest 2020), SLHHRA (NuWest 2017), and SLERA (NuWest 2017a), to determine if the Selected Remedy complies with applicable or relevant and appropriate State environmental and facility siting laws and regulations. The State of Idaho concurs with the Selected Remedy (Alternative 7, Geosynthetic Cap) for the Site.

Sincerely,

A handwritten signature in blue ink that reads "Jess Byrne".

Jess Byrne  
Director

SC

c: Michael McCurdy, DEQ State Office  
Dana Swift, DEQ State Office  
Katy Bergholm, DEQ Pocatello Regional Office  
Douglas Tanner, DEQ Pocatello Regional Office

North Maybe Mine, East Mill DEQ Concurrence Letter

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Sam Heinrich, Deputy Attorney General  
Mel Boling, Forest Supervisor, USFS  
Chris Campbell, Regional Director for Engineering, USFS

## **APPENDIX B**

### **Cost Estimate Details for Alternative 7**





**COMPARISON OF COSTS AND GENERAL NOTES  
FFS-LEVEL ESTIMATED CONSTRUCTION COST  
EAST MILL DUMP**

Alternative	Cover for North Area (Top Deck and North Slope; 70 acres)	Cover for South Area (South Slope; 11 acres)	Estimated Cost
1	No Cover	No Cover	\$0
7	Geosynthetic Cap	No Cover	\$14,698,600
Alternative	Complete Removal	Estimated Cost	
8	On-Site Material Handling - ROM	> \$100MM	

**General Notes:**

1. Cost estimate is based on Arcadis U.S.'s (Arcadis') past experience and contractor bids from similar projects in Idaho. Contractor bids are from 2014 estimates, and have been escalated by 5.2% to 2018 dollars using the Construction Cost Index data.
2. This estimate has been prepared for the purposes of comparing potential remedial alternatives. The information in this cost estimate is based on the available information regarding the site investigation and the anticipated scope of the remedial alternative. Changes in cost elements are likely to occur as a result of new information and data collected during the engineering design of the remedial alternative. This cost estimate is expected to be within -30% to +50% of the actual projected cost. Utilization of this cost estimate information beyond the stated purpose is not recommended. Arcadis is not licensed to provide financial or legal consulting services; as such, this cost estimate information is not intended to be utilized for complying with financial reporting requirements associated with liability services.
3. All costs assume field work to be conducted by non-union labor.
4. All costs presented are based on the current understanding of site-specific conditions and stated remediation goals. Design details are limited to conceptual approaches to remediation and include a number of assumptions that are subject to change. Actual construction specifications and technologies will be determined during the design phase, and as a result, actual construction costs may vary from the costs presented here.
5. For the purposes of this cost estimate, geosynthetic barrier system is assumed to be 60-mil flexible membrane liner and geosynthetic drainage composite. If this alternative is selected, other geosynthetic barriers (e.g., geosynthetic clay liner) would be evaluated during design phase.
6. For the purposes of this cost estimate, a reasonable quantity of surface water drainage features was assumed. During design, surface water drainage features will be designed as needed for the existing landform at East Mill Dump.
7. Unit pricing is based on planimetric quantities; therefore, areas and lengths calculated are also planimetric.



**ALTERNATIVE 7: GEOSYNTHETIC CAP  
FFS-LEVEL ESTIMATED CONSTRUCTION COST  
EAST MILL DUMP**

Item	Description	Quantity	Units	Unit Cost	Capital Cost	M&R Cost	Present Worth Cost	Comment
<b>1.0 General Requirements and Mobilization</b>								
	Site Preparation and Mobilization				\$ 673,000			Includes set up of site trailers, cleaning and grubbing, developing water source for soil conditioning, and project signage.
	Maintenance of Access Roads and Management of Erosion Controls during Construction				\$ 578,000			Includes maintenance of access roads to EMD, installation of erosion controls, dust control and security/access control.
	Site Survey				\$ 306,000			Includes site survey prior to construction and ongoing landform surveying during regrading and cover placement activities.
<b>2.0 Subgrade Preparation</b>								
	Subgrade Regrading Top Deck, Cut and Fill				\$ 137,000			Subgrade will need regrading to promote surface water drainage to North Slope toe. Assumes cut of 42,000 CY and fill of 17,000 CY.
	Subgrade Regrading Slopes, Cut and Fill				\$ 645,000			Subgrade will need regrading to promote surface water drainage to North Slope toe. Assumes cut of 148,000 CY and fill of 127,000 CY.
<b>3.0 Geosynthetic Cover Systems (North Slope and Top Deck, 70 acres)</b>								
	Subcushion Production and Placement				\$ 681,000			Production and placement of approximately 4-inch-thick subcushion layer using existing waste rock. Includes subgrade preparation prior to geosynthetic placement.
	60 mil Textured Flexible Membrane Liner				\$ 1,861,000			Purchase and placement of 60-mil flexible membrane liner over 70 acres. Placement includes welding seams and testing.
	Geosynthetic Drainage Composite				\$ 2,350,000			Purchase and placement of geosynthetic drainage composite over 70 acres.
	Excavate, Haul, and Place General Fill for Cover (On-Site Borrow)				\$ 849,000			Assumes 18-inch-thick general fill layer over the day. Approximately 170,000 CY of general fill would be excavated from an adjacent borrow area.
	Excavate, Haul, and Place Topsoil (Off-Site Borrow)				\$ 743,000			Assumes 6-inch-thick topsoil over the general fill. Approximately 57,000 CY of topsoil would be excavated from an adjacent borrow area.
	Cover Terminations				\$ 66,000			Includes geosynthetics terminations around perimeter of proposed capping area, including transition to soil cover.
<b>4.0 Access Roads and Surface Water Drainage</b>								
	Access Roads				\$ 282,000			Includes site-wide access roads (estimated at 7,700 LF), although less access may be suitable.
	North Slope Drainage Features (Underdrains, Toe Drains, Swales, Downchute)				\$ 613,000			Includes underdrains and toe drains to support geosynthetic stability. Assumes approximately 12 benches/swales along the North Slope with a large collection downchute. Drainage features would be lined with riprap.
	Top Deck Drainage Features (Underdrains, Swales, Collection Channel and Check Dams)				\$ 169,000			Includes underdrains to support geosynthetic stability. Assumes two swales and two 400 LF collection channel with periodic check dams on the Top Deck. Drainage features would be lined with riprap.
<b>5.0 Site Reclamation</b>								
	Revegetation				\$ 251,000			Assumes revegetation of 70 acres.
	Borrow Pit Revegetation				\$ 94,000			Assumes revegetation of 24 acres.
<b>6.0 Long Term Monitoring and Reporting</b>								
	Groundwater and Surface Water Monitoring - First Five Years	5	Event	\$ 30,000	\$ -	\$ 150,000	\$123,000	Sampling and analysis for the first five years following cap placement, engineering estimate.
	Biannual Groundwater and Surface Water Monitoring - Years 6-30	12	Event	\$ 30,000	\$ -	\$ 360,000	\$238,300	Sampling and analysis once every two years for years 6-30, engineering estimate.
	Annual Site Control Report	30	Event	\$ 4,000	\$ -	\$ 120,000	\$49,600	Engineering estimate to prepare annual report to describe completed inspection and maintenance activities for the corresponding year.
	Annual Data Evaluation Report	17	Event	\$ 8,000	\$ -	\$ 136,000	\$78,100	Engineering estimate to prepare annual report to summarize surface and groundwater monitoring events.
	Annual Site Control Report Addenda	29	Event	\$ 4,000	\$ -	\$ 116,000	\$49,100	Engineering estimate to prepare addenda to Site Control Report prior to each subsequent field season to propose changes based on current conditions.
	Five Year Review	6	Event	\$ 15,000	\$ -	\$ 90,000	\$71,500	Engineering estimate to compile the Five Year Review.
<b>9.0 Demobilization and Project Closeout</b>								
	Demobilization and Project Closeout	1	LS	\$ 139,000	\$ 139,000	\$ -		
	Subtotal Capital Costs				\$ 10,837,000			
	Administration & Engineering (15%)				\$ 1,626,000			
	Construction Management (15%)				\$ 1,626,000			
	Subtotal				\$ 14,089,000			
	Total Present Worth M&R (7% Discount)				\$ 609,600			
	Total Present Worth of Capital and M&R FFS-Level Construction Costs				\$ 14,698,600			

LF = linear feet, CY = cubic yards, M&R = Monitoring and Reporting



## **APPENDIX C**

### **Responsiveness Summary**

**Record of Decision  
North Maybe Mine  
East Mill Dump Sub-Operable Unit**

**Responsiveness Summary**

A summary of written comments received and the U.S. Forest Service's responses regarding the Proposed Plan with respect to the North Maybe Canyon Mine (NMM) East Mill Dump Sub-Operable Unit (EMDSOU) are provided below. As required by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the Forest Service prepared a written response to significant comments received pursuant to 40 C.F.R. 300.815(b). Some commenters provided opinions that do not relate to the technical aspects of the preferred removal action alternative identified in the July 2021 Proposed Plan. The Forest Service did not consider these significant comments. The Forest Service did not address them in the response to comments.

The Forest Service received one set of comments during the public comment period from one group comprised of Yellowstone to Uintas Connection, Alliance for the Wild Rockies, Native Ecosystems Council, Snake River Waterkeeper, and Wildlands Defense (collectively referred to as Y2U). Since these comments were received as one 33-page letter, the Forest Service separated the letter into individual comments.

The Forest Service also received two letters of support during the public comment period from the city of Soda Springs and the Idaho Department of Fish and Game, which are included in this Responsiveness Summary.

### NMM EMDSOU Response to Comments

	Commenter	Comment	Response
1	Y2U	As advocates for clean water, clean air, and wildlife, we are deeply disturbed by this Proposed Plan. The phosphate industry came to this area, has been mining the phosphate ore while bringing in billions of dollars in revenue, then offers an Alternative 7 to leave the problem in place while only spending an estimated \$14,698,600 for reclamation. With this proposed reclamation, the industry is leaving pollution and damaged or destroyed habitat that will not recover for decades to centuries, if ever. The public is expected to accept this pollution, loss of access and wildlife habitat that is not only occurring at the Maybe Mine but at over a dozen other SE Idaho mines that are now CERCLA sites due to this chemical pollution. How is this acceptable? Yet the Caribou Targhee NF, Bureau of Land Management and the State of Idaho continue to allow this ongoing disaster to proceed by permitting new mines, one after the other.	Alternative 7 remediates the contamination problem by controlling the source of the contamination to the environment. Selection and acceptability of Alternative 7 is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
2	Y2U	It is unclear how the Caribou Targhee Forest Plan, BLM Resource Management Plan, NEPA, NFMA, APA and other laws and regulations apply here. This is a decision to be issued by the Forest Service based on analysis by the mining company consultants. While CERCLA is cited, there must be other mandates to be met. The public needs to fully understand the legal environment applicable here and it is the duty of the agency to provide that context and additional opportunities for input. Since this is a Forest Service current action, all the rules of NEPA, NFMA, FLPMA, CWA, ESA apply. The public must be given a comprehensive analysis under these laws in addition to that provided under CERCLA.	The response actions proposed for the North Maybe Mine East Mill Dump are guided by CERCLA. NEPA does not apply to CERCLA response actions. Also, this is not a proposal to permit a new mine. Under CERCLA, remedial alternatives and evaluated to determine whether they attain applicable or relevant and appropriate requirements (ARARs) under other environmental laws or whether an ARAR waiver applies. Key ARARs for this Proposed Plan are in Attachment E of the Proposed Plan. The complete listing of ARARs and how they were considered in remedy selection are contained in the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
3	Y2U	This entire Plan needs to be withdrawn and a new plan provided that addresses the true nature of the problem, does not allow continued pollution exceeding background levels in any environmental medium, restores wildlife habitat and connectivity, streams and springs and pays the piper to do what is right. As the old saying goes, "You broke it, you fix it!"	The Proposed Plan addresses the source of the contamination. Selection and acceptability of Alternative 7 is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
4	Y2U	As Trustees, the Tribes have developed a Waste Management Act and Standards for lands within Fort Hall reservation boundaries. They believe "resources must be essentially clean and free of contaminants" as the presence of contamination may "decrease and degrade traditional foods and may preclude the use of the streams/rivers in the Mine Site for fishing, swimming, and other recreational uses." (PAS p5). This Proposed Plan does nothing of this nature as contamination and threats to people and ecosystems will continue indefinitely.	As stated in the comment the Waste Management Act and Standards only applies to lands within the Fort Hall Reservation. The North Maybe Mine is not located on the Fort Hall Reservation.
5	Y2U	Due to the open spaces and accompanying air currents, wind erosion and subsequent deposition also serves as a mechanism of chemical transport at the Mine Site (IDEQ 2002). Wind erosion of surface soils may transport and deposit	Soil, vegetation, surface water and groundwater samples were taken on and adjacent to NMM EMDSOU to ascertain fate and transport of

		<p>selenium contaminated soils some distance from its source, dependent on wind speed and other factors. These wind-deposited soils may be directly taken up by vegetation, may be deposited in aquatic or riparian systems, and/or may be incidentally ingested by wildlife feeding in the depositional areas. Other pathways include infiltration of water thru waste dumps and pits, erosion from waste rock dumps to surface soils, runoff from spring snowmelt and snow events, uptake of selenium in soil placed as caps on waste rock dumps. (PAS p28). Was this addressed across the potential area affected by NMM? There was no evidence of this in the Proposed Plan.</p>	<p>contaminants (wind/water erosion, infiltration, and vegetation uptake). This information was summarized in the NMM EMDSOU RIFFS.</p>
6	Y2U	<p>Animals feeding or grazing on vegetation, animals living in or on waste rock dumps, aquatic organisms are affected. Selenium and other hazardous substances have been documented in surface water, ground water, soils, sediment, vegetation, and animal tissues in the Mine Site resulting in fish consumption advisory, elk liver consumption advisory. (PAS p29). The Proposed Plan did not report on the species using these features nor did it provide results of testing in each of these ecosystem components across the region of potential contamination from NMM.</p>	<p>A Screening Level Ecological Risk Assessment (SLERA) was conducted to ascertain contaminant risks to animals grazing at NMM EMDSOU. This document contains what species were evaluated and their resultant risks at NMM EMDSOU.</p>
7	Y2U	<p>Surface water concentrations documented at the Mine Site for selenium for streams exceeding the aquatic life chronic criteria of 0.005 mg/l for 16 locations in the Blackfoot River and various other streams ranged from the standard up to 6.89 mg/l or over 1000 times the standard. (Table 3 PAS p33). The Proposed Plan did not provide results for the suite of COPCs in all streams and springs potentially affected by its operation, meaning all waste dumps and the open pit and secondary sources from wind deposition of contaminants. There was no data for water quality in the NMM open pit lake shown in the Proposed Plan.</p>	<p>Surface water results are summarized in the Proposed Plan. As stated in the Proposed Plan, surface water sampling results are documented in the NMM EMDSOU RIFFS.</p>
8	Y2U	<p>Example groundwater selenium concentrations for 11 locations in the Mine Site that were above the 0.05 mg/l criterion ranged up to 12 mg/l or 240 times the criterion. (Table 4 PAS p34). The Proposed Plan did not provide results of ground water monitoring across the potential area affected and from all primary and secondary source areas generated by NMM.</p>	<p>Groundwater results are summarized in the Proposed Plan. As stated in the Proposed Plan surface groundwater results are documented in the NMM EMDSOU RIFFS.</p>
9	Y2U	<p>Example sediment concentrations compared to the removal action level of 2.6 mg/kg or the screening benchmark of 2.0 mg/kg in 8 locations representing the most contaminated sites ranged up to 1300 mg/kg or 500 times the removal action level for Idaho. (Table 5 PAS p36). The Proposed Plan did not provide sediment results for the potential area affected by NMM. Soils and vegetation concentrations compared to action levels at locations with most elevated concentrations were provided. The soils removal action level for Idaho is 5.2 mg/kg dry wt. and the EPA screening level is 0.52 mg/kg dw. Soils ranged up to 318 mg/kg. The vegetation removal action level in Idaho is 5 mg/kg dw. Concentrations ranged up to 1010 mg/kg. (Tables 6 and 7 PAS p38). The Proposed Plan did not provide results of sampling in soil and vegetation across the potential area of effect from NMM.</p>	<p>Sediment results are summarized in the Proposed Plan. As stated in the Proposed Plan, sediment sampling results are documented in the NMM EMDSOU RIFFS.</p>
10	Y2U	<p>Response actions were unknown as of the PAS, but "given the geographic extent of the Mine Site, it is unlikely that the remedial actions will sufficiently remedy</p>	<p>There is an ongoing Natural Resource Damage Assessment process conducted by the Trustee Council. Comments 4 through 9 cite to or</p>

		injury to trust resources (including past injury from historic mining activities), and it is expected that additional restoration actions will be required." (PAS 48). As expected, there is no intent to ever return environmental media or aquatic and terrestrial habitats to background levels. What is the future cost of this philosophy across the Mine Site for all mines and for the NMM itself?	refer to the preassessment screen (PAS) for the Southeast Idaho Phosphate Mine Site. The PAS is part of the natural resource damage (NRD) assessment conducted by the NRD trustees. Response actions taken under CERCLA, such as this proposed plan, are separate from the NRD assessment and any restoration activities.
11	Y2U	<p>What is the history of this project area? What Forest actions or permitted activities play a role in the current state of aspen, wildlife habitat, watershed health and other ecosystem attributes? What is the current nature and extent of contamination across the entire Mine Site? What was promised in permitting documents? How do current conditions compare to those commitments? Or were all commitments hedged to avoid future accountability? There should be an analysis of:</p> <ul style="list-style-type: none"> <li>• Validity of assumptions from previous decisions, permit requirements, and NEPA processes;</li> <li>• Accuracy of predictions from these same processes;</li> <li>• Adequacy of Forest Service, BLM, and mining company implementation of previous decisions; and,</li> <li>• Effectiveness of actions taken in previous decisions, including an analysis of the design criteria, BMPs, EMPs, and models.</li> </ul>	<p>Only a general history of NMM EMDSOU was provided in the Proposed Plan. A detailed history of NMM EMDSOU can be found in the RJFS and is contained in the Administrative Record.</p> <p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mine permitting commitments in these evaluations.</p>
12	Y2U	<p>The above items are critical for effective decisions and outcomes and for the public to be informed. After all, there have been assurances to the public regarding controlling pollution, doing reclamation, and not damaging habitats to a significant degree. We return to the example of the Smoky Canyon mine and its Pole Canyon Creek pollution issue. This is not a seventy-year-old mine constructed and operated before NEPA and other current environmental laws, yet it is a CERCLA site for selenium contamination. A full and robust explanation of this situation is needed otherwise how can current designs be trusted? This must be done across all the remediation and reclamation projects to date.</p> <p>Without this analysis the validity of the current assumptions cannot be determined. Without analyzing the accuracy and validity of the assumptions used in previous NEPA processes and projects, one has no way to judge the accuracy and effectiveness of the current analysis and proposals. The predictions made in previous NEPA and permitting processes also need to be disclosed and analyzed because if these were not accurate, and the agency is making similar decisions, then the process will lead to failure.</p> <p>For instance, if in previous processes the agency or permittee said they were going to perform a certain monitoring plan or implement a certain type of management, meet certain goals and objectives, and these were never effectively implemented or attained, it is important for the reader and the decision maker to know. If there have been problems with implementation in the past, it is not logical to assume that implementation will now be appropriate. If prior projects have not been monitored to document and compare post project initiation</p>	<p>The Remedial Investigation and Feasibility Study conducted at this site evaluated current site conditions and identified a preferred alternative to address the source of the contamination.</p> <p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.</p>



		conditions to baseline data, then there is no proof that models, design criteria, BMPs, and EPMs are accurate, effective, or can be relied upon. What commitments have been made in the Forest Plan and subsequent project plans? Have these been realized?	
13	Y2U	The Proposed Plan outlines that waste rock, surface water, sediment, groundwater, soil, vegetation, and beef were potentially contaminated. It is uncertain whether this was based on the review of Site information (Plan p4) or actual sampling and analysis throughout the region of contamination.	Summaries of waste rock, surface water, sediment, groundwater, soil, and vegetation results are included in the Proposed Plan. As stated in the Proposed Plan waste rock, surface water, sediment, groundwater, soil, and vegetation sampling results are documented in the NMM EMDSOU RIFFS.
14	Y2U	What is needed is a description/analysis of the regional and local scale contamination resulting from the North Maybe Mine and in combination with the other mines for cumulative effects. This should describe the extent of contamination from deposition by wind and water. The position of the EMD and mine on top of a ridge means that regional winds can carry the particulates and associated contaminants long distances in each direction. The deposited particulates and associated contaminants can then move downgradient throughout the watershed with surface flows. They will be carried downgradient in ground water after leaching or percolating into lower soil layers and can re-emerge in streams long distances from the source. <sup>6</sup> It is not clear from the Proposed Plan what the extent of actual sampling was, or if a sampling and analysis plan was designed and carried out, or whether these "potential contaminants of concern" were arrived at from knowledge of the characteristics of the overburden or mined material.	Soil sampling during the Remedial Investigation (RI) found that windblown and erosional contamination only moved soil contamination a short distance from the dump (less than 50 – 100 feet).  As stated in the Proposed Plan, surface water and groundwater emanating from NMM EMDSOU and flowing down East Mill Creek are monitored currently) and will be monitored post construction to see if further remedial action(s) are necessary.
15	Y2U	Our personal experience from working on the first Natural Resource Damage Assessments in the nation in the 1980's in Colorado showed that wind deposited metals and radiological elements traveled miles from the point of origin, that they moved in the surface and ground water and could also be documented in soils, vegetation, fish, invertebrate, and sediment components of the system. The question is whether the Forest Service and Nu-West completed an adequate sampling and analysis program to document the extent of the contamination in all ecosystem components. The Proposed Plan does not describe the monitoring or its results and does not illustrate these results using maps, analysis, and interpretations. This leaves the public in the dark about the nature and extent of the contamination and the effects on the ecosystem.	Summaries of waste rock, surface water, sediment, groundwater, soil, and vegetation results are included in the Proposed Plan. As stated in the Proposed Plan waste rock, surface water, sediment, groundwater, soil, and vegetation sampling results as well as the nature and extent of contamination are documented in the NMM EMDSOU RIFFS.
16	Y2U	The Proposed Plan presents an overview of human health and ecological risks. (Plan p6 - 8). These were presented as non-Radiological and Radiological risk estimates using modeled or "screening level" scenarios at the NMM EMD. It is not clear if all the subunits of NMM were included or only the EMD was considered. It is not clear over what area or extent from the EMD the analysis was conducted or if it was based on actual data collected from the different environmental media.	For this action, only NMM EMDSOU was considered in the Human Health and Ecological Risk Assessments (HHRA). Risk Assessments will be conducted at the other NMM subunits as required under CERCLA.
17	Y2U	The metals, non-metals and radionuclides listed above all exceeded their respective human health screening values for all media listed. Risk estimates were "calculated" for the most plausible ecological exposure pathways. The areas	Metals, non-metals, and radionuclides were sampled and the sampling results were all utilized in the NMM EMDSOU Human Health and Ecological Risk Assessments. As stated in the Proposed Plan waste

		<p>evaluated included the EMD Upland Area and the EMD Sediment Control Structure. Apparently, no actual sampling or measurement of the actual levels of contaminants in environmental media downgradient from the Source Areas (including these two subunits plus the open pit and other subunits) was used to make this determination or validate model results. The Proposed Plan does not present the actual concentrations throughout the region affected by these sources, so the public has no idea of what, where and how much. These risks were evaluated in the Screening Level Ecological Risk Assessment (SLERA) which concluded:</p> <p>EMD Upland Area, "The SLERA concluded that ecological risk for terrestrial plants and soil invertebrates and amphibians in the EMD upland area cannot be excluded. Further, the SLERA also concludes that risk to amphibians and wildlife receptors (terrestrial and aquatic birds and mammals) in the EMD upland area cannot be excluded. Risk to receptors at the EMD upland area is due to 17 soil COPECs: antimony, arsenic, boron, cadmium, chromium (total), copper, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, uranium, vanadium, and zinc."</p> <p>EMD Sediment Control Structure, "The SLERA concludes that ecological risk for small to moderate ranging aquatic-feeding wildlife receptors using the Sediment Control Structure for food and water cannot be excluded. Risks to receptors in the aquatic environment are possible from exposure to 10 surface water COPECs: aluminum, barium, boron, cadmium, chromium (total and hexavalent), selenium, silver, uranium, and vanadium. Risks to receptors in the aquatic environment are possible from exposure to 14 sediment COPECs: aluminum, arsenic, barium, cadmium, chromium (total), copper, lead, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc."</p> <p>"As described above, the SLERA for the Site identified several COPECs in surface soil, sediment, and surface water. Therefore, the possibility of adverse risks for ecological receptors cannot be excluded under current conditions and remediation may be warranted."</p> <p>It appears these models were not validated by actual sampling of all media at and downgradient of the Site. As discussed above in Section 2 of these comments, BMPs and agency EPMs need validation so that the assumptions used in making these determinations and their outcomes can be proven. In addition, the meaning of reclamation and remediation is not made clear for either contaminated media or habitats.</p>	<p>rock, surface water, sediment, groundwater, soil, and vegetation sampling results as well as the Human Health and Ecological Risk Assessment results are summarized in the NMM EMDSOU RIFFS, SLHHRA, and SLERA.</p>
18	Y2U	<p>The Proposed Plan briefly describes the habitat of the EMD Upland area as being limited "relative to undisturbed native habitat in nearby areas" and having</p>	<p>Vegetation, sediment control structure, and wildlife sampling results are summarized in the NMM EMDSOU RIFFS.</p>

		undergone reclamation. It is sloping terrain with grasses, herbaceous plants, and low shrubs. There was no mention of surveys of wildlife in the area documenting what species are present in the EMD and in these "nearby areas" of native habitat. Nor is the native habitat described. The aquatic habitat in the Sediment Control Structure is limited, but an aquatic community has been observed. Fish are absent due to the separation of the SCS from East Mill Creek. No discussion of the aquatic community or contamination levels in the open pit pond or East Mill Creek, or other aquatic environments (springs, seeps, ponds, streams) was presented.		
19	Y2U	"Watershed protection and ecological restoration have been given a high priority in the Forest Service in decision-making processes, including budget and program planning, land management planning, project implementation, and watershed assessments for forest and interagency plans." (Caribou Revised Forest Plan) Other than reclamation of the mine footprint to some early seral plant community, habitat structure and ecological restoration were not addressed. The Proposed Plan merely posits, but does not commit to remediation for contamination, let alone the full extent of contamination in all media, nor does it commit to watershed and habitat restoration.	Watershed restoration is outside the scope of CERCLA remediation for NMM EMDSOU. Limited habitat restoration will be considered during design of the NMM EMDSOU remedy. Commitment to remediation for contamination will be contained in the Record of Decision for NMM EMDSOU.	
20	Y2U	"The Revised Forest Plan addresses minerals operations, reclamation and hazardous substance management by requiring the mine operators to use the most current science and research as it becomes available." (p2-11). We saw no studies of successful reclamation or covers, and no data from other projects in the mining area to validate the practices proposed or models used. This also applies to BMPs or EPMs.	The Proposed Plan cited the recent Removal Action at South Maybe Canyon Mine (SMCM) Cross Valley Fill (CVF). This action is very similar to the Proposed Plan for NMM EMDSOU.	
21	Y2U	"Sustain site productivity by providing the following minimum amounts of woody residue = 3 inches in diameter dispersed on the site as outlined in Table 3.1." (p3-7). The Proposed Plan did not discuss the actual habitat needs of the wildlife potentially present, which would include woody residue.	During the SMCM CVF construction woody material was re-deposited as available in borrow areas. Similar actions are anticipated to be utilized during design and construction of NMM EMDSOU.	
22	Y2U	"Adequate bonds or other security instruments shall be required for special use authorizations if it is determined that the use has potential for disturbance that may require rehabilitation or when needed to ensure other performance." (p3-10). The reclamation bond and its provisions were not discussed in the Proposed Plan. What we have seen is the bond is for the actual mine footprint with nothing provided to ensure that long term damage is corrected, pollution eliminated, or habitats restored.	Reclamation bonds for the North Maybe Mine are administered by BLM. Financial assurance under CERCLA will be provided by the mining company for the remedial action.	
23	Y2U	"Mineral resources are available for development, consistent with other resource uses. Paleontological resources are properly managed to provide for preservation and use of these resources for current and future generations. Drastically disturbed sites are reclaimed so that natural recovery to pre-disturbed conditions is most likely. Reclamation emphasizes: 1) suitable topsoil preservation; 2) use of native plant species; and 3) stabilizing lands to a topographic relief (landform) that conforms to natural surroundings. Drastically disturbed lands are reclaimed to prescribed post-disturbance land uses as soon after disturbance as is practical. On mined lands and other drastically disturbed lands, maintain or reestablish	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities.	



		hydrologic function, integrity, quality, and other surface resource values within the capability of affected lands. Provide for mineral resource development using state of the art practices for surface resource protection and reclamation, and with consideration of social and economic resources. Mining activities are administered to prevent the release of hazardous substances in excess of established state and/or federal standards. Reclamation is designed to eliminate or minimize wildlife, livestock, and/or human exposure to hazardous substances." (p3-11). This sums it up in a nutshell. We see no evidence in the Proposed Plan that the intent of this RFP passage has been met. In fact, the presence of such massive contamination by such a long list of dangerous pollutants is prima facie evidence this provision was ignored. Likewise, there is no restoration of the streams, springs, topography, hydrology, and other natural attributes. No science or studies from other mines or reclaimed areas was provided to show the success of reclaiming these areas, the plant communities and wildlife populations developed over time, the status of COPCs in soils, vegetation, fish, and wildlife.	
24	Y2U	"Conduct annual reviews of Best Management Practices (BMPs) and make appropriate adjustments to ensure that hazardous substance releases do not exceed state and/or federal standards." (p3-12). The Proposed Plan did not provide any summary of these reviews or any studies documenting the effectiveness of BMPs or EPMs. Apparently, at NMM given the list of contaminants expected in the ecosystem, they were not effective.	<p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.</p> <p>Under CERCLA §121(c), EPA (or the delegated agency) is required to review the remedies at Superfund sites where hazardous substances remain on site. Such reviews must be conducted every five years or may be conducted more frequently if necessary to ensure the protectiveness of the remedy.</p> <p>Water quality monitoring (surface water and groundwater) has been ongoing at NMM EMDSOU since 2009. Water quality monitoring will continue to monitor the effectiveness of the remedy into the future.</p> <p>Vegetation sample data was collected for NMM EMDSOU and summarized in the RIFFS and utilized in the SLERA to document unacceptable risks at the site.</p> <p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger.</p>
25	Y2U	"Lessee/ operator shall conduct pre-mining, concurrent, and/or post-mining water quality and aquatic habitat monitoring (both surface and groundwater) on all phosphate-mining sites where bond release has not occurred, using most current sampling procedures and protocols." (p3-12). The Proposed Plan did not present the results of sampling and analysis of all media throughout the extent of the contaminated region. Were there baseline studies? Was ongoing monitoring conducted? Was monitoring conducted for the Proposed Plan? What are the results and how do they compare?	
26	Y2U	"Reclamation vegetation shall be monitored for bio-accumulation of hazardous substances prior to release for multiple use management." (p3-13). We have seen no studies or summaries of past projects' reclamation or affected areas other than the PAS. Are mining companies collecting data on reclamation areas and soils adjacent to the mine footprint and haul roads to ascertain the concentration of COPCs in soils and vegetation? What has been done on the North Maybe Mine and its subunits?	
27	Y2U	"The lessee/operator shall monitor reclamation work annually and report to the Forest Service until reclamation is accepted and the bond released." (p3-13). There was no summary of this annual monitoring provided. According to the	

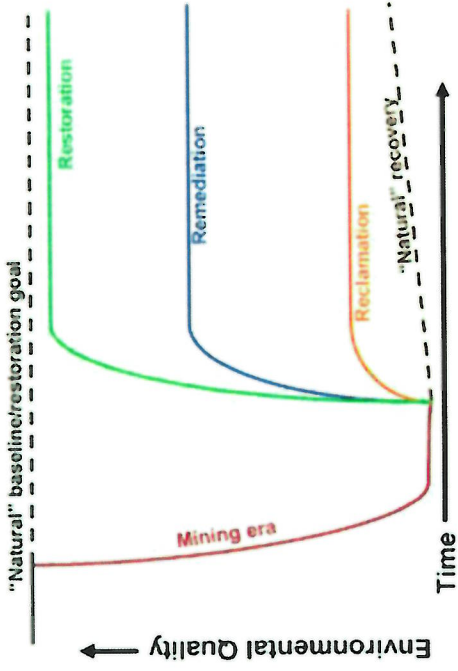
		PAS, some reclamation covers remain very sparse and the PAS reported high concentrations of contaminants in soil and vegetation.	It is not necessary to consider the status of mining reclamation in these evaluations.
28	Y2U	"Loss of available surface water sources for uses such as wildlife or grazing, as a consequence of mining operations shall be replaced or mitigated by the mine operator. This includes the loss of water quality sufficient to maintain post-mining uses." (p3-13). The Proposed Plan did not provide for any monitoring, mitigation or restoration of water sources for post mining water quality and habitat.	An Operations and Maintenance (O&M) plan will be approved for the NMM EMDSOU remedy that will provide for monitoring of water quality and ensure the remedy operates as designed.
29	Y2U	"Ground cover should be assessed prior to release of the reclamation bond to assure: 1) minimum ground cover exists to attain long-term soil productivity requirements; 2) ground cover should persist at minimum cover needs without artificial assistance (e.g. watering, fertilizers, etc.); and 3) meet or trend towards post-mining land use goals." (p3-14). Same comments as above. There is no reported data for the various mines showing the status of revegetation.	The BLM is the Agency that ascertains the adequacy of reclamation and effectiveness of actions taken in connection with mining at NMM EMDSOU.  Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.
30	Y2U	"In reclaimed areas, vegetation should include species that meet wildlife habitat needs. Wildlife structures (slash piles, logs, rock piles) using native vegetation and materials are designed to provide cover for wildlife movements in created openings." (p3-14). There was no provision for these features in the Proposed Plan.	A native vegetation seed mix will be approved for use in revegetation of the NMM EMDSOU remedy and prevent erosion. The exact mix and use of wildlife structures will be evaluated and approved during the design of the NMM EMDSOU remedy.
31	Y2U	"Maintain the dead and down woody material guidelines for wildlife. (See Wildlife Standards and Guidelines for Dead and Down material)." (p3-19). There was no mention of how this is to be achieved in the Proposed Plan for Source Areas (all subunits and haul roads) or in areas outside the mine footprint.	During the SMCV construction woody material was re-deposited as available in borrow areas. Similar actions are anticipated to be utilized during design and construction of NMM EMDSOU. Please note that habitat restoration will be addressed during design and construction of NMM EMDSOU as appropriate.
32	Y2U	"Not more than 30 percent of any of the principal watershed and/or their sub-watersheds (6th order HUC) should be in a hydrologically disturbed condition at any one time." (p3-16). Note hydrologically disturbed applies to changes in natural canopy and surface soil characteristics that may alter natural streamflow quantities and character. It is presumed that 30% of a watershed can be dug up and destroyed by mining alone, yet other activities also hydrologically disturb watersheds. These include timber harvest or sagebrush treatment, roads and other activities which also remove canopy, and livestock grazing that denudes and compacts soils and accelerates erosion	Investigations into the rest of the watershed are outside the site boundaries.
33	Y2U	"ME-1 reclamation plans for minerals development operations will be designed to meet applicable Idaho Standards for Rangeland Health (BLM 1997), reclamation complete when these standards have been met." The Proposed Plan made no reference to these RH standards and whether these were met or how reclamation is to be monitored.	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.  Comments 108 through 109 cite to or refer to the BLM approved resource management plan (ARMP). The ARMP is developed by BLM to guide management of those lands and mineral interests administered

34	Y2U	<p>"ME-2 Final reclamation will meet applicable standards for watersheds, riparian areas and wetlands, stream channels and floodplains, seedlings, exotic plant communities, and water quality with future site management directed towards attaining standards for native plant communities and threatened and endangered plants and animals (BLM 1997).</p> <ul style="list-style-type: none"> <li>• The lessee/operator will monitor reclamation and report to the Authorized Officer annually until reclamation is accepted as adequate.</li> <li>• Mineral operations will replace or mitigate any loss of available surface water sources for uses such as wildlife or grazing.</li> <li>• Plan selection for reclamation will reflect the surrounding ecosystem and post development land use.</li> <li>• Site specific mitigation measures will be developed through the NEPA process and applied to ensure that operations comply with applicable laws, land use plan guidance and do not result in unnecessary degradation." <p>There was no mention of these attributes or how the Proposed Plan intends to address them. No mitigation or replacement of contaminated water sources for wildlife was included.</p> </li></ul>	<p>by BLM and under its jurisdiction. The ARMP does not apply to Forest Service response actions taken under CERCLA.</p> <p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.</p> <p>As this is not an active mine, BLM regulations on National Forest System lands do not apply.</p>
35	Y2U	<p>"GE-1 use inventories and surveys to document the condition and extent of resources/uses to monitor and respond to changes in conditions. Mitigate potential adverse effects." The Proposed Plan only addresses contamination, not habitat and mitigating the adverse effects on habitat.</p>	<p>The BLM is the Agency that ascertains the adequacy of reclamation and effectiveness of actions taken in connection with mining at NMM EMDSOU.</p> <p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.</p>
36	Y2U	<p>"GE-2 consistent with multiple use and sustained yield, achieve desired conditions while providing an ecologically healthy environment. Reduce impacts from management actions and maintain or improve resource conditions." The Proposed Plan leaves a polluted and degraded landscape without the attributes or contours that existed prior to mining and does not propose restoration.</p>	<p>The BLM is the Agency that ascertains the adequacy of reclamation and effectiveness of actions taken in connection with mining at NMM EMDSOU.</p> <p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.</p>
37	Y2U	<p>"GE-3 provide proper nutrient cycling, hydrological cycling, restore or improve public lands adversely affected by major surface disturbance. Employ Idaho Standards for Rangeland Health (1997) to determine success of reclamation,</p>	<p>CERCLA focuses on remediation of hazardous substances, not restoration.</p> <p>The BLM is the Agency that ascertains the adequacy of reclamation and effectiveness of actions taken in connection with mining at NMM EMDSOU.</p>

		rehabilitation, or restoration activities." The Proposed Plan did not report on the conditions of prior reclamation activities on the NMM or other mines in the affected area and did not propose any restoration.	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.
38	Y2U	"SW-2 manage activities to maintain or contribute to the long-term improvement of surface and ground water quality; prioritize stream management and restoration by presence of sensitive species, amount of stream on BLM lands, condition, and importance for achieving multiple use objectives." Instead of improving water quality, the Proposed Plan intends to leave polluted groundwater and surface water, soils, and vegetation, and consequently, poisoned wildlife, pollinators, and other insects/invertebrates, and destroyed habitats, all to the detriment of their populations.	As stated in the Proposed Plan this is an interim action for source control. A final remedy for the rest of the site that will address all media will be selected in the future.
39	Y2U	"FW-2 maintain connectivity among habitats, use opportunities to improve habitat connectivity and reduce fragmentation of upland and riparian habitats by land actions, habitat improvement projects, wildlife, fire ES&R and restoration projects." The Proposed Plan omits any reference to wildlife connectivity and how this mine and the proposed reclamation does not destroy connectivity, or how connectivity is to be restored.	Habitat connectivity analysis is not required under a Screening Level Ecological Risk Assessment (SLERA). Sufficient risks were identified under the SLERA for NMM EMDSOU to document adverse risk to wildlife and justify an FS for a remedy at NMM EMDSOU.
40	Y2U	These excerpts illustrate the nature of the problem. The phosphate industry is creating pollution and environmental damage that will never be corrected under the current philosophy represented by the Proposed Plan. The Fact Sheet and PAS have described numerous mines with these issues. The public does not have a clue as to the extent of the problem in SE Idaho and it is incumbent on the Trustees to provide an analysis of all the mines and the current nature and extent of this contamination and habitat loss. This should be done under a NEPA process with an EIS that addresses the full extent of not only the contamination problem, but the alterations and fragmentation of habitats and the resulting effects on special status and other species. The analysis should not be fragmented into over a dozen R/FS and other voluminous documents for up to 18 or more mines that the public can't access or easily understand. The analysis should also show the intent of the reclamation and remedial actions, the extent of pollution to remain, the extent to which Institutional Controls are to be applied and thereby the extent of the public and private lands that will be off limits or dangerous (exceeding background and all criteria) to people and wildlife.	This comment appears to be directed to the NRD trustees, and the NRD process. The Proposed Plan was issued by the Forest Service under CERCLA. NEPA does not apply to CERCLA response actions. The administrative record for the NMM EMDSOU is located at Soda Springs, ID and is made available to the public, consistent with the NCP.
41	Y2U	The State of Idaho statutes include relevant provisions. These are Title 47 Mines and Mining Chapter 15 Mined Land Reclamation and Title 39 Health and Safety Chapter 36 Water Quality. There are numerous provisions in these Statutes that must be addressed. Some of these are: <ul style="list-style-type: none"> <li>• 47-1509 (4). Manage water as necessary to meet the requirements authorized under chapter 1, title 39, Idaho Code. (This includes meeting water quality criteria, antidegradation and beneficial use intent.)</li> </ul>	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.  Financial assurance under CERCLA will be provided by the mining company for the remedial action.



		<p>• 47-1510. VEGETATION PLANTING: (a) Except as otherwise provided in this act, an operator shall plant on affected lands, vegetation species that can be expected to result in vegetation comparable to the vegetation that was growing on the area occupied by the affected lands prior to the exploration and mining operations.</p> <p>• 47-1511. RECLAMATION ACTIVITIES — TIME LIMITATIONS.</p> <p>(a) All reclamation activities required to be conducted under this act shall be performed in a good and workmanlike manner, with all reasonable diligence, and as to a given exploration drill hole, road, or trench, within one (1) year after abandonment thereof.</p> <p>(b) The reclamation activity as to a given mine panel shall be commenced within one (1) year after mining operations have permanently ceased as to such mine panel, provided, however, that in the event that during the course of mining operations on a given mine panel, the operator permanently ceases disposing of overburden on a given overburden pile, or permanently ceases removing minerals from a given pit, or permanently ceases using a given road or other affected land, then the reclamation activities to be conducted hereunder as to such pit, road, overburden pile, or other affected land shall be commenced within one (1) year after such termination, despite the fact that all operations as to the mine panel, which includes such pit, road, overburden pile, or other affected land, have not permanently ceased.</p> <p>• 47-1512. FINANCIAL ASSURANCE — REQUISITES. (a) Prior to conducting any mining operations on a mine panel covered by an approved reclamation plan or operating a cyanidation facility covered by an approved permanent closure plan, an operator shall submit to the board financial assurance meeting the requirements of this section. (1) The initial reclamation financial assurance filed prior to conducting any mining operations on a mine panel shall be in an amount determined by the board to be the estimated reasonable costs of reclamation required in this chapter</p> <p>The Proposed Plan does not propose to meet these criteria. Nothing is revealed regarding the amount of the reclamation bond set aside for the NMM and whether any of that bond has been released or what remains and whether it is adequate for reclamation of the entire NMM. If not, the Bond should be increased to cover restoration to original contours, filling the open pit and restoring habitat that existed prior to mining.</p>		
42	Y2U	<p>The terms remediation and reclamation are used in the Proposed Plan, but the distinction is not made clear. The Proposed Plan made no mention of restoration. Yet the intent of the Forest Plan and ARMP includes restoration. The Forest Service should clearly distinguish these from each other and demonstrate where its Proposed Plan outcome fits in a continuum to total restoration of background</p>	<p>The BLM is the Agency that ascertains the adequacy of reclamation and effectiveness of actions taken in connection with mining at NMM EMDSOU.</p>	

	<p>conditions prior to mining. We found an example in a website that provides information on the remediation and restoration taking place in the Clarks Fork River Basin.<sup>7</sup> That site provides this narrative describing the relationship between reclamation, remediation, and restoration.</p> <p>Reclamation is a blanket term often used, for example, by mining engineers when they rehabilitate a disturbed site for some useful purpose. Remediation is a legally and technically specific term for treating hazardous material to reduce or eliminate harm to human or environmental health. And restoration is a legally and technically specific term for returning a disturbed site to a more-or-less natural condition.</p> <p>A diagram illustrating the distinctions is also provided and reproduced below:</p> <p><b>Environmental Quality and the “3 R’s”</b></p>  <p>According to this diagram, the reclamation described in the Proposed Plan is at the bottom when compared to the other “R’s” and far below baseline conditions pre-mining. We argue that the intent of the laws, regulations and land use plans are for restoration.</p>
<p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation in these evaluations.</p> <p>A remedial action is contemplated in the Proposed Plan to control the source of contamination. Remedial actions under CERCLA are typically considered remediation and the Proposed Plan is consistent with the commenter’s definition of remediation. The Natural Resource Damage and Restoration process will ascertain whether additional actions are necessary for restoration.</p>	<p>As stated earlier the proposed remedy is anticipated to achieve a 95% reduction in contamination flowing into E Mill Creek. As stated in the Proposed Plan a final remedy will be selected that will address any remaining contamination in East Mill Creek. Other NMM Operable Units are outside the scope of the NMM EMDSOU Proposed Plan.</p>
43	<p>Y2U</p> <p>The Proposed Plan presents 8 alternatives from No Action to Removal and Disposal of the overburden material from the EMD. The Preferred Alternative 7 would consist of an “infiltration-limiting and direct contact-limiting engineered geosynthetic cap system applied to the North Area, excavation of sediment from the SCS and placement within the North Area prior to cap construction, access and use restrictions, informational signage, and monitored natural attenuation (MNA) of residual COPCs in groundwater.” (Plan p13). This is expected to take 3</p>

		years to construct and cost \$14,698,600 with the resulting decline in contamination taking place over an undefined period or space.  A "reduction in erosion and transport of COPCs to East Mill Creek is to be achieved by capping the North Area. Potential remedies for contaminants that exceed acceptable risks in East Mill Creek beyond the SCS will be evaluated after implementation of the selected EMD remedial alternative." (Plan p 17). (This is a clear demonstration that this reclamation Plan is trial and error using the natural environment and wildlife as guinea pigs.)	
44	Y2U	It is difficult to even know where to start on this situation. As the PAS shows, this mine has likely been sending COPCs into the environment since the early 1960's and that is added to the numerous other Nu-West mines in the area along with mines under other ownerships. This Proposed Plan addresses only one of the "subunits" at the NMM. According to the PAS there is the 2.5-mile-long open pit surrounded by 12 external rock dumps. Now, this Proposed Plan addresses only one of these features and will admittedly allow continued contamination of environmental media. There is no schedule or analysis of the pit or these remaining rock dumps, no schedule for remediation to meet the intent of the Forest Plan, ARMP, or water quality criteria. This Plan merely kicks the can down the road with an indefinite outcome.	As stated earlier the proposed remedy is anticipated to achieve a 95% reduction in contamination flowing into E Mill Creek. As stated in the Proposed Plan a final remedy will be selected that will address any remaining contamination in East Mill Creek. Other NMM Operable Units are outside the scope of the NMM EMDSOU Proposed Plan.
45	Y2U	As the Plan describes, the ARARs are to be waived for an indefinite period and then when any further remediation occurs, these will be evaluated at points of compliance (POCs). As we have pointed out earlier in these comments, those POCs are at the standard or criteria levels, not background. In addition, this will allow those criteria to be exceeded in the region upgradient of the POC which can be many miles and with MNA, this process can proceed indefinitely. We have seen estimates of hundreds of years for other mines such as Rasmussen Valley. We know from our reviews of these other mine EIS that cutthroat trout in the Blackfoot River system are declining with some streams lacking reports of their presence in recent years and with levels of selenium greatly exceeding levels that allow reproduction. It is not documented what the combined effects of the entire suite of metals, non-metals and radiological isotopes released in this Blackfoot watershed are on cutthroat trout and other species, especially when combined with the effects of the other environmentally degrading activities such as roads, livestock grazing and timber harvest.	Evaluation of the entire Blackfoot River watershed is outside the site boundaries of the NMM EMDSOU site. While background levels can be an important consideration at a CERCLA site, selection of a CERCLA remedy is based upon evaluation criteria in the NCP, as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
46	Y2U	Protections include Institutional Controls which basically prohibits access over an area considered to be contaminated to some modeled risk level. For this Proposed Plan that is unknown. For the entire NMM the extent of contamination is unknown, therefore a wide area of water, soil, vegetation, and wildlife contamination could exist. Then combine this with the other mines. Is the entirety of SE Idaho to become off-limits as mine after mine continues to be approved in the face of this overwhelming evidence of contamination and failures of BMPs and EPMs, and even remediation, to control the contamination?	This proposed plan only considers NMM EMDSOU with known contamination for water, soil, vegetation, and wildlife. Consideration of impacts from other sites is outside the scope of the NMM EMDSOU Proposed Plan.

47	Y2U	<p>Then we come to the issue of stability of the Proposed Remedy. As described in the Plan, erosion is to be minimized. The Plan (p10) notes that sloughing of the waste material into the open pit can occur. Even if moved away from the open pit, the EMD remains in a hilltop or ridge position and as we have pointed out in our referenced comments above, SE Idaho is in a seismically active area. This has not been analyzed and the Plan (p10) indicates that "it may be necessary to move overburden away from the rim of the open pit to address highwall stability issues. •Collection of additional geotechnical stability data in support of the remedial design may be necessary and would be undertaken in conjunction with pre-design data collection activities. Details for any potential reconfigured rim and associated grading and/or removal of overburden, as well as any necessary road reconstruction or repair, will be developed in the remedial design." This implies many years and a speculated scenario that might or might not occur at just one of 13 subunits at NMM. In the meantime, COPCs will continue to be released and habitat lost.</p>	<p>Geotechnical investigations and slope stability investigations will be conducted as part of the remedial design for the selected NMM EMDSOU remedy.</p>
48	Y2U	<p>Monitored Natural Attenuation is another problem. Despite the Tribes' dedication to no contamination as suggested in the PAS, and the CTNF RFP objectives cited, we have ongoing contamination with no end in sight. As we write these comments other mines such as Husky are undergoing environmental analysis as if all this past contamination is somehow not expected or never occurred and once again, promises of BMPs, EPMs and flawed models will be used to explain away the problems.</p> <p>EPA published guidance on MNA in April 1999, "Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites". A look at that guidance document is instructive. In the Purpose, EPA states, "EPA remains fully committed to its goals of protecting human health and the environment by remediating contaminated soils, restoring contaminated groundwaters to their beneficial uses, preventing migration of contaminant plumes, and protecting groundwaters and other environmental resources." EPA goes on to qualify the use of MNA as to whether it is the most "appropriate" technology; will meet site remediation objectives within a timeframe that, "is reasonable compared to that offered by other methods"; incorporate "contingency measures" into the remedy; and "EPA expects that source control and long-term performance monitoring will be fundamental components of any MNA remedy."</p>	<p>The preferred remedy (Alternative 7) is a long-term source control measure that meets the EPA guidance for use of monitored natural attenuation (MNA).</p>
49	Y2U	<p>In the Background section, EPA states, "When relying on natural attenuation processes for site remediation, EPA prefers those processes that degrade or destroy contaminants. Also, EPA generally expects that MNA will only be appropriate for sites that have a low potential for contaminant migration." In the first statement, we have seen that a cover and limiting infiltration is the principal mechanism at work to control and retain pollutants in the Source Area indefinitely, but it will continue to allow contaminant migration - recall the 5 pounds of selenium per day. The contaminants will not be destroyed. Regarding the second statement, NMM has extreme topographic relief with its Source Areas</p>	<p>Contaminant migration at NMM EMDSOU is proportional to the amount of infiltration. Therefore, if infiltration is prevented, migration will be eliminated as well. As stated in comment 47 geotechnical investigations will be conducted to ensure the stability of the dump and its remedy prior to construction.</p>



50	Y2U	<p>on top of the ridge. The potential for migration to Non-Source Areas is great and as we have seen, continues despite any (not known) remedial or control measures taken to date.</p> <p>The Directive discusses MNA applied to inorganics as well. Since the Proposed Plan Preferred Alternative is to leave the current contamination in place where it will gradually leak outward and downward across the region, it is important to see what EPA has to say. "Changes in a contaminant's concentration, pH, redox potential, and chemical speciation may reduce a contaminant's stability at a site and release it into the environment. Determining the existence, and demonstrating the irreversibility, of these mechanisms is important to show that a MNA remedy is sufficiently protective." EPA further summarizes by saying, "Therefore, natural attenuation of inorganic contaminants is most applicable to sites where immobilization or radioactive decay is demonstrated to be in effect and the process/mechanism is irreversible.</p> <p>If the Forest Service and Nu-West determine to leave in place the COPCs they have the burden of showing that the COPCs currently at and surrounding the site will remain there and not, through physical, chemical, or biological means, migrate further, change states, or become accessible for human or animal consumption or exposure. On this steep slope, which has stability and seismic risks, where animals or insects, or plant roots can access the contaminated material there can be no assurance the Preferred Alternative will provide long term protection and as we point out, it is a leaky system by design.</p>	<p>After the remedy is constructed, an Operations and Maintenance Plan will be produced that will ensure the remedy operates as designed for the life of the remedy. Further, per CERCLA, the remedy will be reviewed every five years to ensure the remedy operates as designed. Should the remedy fail to meet the cleanup goals, then action(s) will be taken to bring the remedy into compliance.</p>
51	Y2U	<p>Based on the magnitude of the problem, i.e. the legacy these phosphate mines are leaving, the only appropriate alternative is to remove the contaminated materials in efforts similar to that which occurred in other places, such as the Atlas Uranium Mill in Moab, Utah. While expensive, it must be balanced against the centuries long or longer time until MNA documents contamination has returned to background levels, not just ARARs which can exceed toxic and chronic thresholds for people, fish and other wildlife, vegetation, insects, and microorganisms. Much of this is not addressed in the Proposed Plan.</p>	<p>Removal of the entire dump was considered in Alternative 8.</p>
52	Y2U	<p>Why has this happened? The NMM has been around since the early 1960's, but as the PAS describes has gone thru several active phases up until 1993 when the final ore was removed. Environmental laws such as the Federal Water Pollution Control Act (1948 and 1972), Clean Water Act (1972), Multiple Use and Sustained Yield Act (1960), National Forest Management Act (1976), Federal Land Policy and Management Act (1976), Comprehensive Environmental Response, Compensation, and Liability Act (1980) have been in place during this process. Either the Acts themselves are inadequate, or the agencies tasked with implementing these laws have failed to implement their intent such as in the case of the SE Idaho phosphate industry.</p> <p>Costs of remediation of NMM are raised as a concern, but there is no analysis of the costs of lost ecosystem values, polluted water, wildlife, and human health</p>	<p>Analysis and cost of lost ecosystem values is being investigated under the Natural Resource Damage and Restoration (NRD) effort conducted by the Trustees.</p>

		effects. It is especially troubling that the CTNF and BLM continue to approve these mines in an area deemed a Superfund Site subject to Natural Resource Damages from past and/or ongoing mining pollution. In past comments we have questioned whether the economic benefit outweighs the environmental costs of mining phosphate in this region. According to the recent Smoky Canyon DEIS, this region produces 15% of the phosphate rock in the US while Florida and North Carolina produce 85%. There is no evaluation of the value of the Public Lands to present and future generations for its inherent benefits of water supply, fish and wildlife and recreation. The American People are left with a permanent burden of water pollution, degraded water supplies, polluted and destroyed fish and wildlife habitat, reduced productivity of ecosystems, and reduced or eliminated species.		
53	Y2U	Groundwater impacts are minimally described at best. Models used depend on numerous parameters, each of which has a wide range of variability. Cover systems and reclamation are described, but no test plot data for revegetation, lysimeter tests for leachates have been provided, or perhaps they have not been conducted. We conclude that these mining projects are an experiment but with universal outcomes of destroyed habitat and polluted environments.	Groundwater impacts are fully described in the NMM EMDSOU RI/FFS. AS stated in the Proposed Plan, the SMCN CVF with a similar remedy has achieved a 95% reduction in selenium concentrations in surface water and groundwater.	
54	Y2U	That the Smoky Canyon mine became a Superfund Site discredits the permitting and analysis process. What models and BMPs were used? What did they predict? What was or were the outcomes? How can the public be assured that Dairy Syncline, Caldwell, Husky, or other mines undergoing NEPA review or recently permitted will not suffer the same or similar outcome, leaving the public burdened with cleanup, restoration, and loss of public resources for many generations, effectively permanently? Reclamation Bonds appear to be only for reclamation. When does it expire? What tools or resources are available to correct ongoing pollution and habitat loss extending past the Mine life or past the Bonding period?	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances or pollutants or contaminants which may present an imminent and substantial danger. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations.	
55	Y2U	"Develops and uses scientifically credible strategies for the protection of species and ecosystems." (p1-2). Migration corridors, linkages, peripheral habitat were not analyzed.	Evaluation of Migration Corridors, linkages, and peripheral habitat are outside the site boundaries of NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RI/FFS).	
56	Y2U	"Monitoring and evaluation is an essential feature of the Plan." (p1-4). No Forest Service monitoring of DFC, habitat and populations presented.	As stated in the Proposed Plan, an evaluation of risk to the was conducted during the NMM EMDSOU SLERA as required by CERCLA. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service	

			<p>CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).</p> <p>Wildlife population monitoring is not required under a SLERA. Sufficient risks were identified under the SLERA for NMM EMDSOU to document adverse risk to wildlife and identify a preferred remedial action at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).</p> <p>Habitat structure and ecological restoration are conducted under the NRDAR process Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).</p> <p>Aquatic habitat downstream from NMM EMDSOU is outside the site boundaries and was not analyzed under CERCLA. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).</p> <p>Habitat structure and ecological restoration are conducted under the NRDAR process. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).</p>
57	Y2U	<p>"The NPMA diversity provision and the fish and wildlife resource regulation establish a goal to provide habitat for the continued existence of vertebrate species in the planning area. The goal is met by following the provisions of 36 CFR 219.19(a)(1) through (a)(7). The bottom line is that the Forest Service may not adopt a plan that it knows or believes would, through possible future Forest Service actions, extirpate a vertebrate species from the planning area." (p1-4). The destruction of habitat from mining, roads and other activities is effectively extirpating most species from the mine footprint and project areas during mining and for some species, permanently. There was no analysis of population data from Forest Service monitoring of population trends and no analysis of project and cumulative effects on habitats and species other than broad general assertions.</p> <p>"Watershed protection and ecological restoration have been given a high priority in the Forest Service in decision-making processes, including budget and program planning, land management planning, project implementation, and watershed assessments for forest and interagency plans." (p2-1). Other than reclamation of the mine footprint to some early seral plant community, habitat structure and ecological restoration were not addressed.</p>	
58	Y2U		
59	Y2U	<p>"New scientific information indicates that 60 percent of the healthiest aquatic habitats occur in roadless or very low road density areas on federal land, specifically in the Columbia River Basin (ICBEMP, 2000)." (p2-2). Our analysis for Dairy Syncline showed the HBIRA in already degraded condition with the project eliminating all security habitat. What is the status or IRAs and security habitat in the area affected by NMM. This has not been analyzed.</p>	
60	Y2U	<p>Only 10% of watersheds are in good condition, 80% need restoration and improvement. Only about 30% of riparian areas are in pfc. (p2-3). Aspen are in a high departure from HRV and a 40% decline in aspen acres on the Forest. (p2-4). Sagebrush habitats have more bare ground and suffer increasing soil loss. (p2-5). In comments on other mines, we have recommended the steps needed to analyze, document and restore habitat. Clearly at NMM these are non-existent and there is no intent to restore or improve habitats as the intent of the regulations, Forest Plan and other rules provide.</p>	

61	Y2U	"Due to changes in and loss of historic habitat, big game animals are pioneering new winter ranges on and adjacent to the Forest. The most recent impact is urban residential development on historic winter ranges." (p2-6). Winter range is not analyzed, but clearly could not exist under the Proposed Plan.	Big Game animals were included in the SLERA for NMM EMDSOU. This includes the overall anticipated range of big game animals present at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
62	Y2U	"The Revised Forest Plan addresses minerals operations, reclamation and hazardous substance management by requiring the mine operators to use the most current science and research as it becomes available." (p2-11). We saw no studies of successful reclamation or covers, no data from other projects in the mining area to validate the practices proposed. This also applies to BMPs or EMPs. How are we left with this massive contaminated landscape if these supposed protections were adequate?	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
63	Y2U	"In six of the seven ecological subsections on the Forest, Yellowstone and Bonneville cutthroat trout stronghold restoration and protection will be emphasized." (p2-12). We see no restoration effort to restore flows and habitat. Restoration mechanisms and locations should have been identified and proposed as part of the Proposed Plan.	The NMM EMDSOU remedy includes construction of a sediment control structure to ensure contaminants and erosional material does not impact downstream aquatic species and habitat. Restoration of downstream locations is outside the NMM EMDSOU site boundaries. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
64	Y2U	"The National Forest Management Act (NFMA) regulations require National Forests to provide habitat in order 'to maintain viable populations of existing native and desired non-native vertebrate species in the planning area.'" (p2-13). There was no population analysis for species at risk, nor was the habitat fragmentation affecting big game, sage grouse, lynx, wolverine, and raptors such as Northern goshawk analyzed.	Population monitoring is not required under a SLERA. Sufficient risks were identified under the SLERA for NMM EMDSOU to document adverse risk to wildlife and identify a preferred remedial action at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).



65	Y2U	"The Plan addresses big game issues important to the Idaho Department of Fish and Game by designating winter ranges and prescription areas which emphasize big game security. It will maintain habitat for threatened, endangered, and sensitive species, where they exist." (p2-13). There was no analysis of the current state of wildlife habitat, connectivity and security areas.	Wildlife habitat, connectivity, and security analysis are not required under a (SLERA). Sufficient risks were identified under the SLERA for NMM EMDSOU to document adverse risk to wildlife and identify a preferred remedial action at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
66	Y2U	DFCs and Vision for the CNF: "Landscapes display a balance of physical landscape components, including upland terrestrial habitats, riparian areas, wetlands, and clean water. Both aquatic and terrestrial habitats are becoming less fragmented and more connected." (p3-2). Once again there was no analysis showing that habitats are becoming less, not more, fragmented and water quality is definitely not "clean" per the intent of the CWA.	Habitat fragmentation analysis is not required under a SLERA. Surface water and groundwater were included in the SLERA. Sufficient risks were identified under the SLERA for NMM EMDSOU to document adverse risk to wildlife and identify a preferred remedial action at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
67	Y2U	"Within 10 years of signing of the Record of Decision (ROD), reassess composition and structure and other indicators used in the Caribou Sub-regional Properly Functioning Condition Assessment. This should include the Caribou and adjacent areas to determine changes achieved." (p3-3). No information on PFC of the habitats pre-mining, in adjacent areas, and the currently disturbed area was provided.	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
68	Y2U	"Soil quality, productivity, and hydrologic function are maintained and restored where needed. Long term soil productivity is sustained and meets future land needs. Soils have adequate protective cover, adequate levels of soil organic matter (litter), and coarse woody material. Physical, chemical and biological processes in most soils function to sustain the site. Microbiotic crusts and their importance to soil stability are recognized. Management practices are designed to retain these soil components." (p3-5). There was nothing in the Proposed Plan describing how these processes and components are to be restored.	This will be addressed during the remedial design for the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).

69	Y2U	"Long-term soil productivity is sustained by limiting detrimental soil disturbances and by retaining ground cover, microbial crusts, fine organic matter and, where applicable, woody residue on activity areas." (p3-6). All woody residue was lost from the forested and shrub habitats, and soil organic matter, microbes were disrupted by excavation, storage and mixing. This was not addressed in the Proposed Plan.	This will be addressed during the remedial design for the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
70	Y2U	"For ground-disturbing activities where detrimental soil disturbances (defined in FSH 2509.18) occur on areas of 10 acres or greater, plan and implement rehabilitation to meet desired future conditions." (p3-6). The Proposed Plan did not address DFC for the disturbed areas.	This will be addressed during the remedial design of the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
71	Y2U	"Detrimental soil disturbance such as compaction, erosion, puddling, displacement, and severely burned soils caused by management practices should be limited or mitigated to meet long-term soil productivity goals." (p3-6). No data or research was provided to demonstrate that reclaimed areas will meet this.	This will be addressed during the remedial design phase for of the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
72	Y2U	"Sustain site productivity by providing the following minimum amounts of woody residue =3 inches in diameter dispersed on the site as outlined in Table 3.1." (p3-7). Reclamation description did not provide for woody residue.	This will be addressed during the remedial design phase of the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
73	Y2U	"Adequate bonds or other security instruments shall be required for special use authorizations if it is determined that the use has potential for disturbance that may require rehabilitation or when needed to ensure other performance." (p3-10). Only a reclamation bond for the mine footprint was provided. No information was provided to indicate that the bone will ensure that long term damage is corrected or habitats restored.	Financial assurance under CERCLA will be provided by the mining company for the remedial action. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria

74	Y2U	<p>"Mineral resources are available for development, consistent with other resource uses. Paleontological resources are properly managed to provide for preservation and use of these resources for current and future generations. Drastically disturbed sites are reclaimed so that natural recovery to pre-disturbed conditions is most likely. Reclamation emphasizes: 1) suitable topsoil preservation; 2) use of native plant species; and 3) stabilizing lands to a topographic relief (landform) that conforms to natural surroundings. Drastically disturbed lands are reclaimed to prescribed post-disturbance land uses as soon after disturbance as is practical. On mined lands and other drastically disturbed lands, maintain or reestablish hydrologic function, integrity, quality and other surface resource values within the capability of affected lands. Provide for mineral resource development using state of the art practices for surface resource protection and reclamation, and with consideration of social and economic resources. Mining activities are administered to prevent the release of hazardous substances in excess of established state and/or federal standards. Reclamation is designed to eliminate or minimize wildlife, livestock, and/or human exposure to hazardous substances." (p3-11). These provisions were not addressed in the Proposed Plan. The topography appears to be permanently altered with an unnatural relief, a huge open pit and no forested habitats provided. There was no evidence provided or studies from reclaimed areas in the phosphate mining area to show the success of reclaiming these areas, the plant communities developed over time, the status of COPCs in soils and vegetation. The Proposed Plan did not address restoration of hydrologic function, particularly for streams and springs and their associated riparian or wetland areas.</p>	<p>in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS). Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).</p>
75	Y2U	<p>"Conduct annual reviews of Best Management Practices (BMPs) and make appropriate adjustments to ensure that hazardous substance releases do not exceed state and/or federal standards." (p3-12). There was no summary of these reviews or any studies documenting the effectiveness of BMPs or EPMs. Clearly, given the status of pollution described in the Proposed Plan, they were not effective.</p>	<p>Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).</p>
76	Y2U	<p>"Lessee/ operator shall conduct pre-mining, concurrent, and/or post-mining water quality and aquatic habitat monitoring (both surface and groundwater) on all phosphate-mining sites where bond release has not occurred, using most current sampling procedures and protocols." (p3-12). There was no reporting of this monitoring data in the Proposed Plan.</p>	<p>Water quality monitoring has been conducted at NMM EMDSOU since 2009. Water quality monitoring will be conducted at NMM EMDSOU post construction to ensure the remedy operates as designed. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities.</p>

		As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
77	Y2U	<p>"Best Management Practices shall continue to be developed, refined and implemented to ensure that no release of hazardous substances into the environment exceeding established state and/or federal standards occurs." (p3-12). We have commented in detail on the past failures of covers and BMPs. The existence of COPC contamination at Smoky Canyon Mine and the other mines indicates the technology and models are still experimental and cannot be relied upon.</p>
78	Y2U	<p>"When surface disturbing activities are proposed within geologic units having a moderate or high potential for the occurrence of vertebrate fossils (other than fish or sharks), a field survey of the area shall be made prior to, and if possible, during the proposed activities." (p3-12). We did not find any reference to this in the Proposed Plan.</p>
79	Y2U	<p>"Reclamation vegetation shall be monitored for bio-accumulation of hazardous substances prior to release for multiple use management." (p3-13). We have seen no studies or summaries of past projects reclamation or affected areas other than the summary in the PAS. Are mining companies collecting data on reclamation areas and soils adjacent to the mine footprint and haul roads to ascertain the concentration of COPCs in soils and vegetation? We can't tell from the Proposed Plan what, if any, monitoring was done at NMM.</p>
80	Y2U	<p>"The lessee/operator shall monitor reclamation work annually and report to the Forest Service until reclamation is accepted and the bond released." (p3-13). According to the PAS, some reclamation covers remains very sparse with high concentrations in soil and vegetation.</p>



81	Y2U	"Loss of available surface water sources for uses such as wildlife or grazing, as a consequence of mining operations shall be replaced or mitigated by the mine operator. This includes the loss of water quality sufficient to maintain post-mining uses." (p3-13). No mitigation was described for loss of these nor any monitoring and mitigation plan for post mining water quality, spring and stream restoration.	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
82	Y2U	"Ground cover should be assessed prior to release of the reclamation bond to assure: 1) minimum ground cover exists to attain long-term soil productivity requirements; 2) ground cover should persist at minimum cover needs without artificial assistance (e.g. watering, fertilizers, etc.); and 3) meet or trend towards post-mining land use goals." (p3-14). Same comments as above. No reported data for the various mines showing the status of revegetation.	Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
83	Y2U	"In reclaimed areas, vegetation should include species that meet wildlife habitat needs. Wildlife structures (slash piles, logs, rock piles) using native vegetation and materials are designed to provide cover for wildlife movements in created openings." (p3-14). No provision for these features were seen in the Proposed Plan reclamation description.	This will be addressed during the remedial design for the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
84	Y2U	"Watersheds provide infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform. Watersheds provide a well-distributed pattern of nutrients and energy as well as diverse age-classes of vegetation that contribute to watershed health. Restoration strategies promote recovery of watershed, riparian, water quality and aquatic conditions characteristic of the geoclimatic setting." (p3-15). No restoration strategy was described to restore these structural and functional characteristics.	Watershed restoration is outside the site boundaries of NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
85	Y2U	"Each year, complete at least one Watershed Assessment for a 5th HUC watershed. Incorporate Hydrologic Condition Inventories using A Framework for Analyzing the Hydrologic Condition of Watersheds or current equivalent Regional or National guidance." (p3-16). Nothing was provided in the Proposed	Watershed Assessment for a 5 <sup>th</sup> HUC is outside the site boundaries of NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).

		Plan regarding watershed functions and hydrologic alteration of stream flows, spring flows, groundwater.	investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
86	Y2U	"Not more than 30 percent of any of the principal watershed and/or their subwatersheds (6 <sup>th</sup> HUC) should be in a hydrologically disturbed condition at any one time." Note hydrologically disturbed applies to changes in natural canopy, surface soil characteristics that may alter natural streamflow quantities and character. (p3-16).	Watershed restoration is outside the site boundaries of NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
87	Y2U	"Proposed actions analyzed under NEPA should adhere to the State Nonpoint Source Management Plan to best achieve consistency with both Sections 313 and 319 of the Federal Water Pollution Control Act." (p3-16). IDAPA provides for practices such as livestock exclusion and buffer zones for riparian areas to address sediment and e. coli pollution. There was no plan to relieve stress on the streams and springs in the project area (undefined) by reducing livestock impacts, water diversions and other measures to restore water quality and stream flows.	Livestock grazing at NMM EMDSOU is already curtailed to protect human health and the environment. This will continue post construction to protect the integrity of the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
88	Y2U	"Diverse forested and non-forested ecosystems are maintained within their historic range of variability and/or restored through time with emphasis on aspen, aspen-conifer, mixed conifer, big sagebrush, mountain brush and tall forbs." (p3-17). Reclaimed ODAs and mine pit do not provide this HRV.	A USFS approved seed mix will be part of the remedial design for the NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
89	Y2U	"In each 5th code HUC which has the ecological capability to produce forested vegetation, the combination of mature and old age classes (including old growth) shall be at least 20 percent of the forested acres. At least 15 percent of all the forested acres in the HUC are to meet or be actively managed to attain old growth characteristics." (p3-19). There was no discussion or analysis of the current state of forested vegetation, the amount removed, the percentage of mature and old age classes to compare with this criterion.	Assessment for a 5th HUC is outside the site boundaries of NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).

90	Y2U	"Maintain the dead and down woody material guidelines for wildlife. (See Wildlife Standards and Guidelines for Dead and Down material)." (p3-19). No mention of how this is to be achieved in the reclamation plan or in areas inside and outside the mine footprint in the Project Area.	This will be addressed during the remedial design for the remedy for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
91	Y2U	"The Forest provides habitat that contributes to state wildlife management plans. Forest management contributes to the recovery of federally listed threatened, endangered, and proposed species and provides for conditions, which help preclude sensitive species from being proposed for federal listing." (p3-24). In our comments on various mines and other Forest projects, we have discussed the displacement of wildlife and fragmentation of habitats, loss of security areas and blocking of migration corridors for lynx and other species by roads, mines, transmission lines. Part of reclamation should be restoring these functions for special status species. This is not addressed in the Proposed Plan.	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. The proposed remedy will improve aquatic habitat by reducing metals contamination by up to 95%. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
92	Y2U	"Maintain, and where necessary and feasible, provide for habitat connectivity across forested and non-forested landscapes." (p3-24). Nothing was provided in the Proposed Plan to mitigate fragmentation or restore connectivity.	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
93	Y2U	Wolverine Habitat: "Within two years of signing the ROD, complete a GIS analysis to identify potential wolverine natal den sites. Within four years of the ROD, survey potential wolverine natal den sites to document wolverine presence and assess suitability as natal denning habitat." (p3-24). The FEIS for the Caribou NF RFP provided information on wolverines, but there was no mention of these studies and potential wolverine habitat in the Proposed Plan.	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under

94	Y2U	Canada Lynx Habitat: "Within three years of signing the ROD, complete surveys on the Soda Springs and Montpelier Ranger Districts." (p3-24). No evidence in the Proposed Plan that effects of the NMM and reclamation plan on lynx were considered.	CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS). Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
95	Y2U	Sage Grouse: "Within five years of signing the ROD, map functional and degraded sage grouse nesting and winter habitat within 5 miles of known leks. Identify opportunities to increase quality or quantity of that habitat." (p3-25). Was this done for the NMM? What leks were in the area and what is there status today. How will reclamation restore sage and sharptail grouse habitat?	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
96	Y2U	Migratory Landbirds: "Within five years of signing the ROD, establish breeding bird trend plots to monitor changes in breeding birds in relation to structure or shrub riparian habitats. Once established, reread plots every three years." (p3-25). There was no discussion of these trend plots and the resulting data if they were ever established and monitored, how the NMM affected these birds and how the Proposed Plan will restore their habitat.	A Screening Level Ecological Risk Assessment (SLERA) was conducted to ascertain contaminant risks to birds at the Site. This document contains what species were evaluated and their resultant risks at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
97	Y2U	Amphibians: Repeat amphibian surveys at 10 year intervals to determine habitat and population trends." Survey potential habitat. (p3-25). The Proposed Plan mentioned amphibians in the Sediment Pond, but there was nothing about the effects on their natural habitat or the chemical effects on potential populations, or restoring their habitats.	A SLERA was conducted to ascertain contaminant risks to representative animals present at NMM EMDSOU. The SLERA document contains what species were evaluated and their resultant risks at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be



98	Y2U	In project analyses affecting grassland, sagebrush, mature and old forest habitats, assess impacts to habitat and populations for MIS Columbian sharp-tailed grouse, sage grouse and northern goshawk. (p3-25). No data provided for the cover and vegetation community characteristics needed for these MIS. No population trends provided. No information on the status of their habitats and populations pre-mining and how the Proposed Plan will restore their habitats.	investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).  A SLERA was conducted to ascertain contaminant risks to representative animals present at NMM EMDSOU. Population risks were not evaluated in the SLERA for NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
99	Y2U	Snag/cavity nesting habitat not characterized. Table 3.3 lists biological potentials by forested vegetation type. (p3-28). There was no analysis of these characteristics and how reclamation will restore this habitat feature.	A SLERA was conducted to ascertain contaminant risks to representative animals present at NMM EMDSOU. Habitat assessment is not part of the SLERA. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
100	Y2U	"Management direction which will maintain linkages for Canada lynx on the Forest is located in the following places: Vegetation Desired Future Conditions; Vegetation Goals 1-4; Vegetation Standard 2; Wildlife Goals 2, 3, and 5; Vegetation Goal 7; Lands Objective 1; and Lands Standard 1." (p3-28). There was no analysis of the status of these attributes or measures needed to maintain or restore the linkages.	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
101	Y2U	Northern goshawk standards and guidelines are provided in Table 3.5. "Open roads in goshawk territories shall be given priority for closure to meet management prescription road density standards. First priority shall be to close roads in nest areas; second priority in post-fledging family areas; third priority in foraging areas. Where possible, open road density should be zero in the nest areas and the post-fledging family areas." (p3-30). Road density was not addressed,	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan

		goshawk home ranges were not mapped and analyzed for the habitat characteristics, security and road densities in the Project Area, what habitats were destroyed by mining and how these will be restored.	specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
102	Y2U	Habitat guidelines for Flammulated, Boreal and Great Gray owls include limiting timber harvest and maintaining mature and old forest age classes. (p3-31). Same comment as above for goshawk.	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
103	Y2U	Big game guidelines provide for buffers for sight distance around big game concentration areas and provide for security or travel corridors near created opening. (p3-31). These were not identified by location and there was no mapping or analysis of travel corridors functionality pre-mining and how they will be restored.	A SLERA was conducted to ascertain contaminant risks to representative animals present at NMM EMDSOU.  Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
104	Y2U	For Sage grouse, "Management activities should consider proximity to active lek locations during site-specific project planning. Those within 10 miles of an active sage grouse lek and 2 miles of active sharp-tailed grouse leks should be considered further for suitability as grouse habitat." (p3-32). The Proposed Plan did not provide data or analysis of the current condition of habitats for sage grouse within 10 miles of the NMM and its Project Area.	Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).

105	Y2U	Amphibian guidelines include "Maintain amphibian habitats when developing and modifying springs and wetlands." (p3-32). Habitats were be reduced or destroyed at the NMM. The Proposed Plan did not discuss restoring or mitigating these habitats.	As stated in the RI/FFS no wetland habitats were noted within the NMM EMDSOU site boundary. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
106	Y2U	Landbird guidelines include: "Stands of mature trees (including snags and dead-topped trees) should be maintained next to wet meadows. Where feasible, maintain 30 to 50 percent of the sagebrush habitat in a 5th code HUC in contiguous blocks greater than 320 acres to support sagebrush obligate species. (Page and Ritter, 1999). Practices which stabilize or increase native grass and forbs cover in sagebrush habitats with 5% to 25% sagebrush canopy cover should be implemented. (Page and Ritter, 1999). In sagebrush habitats, manage herbaceous cover to conceal nests through the first incubation period for ground and low shrub-nesting birds. It is assumed that proper use of rest-rotation or deferred-rotation grazing should meet these conditions, although not every year on every area (Idaho Partners in Flight 2000)." (p3-33). These attributes, their condition pre-mining and current status. Their management and restoration were not addressed.	A Screening Level Ecological Risk Assessment (SLERA) was conducted to ascertain contaminant risks to representative animals present at NMM EMDSOU. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
107	Y2U	Transportation goals, standards, guidelines and objectives include: "Roads and trails not needed for long-term objectives are decommissioned, stabilized, and restored to a more natural state. Within three years of signing the ROD, initiate site-specific travel planning to incorporate Revised Forest Plan direction on access management. Roads identified as unneeded in a roads analysis should be decommissioned, stabilized and returned to production." (p3-36). This was not addressed. All temporary and illegal roads and trails should be mapped and, as we suggest, the mining companies could do this as a mitigation.	The BLM is the Agency that ascertains the adequacy of previous decisions and effectiveness of actions taken in connection with mining at NMM EMDSOU.  Site investigations under CERCLA evaluate current site conditions for the release or threat of release of hazardous substances. It is not necessary to consider the status of mining reclamation or past NEPA analyses in these evaluations. Comments 55 through 107 cite to or refer to the Revised Forest Plan for the Caribou National Forest. The Revised Forest Plan specifically states that previously mined areas will be investigated and evaluated pursuant to the NCP and addressed using Forest Service CERCLA authorities. As noted above, selection of a remedy under CERCLA is based on the alternatives evaluation criteria in the NCP as explained in the Proposed Plan and the NMM EMDSOU Remedial Investigation/Focused Feasibility Study (RIFFS).
108	Y2U	A review of the April 2012 Record of Decision and Pocatello Field Office Approved Resource Management Plan provides a picture of management that states, through its Planning Criteria, Goals, Objectives and Actions, an intent to provide for wildlife and watershed values, and native American values. Our reviews of the EIS for the Caldwell Canyon Mine, Dairy Syncline Mine, Smoky Canyon Mine, Rasmussen Valley Mine and their Reclamation Plans present a very different picture. It is a picture of a single use, phosphate mining, that	Comments 108 and 109 cite to or refer to the BLM approved resource management plan (ARMP). The ARMP is developed by BLM to guide management of those lands and mineral interests administered by BLM and under its jurisdiction. The ARMP does not apply to Forest Service response actions taken under CERCLA.



	<p>literally bulldozes all other considerations aside and is given priority over all other uses. Despite the length of these EIS, and the numerous technical reports referenced, we cannot say that the multiple use values espoused by FLPMA (or NFMA for that matter) are supported. Nor can we say that the intent of the ARMP is carried out. In the following paragraphs we summarize some, but not all, of the provisions of the ARMP that are not met in the Proposed Plan. We have not commented on them individually, but the Proposed Plan must meet the intent of the ARMP. ARMP Selected Planning Criteria (ARMP Table 5)</p> <ul style="list-style-type: none"><li>• The principles of multiple use and sustained yield, as set forth in FLPMA, will be applied in the RMP.</li><li>• Recognize Idaho Non-Point Source Management Program Plans and relevant state water quality standards.</li><li>• Maintain, improve, or restore natural functions to benefit water storage, groundwater recharge, water quality, and fish and wildlife values.</li><li>• Provide for multiple use and sustained yield of forage for wildlife and domestic livestock. In consultation with the Idaho Department of Fish and Game (IDFG), ensure that wildlife habitat is sustained.</li><li>• Incorporate management actions that do not jeopardize the continued existence of federally listed threatened or endangered plant or animal species or that result in the destruction or modification of critical habitat.</li><li>• Incorporate management actions that protect sensitive species and do not contribute to the listing of species proposed for federal listing (candidate species).</li><li>• Protect and maintain the intrinsic and recreational values associated with native and appropriate nonnative species.</li><li>• Protect critical deer and elk winter range and big game habitat.</li><li>• Consider need to minimize harassment of wildlife or significant disruption of wildlife habitats.</li><li>• Identify areas that are managed specifically to protect nonmineral resource values but may conflict with mineral resource development.</li><li>• Manage to retain values that make cultural resources and areas significant to tribal members. Protect cultural use areas, in cooperation with tribal governments. Recognize Fort Bridger Treaty rights with all associated management activities and uses.</li></ul> <p>The ARMP (p10) notes that BLM planning regulations require its plans to be consistent with those adopted by other federal, state, local and tribal governments. The 2003 Caribou National Forest Revised Forest Plan and EIS was among those listed.</p>			
109	Y2U	<p>The ARMP includes Goals, Objectives and Management Actions. These bullets below reflect these.</p> <ul style="list-style-type: none"><li>• GE-1 use inventories and surveys to document the condition and extent of resources/uses to monitor and respond to changes in conditions. Mitigate potential adverse effects.</li></ul>		<p>As stated earlier the proposed remedy is anticipated to achieve a 95% reduction in contamination flowing into E Mill Creek. As stated in the Proposed Plan, a final remedy will be selected that will address any remaining contamination in East Mill Creek. Other NMM Operable Units are outside the scope of the NMM EMDSOU Proposed Plan. Water quality monitoring (surface water and groundwater) has been ongoing at NMM EMDSOU since 2009. Surface Water storage, recharge will be considered during remedial design. Water quality monitoring will continue to monitor the effectiveness of the remedy into the future. A native vegetation seed mix will be approved for use in revegetation of the NMM EMDSOU remedy and prevent erosion. The exact mix and use of wildlife structures will be evaluated and approved during the design of the NMM EMDSOU remedy. Based on communication with the USFWS and the Idaho Department of Fish and Game (for state-listed species) and site-specific assessment of potential habitat, no state or federally listed Threatened or Endangered species are expected to occur at or in association with the EMDSOU. Wildlife and nesting bird surveys will be completed as part of design to ensure that wildlife is not taken or harassed as part of construction. As part of design a cultural survey will be completed for all proposed disturbed areas to ensure that cultural resources are identified and preserved (if any).</p>

		<ul style="list-style-type: none"> <li>• GE-2 consistent with multiple use and sustained yield, achieve desired conditions while providing an ecologically healthy environment. Reduce impacts from management actions and maintain or improve resource conditions.</li> <li>• GE-3 provide proper nutrient cycling, hydrological cycling, restore or improve public lands adversely affected by major surface disturbance. Employ Idaho Standards for Rangeland Health (1997) to determine success of reclamation, rehabilitation, or restoration activities.</li> <li>• CR-1 ensure scientific and socio-cultural values are maintained and available for appropriate uses by present and future generations. Traditional uses have long term preservation.</li> <li>• TR-1 maintain traditional/cultural use values and the health of land and water resources so treaty rights and interests can be fulfilled.</li> <li>• SW-1 provide for soil quality, productivity and hydrological function within naturally sustainable limits.</li> <li>• SW-2 manage activities to maintain or contribute to the long-term improvement of surface and ground water quality; prioritize stream management and restoration by presence of sensitive species, amount of stream on BLM lands, condition and importance for achieving multiple use objectives.</li> <li>• VE-1 mitigation measures to reduce visual contrasts with rehabilitation/restoration areas</li> <li>• VE-4 maintain or increase Land Health Condition-A acres; prioritize treatment and restoration in Greater sage- and Columbian sharp-tailed grouse Source and Key habitat. habitats for conservation and recovery of special status species; in aspen/aspen conifer and dry conifer types maintain or increase LHC-A and B acres.</li> <li>• FW-1 manage habitats for vegetation composition and structure assures continued presence of fish and wildlife as part of an ecologically healthy system; manage riparian areas for habitat and population linkage, restore degraded riparian areas, use seasonal restrictions for winter range, fawning and calving habitats, during planning reduce number of designated routes/roads in big game habitats; manage livestock season of use, stocking rates to provide sufficient shrub forage for wildlife. Big game winter range shown in Figure 2.</li> <li>• FW-2 maintain connectivity among habitats, use opportunities to improve habitat connectivity and reduce fragmentation of upland and riparian habitats by land actions, habitat improvement projects, wildlife, fire ES&amp;R and restoration projects.</li> <li>• SS-1 manage special status species and habitats to provide for their continued presence and conservation. Conserve, inventory and monitor special status species. Maintain or improve the quality of listed species habitat by managing public land activities to support species recovery and the benefit of those species.</li> </ul>	and management actions referred to in this comment, does not apply to Forest Service response actions taken under CERCLA.
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		<ul style="list-style-type: none"> <li>o Bald eagle - determine distribution of populations and suitable habitats; cooperate in conducting nest surveys and monitoring; cooperate in maintenance and improvement of habitat in key foraging areas such as deer winter range, aquatic and riparian habitats.</li> <li>o Gray wolf - determine distribution of wolves and key gray wolf habitat areas such as dens, rendezvous sites, and crucial big game winter ranges; cooperate in improving gray wolf habitat by improving big game winter range.</li> <li>o Utah Valvata Snail - gather existing information to understand the distribution of known populations, ensure Federal actions support or do not preclude species recovery.</li> <li>o Maintain or improve the quality of sensitive species habitat by managing to support recovery and benefit those species</li> <li>o Pygmy rabbits - survey potential habitats, manage sagebrush habitats for suitable pygmy rabbit conditions, suitable and potential habitat should be managed to allow for expansion of populations.</li> <li>o Boreal toads and Northern leopard frogs - identify and inventory populations, manage riparian areas towards PFC, increase pool habitat, mitigate activities having adverse effects on habitats, manage Lane and Lander Creeks as priority areas.</li> <li>o Sage Grouse - Protect and maintain suitable habitats and reconnect separated populations, manage key habitat for sagebrush, grass and forb cover, monitor progress and adjust activities to make progress towards Greater sage grouse goals and objectives, evaluate future actions for threats and restore shrub-steppe habitats in source areas, restoration areas and areas that link populations.</li> <li>o Cutthroat trout - monitor populations, habitat quantity and quality, enhance channel integrity, water quality, and habitat connectivity, fence streams with these species to exclude livestock, eliminate or reduce threats to present or potential cutthroat trout distribution and to habitat quality and quantity, strive to achieve highest quality trout habitats</li> <li>o Migratory birds - improve canopy cover and understory health of sagebrush, maintain 30 - 50% of sagebrush habitat in 5th HUC in contiguous blocks greater than 320 acres, stabilize or increase native grass and forb cover in sagebrush, restore shrub-steppe habitats in restoration or corridor areas.</li> <li>o Special status plants - meet or make significant progress towards meeting Idaho Standards for Rangeland Health (BLM 1997) for special status plant habitat.</li> </ul>
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|  | <ul style="list-style-type: none"> <li>o Where special status species can be conserved and habitat connectivity improved, lands will be acquired through land tenure adjustments, easements, and interagency cooperation.</li> <li>• LR-4 assure land classifications and withdrawals of public lands are appropriate to protect important resource values.</li> <li>• LR-5 maintain overall public land base, protect significant resource values, high value parcels may not be suitable for disposal except through exchange for equal or higher resource value lands.</li> <li>• LR-6 balance development with protection of natural resources and public enjoyment and recreation.</li> <li>• ME-1 reclamation plans for minerals development operations will be designed to meet applicable Idaho Standards for Rangeland Health (BLM 1997), reclamation complete when these standards have been met.</li> <li>• ME-2             <ul style="list-style-type: none"> <li>o On split estate lands approval of any operations plan will be coordinated with the surface owner to mitigate impacts; stipulations, mitigation and reclamation requirements will be the same as on public lands and/or equivalent to State standards.</li> <li>o Final reclamation will meet applicable standards for watersheds, riparian areas and wetlands, stream channels and floodplains, seedings, exotic plant communities, and water quality with future site management directed towards attaining standards for native plant communities and threatened and endangered plants and animals (BLM 1997).</li> <li>o The lessee/operator will monitor reclamation and report to the Authorized Officer annually until reclamation is accepted as adequate.</li> <li>o Mineral operations will replace or mitigate any loss of available surface water sources for uses such as wildlife or grazing.</li> <li>o Plan selection for reclamation will reflect the surrounding ecosystem and post development land use.</li> <li>o Before bond release, the site will be assessed to assure:                 <ul style="list-style-type: none"> <li>minimum ground cover exists to attain long-term soil productivity; ground cover persists, impacted lands meet or trend towards meeting applicable standards and post development land use objectives. In reclaimed areas, vegetation will include species that meet wildlife habitat needs. Cover for wildlife will be incorporated into design plans (e.g. slash piles, logs, rock piles, etc.).</li> <li>o Prevent or control sediment and the release of contaminants into the environment.</li> <li>o Monitor hydrologic function and watershed health with adjustments to operations and reclamation as necessary to</li> </ul> </li> </ul> </li> </ul> |
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		<p>achieve PFC of watersheds, revegetation objectives and protection of resources.</p> <ul style="list-style-type: none"><li>o Mine site plans designed to protect SE Idaho surface water resources, wildlife habitat and ecological resources, multiple beneficial uses, ground water resources.</li><li>o Meet ARMP Appendix F and (p101) action levels for selenium, cadmium, chromium, nickel, vanadium and zinc for vegetation, ground water, surface water, and CWA.</li><li>o Appropriate site specific mitigation measures will be implemented as conditions of approval.</li><li>o Site specific mitigation measures will be developed through the NEPA process and applied to ensure that operations comply with applicable laws, land use plan guidance and do not result in unnecessary degradation.</li></ul>	
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## City of Soda Springs

9 West Second South  
Soda Springs, ID 83276  
208-547-2600

Mitchell J. Hart, Council President

15 July 2021

SENT VIA E-MAIL -- [brian.deeken@usda.gov](mailto:brian.deeken@usda.gov)

Caribou – Targhee National Forest  
Attn: NMM EMD Comments  
Brian Deeken  
USDA Forest Service  
4350 Cliffs Drive  
Pocatello, Idaho 83204

Re: North Maybe Mine, East Mill Dump  
Proposed Plan for the Selection of a Remedial Action

Mr. Deeken:

I support the Proposed Plan (e.g. Preferred Remedial Alternative 7 – Geosynthetic Cap) for the selection of a Remedial Action (RA) at the East Mill Dump (EMD) of the North Maybe Mine (NMM) located in Caribou County, Idaho.

It has now been 25 years since the selenium issue appeared (circa 1996). It is puzzling that the largest contributor of selenium (e.g. NMM EMD) impacting the Upper Blackfoot River Basin has taken this long to be meaningfully addressed.

My understanding is that the NMM operated from 1964 through 1968, 1972 through 1986 and in 1993. An initial Administrative Order on Consent (AOC or Consent Order) was issued in 2004. In 2008, the regulatory agencies requested renegotiation of the AOC to transition from an SI/EECA (Site Investigation/Economic Evaluation Cost Analysis) to an RI/FS (Remedial Investigation/Feasibility Study) process. In early 2013, an RI/FS based AOC [consisting of a Remedial Investigation (RI) and Focused Feasibility Study (FFS)] was agreed to and motivated by the 2012 settlement of a lawsuit filed in 2009 by Nu-West (Nu-West Industries, Inc. and Nu-West Mining, Inc.) against the United States.

The selection and installation of the proposed (Preferred Remedial Alternative 7) geosynthetic cap system [like what was placed on the Cross Valley Fill (CVF) of the South Maybe Canyon Mine (SMCM)] on the North Area of EMD is prudent and should establish the same success criteria and provide similar positive results. Supporting the proposed remedial action plan includes -- the removal of sediments

from a sediment control structure and placement on the North Area prior to cap construction, access and use restrictions and monitored natural attenuation of residual contaminants in groundwater.

It has been represented that the planned schedule of the Proposed Plan for NMM EMD is:

- July 2021 Public Comment Period
- Winter 2021 Record of Decision (ROD)
- 2022 Remedial Design and Site Preparation
- 2023 and 2024 Construction of Remedial Action

I encourage the USDA Forest Service (USFS), as Lead Agency, to promptly grant final approvals of the Proposed Action, to complete project design and allow commencement of system construction without further delay.

Best Regards,

s/ *Mitch*

Mitchell J. Hart  
Council President





**IDAHO DEPARTMENT OF FISH AND GAME**

SOUTHEAST REGION

1345 Barton Road  
Pocatello, Idaho 83204

Brad Little / Governor  
Ed Schriever / Director

July 21, 2021

NMM EMD Comments  
Brian Deeken  
USDA Forest Service  
4350 Cliffs Drive  
Pocatello, ID 83204

Re: IDFG Review of the Proposed Plan for the North Maybe Mine East Mill Dump

Dear Mr. Deeken,

Idaho Department of Fish and Game has reviewed the plan for the cleanup of the North Maybe Mine East Mill Dump (Site) in Caribou County, Idaho. It is our understanding that the agency-preferred alternative, Alternative 7, will consist of a geosynthetic cap system, access and use restrictions, informational signage, and monitored natural attenuation of residual contaminants (COPCs) in groundwater.

Based on our knowledge of issues impacting wildlife, fish, and habitats at North Maybe Mine, actions outlined in Alternative 7 seem reasonable for reducing contaminant loads in groundwater and reducing wildlife exposure to contaminants, including Selenium, in vegetation at the Site.

Thank you for the opportunity to review the Proposed Plan for the North Maybe Mine East Mill Dump. Please feel free to contact Becky Johnson, Environmental Staff Biologist, if you have additional questions at [becky.johnson@idfg.idaho.gov](mailto:becky.johnson@idfg.idaho.gov) or 208-236-1258.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Garren", is written over a horizontal line.

Dan Garren  
Regional Supervisor

DG/bj

## **APPENDIX D**

Administrative Record Index

**Administrative Record**

**North Maybe Mine**

**East Mill Dump Sub-Operable Unit**

1. NuWest 2020. Final Remedial Investigation/ Focused Feasibility Study (RI/FFS) Report, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by Arcadis.
2. NuWest 2017. Final Screening Level Ecological Risk Assessment, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by Arcadis.
3. NuWest 2017a. Final Screening Level Human Health Risk Assessment, North Maybe Mine, East Mill Dump Sub-Operable Unit. Prepared by Arcadis.

## **APPENDIX E**

Applicable Relevant  
and  
Appropriate Requirements

Appendix G-1  
 Summary of Potential ARARs  
 Remedial Investigation/Focused Feasibility Study  
 North Maybe Mine East Mill Dump Sub-Operable Unit



	Standard, Limitation, or Requirement Criteria	Citation	Description of Law or Regulation	Applicability Determination	Description of Applicability
<b>Federal</b>					
Chemical	CWA: Water Quality Standards	33 U.S.C. 1342 - 1344 40 CFR 131	Establishes water quality criteria for surface water.	Potentially Applicable	SWQ standards are potentially applicable to actions associated with discharge of stormwater to waters of the United States. The proposed interim actions may not meet the WQS in the short-term and a waiver is requested.
	RCRA: List of Hazardous Wastes	40 CFR 261, Subpart C and D	Defines those solid wastes which are subject to regulations as hazardous wastes under 40 CFR Parts 262-265 and Parts 124, 270, and 271. The Bevill Exclusion at 40 CFR 261.4(b)(7) excludes solid wastes from the extraction, beneficiation and processing of ores and minerals, including phosphate rock, from the definition of hazardous waste.	Potentially Relevant and Appropriate	RCRA hazardous waste regulations are not applicable to this remedy. However, certain RCRA regulations may potentially be relevant and appropriate and are discussed under locations and action specific requirements.
	Safe Drinking Water Act (SDWA): National Primary Drinking Water Regulations	42 U.S.C. 300f et. seq.; 40 CFR Part 141	Establishes health-based standards (MCLs) for public water systems.	Potentially Relevant and Appropriate	MCLs are potentially relevant and appropriate to groundwater. Institutional controls will address COCs above MCLs.

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	Standard, Limitation, or Requirement Criteria	Citation	Description of Law or Regulation	Applicability Determination	Description of Applicability
Location	CWA: Section 404	33 U.S.C. 1344.33, 40 CFR Parts 320 - 330, 40 CFR 230	Specifies dredge or fill requirements.	Potentially Applicable	Substantive requirements of the dredge and fill requirements are potentially applicable to alternatives that include excavation of sediment.
	American Indian Religious Freedom Act	42 USC 1996 et seq.	To protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religious, including but not limited to, access to sites, use and possession of sacred objects, and the freedom to worship through ceremonies and traditional rites.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Archaeological and Historical Preservation Act	40 CFR 6.301© 16 USC 469 et seq.	Data recovery and preservation activities.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Archaeological Resources Protection Act	16 USC 470(aa-ii) 43 CFR 7	Steps must be taken to protect archaeological resource and sites that are on public and Indian lands and to preserve data.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Bald Eagle Protection Act	16 U.S.C. §§ 668 et seq. 50 CFR Part 22	Prohibits any person from knowingly, or with wanton disregard, selling, offering to sell, taking, purchasing, transferring, bartering, exporting, importing, or possessing or harming a bald or golden eagle, or any part, nest, or egg thereof without obtaining a permit.	Potentially Relevant and Appropriate	Remedial actions must be designed and implemented to avoid harm to bald or golden eagles, their nests or eggs. The occurrence of these birds and nesting features within the Site will be determined during the remedial design to comply with these requirements.
	Caribou-Targhee Land Use Management Plan (National Forest Management Act)	16 USC 1601 - 1614 36 CFR 219	Establishes multiple use goals and objectives, forest-wide management requirements, and monitoring and evaluation requirements. Establishes direction so that future decisions affecting the Forest will include an interdisciplinary approach to achieve integrated consideration of physical, biological, economic and other sciences.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Endangered Species Act	16 U.S.C. §§ 1531 et seq. 50 CFR Part 17 50 CFR Part 402	Statute and implementing regulations require that federal activities not jeopardize the continued existence of any threatened or endangered species. Section 7 of the ESA requires consultation with the USFWS to identify the possible presence of protected species and mitigate potential impacts on such species.	Potentially Relevant and Appropriate	Potentially relevant and appropriate if remedial action activities jeopardize threatened or endangered species or adversely modify their habitat.
	Fish and Wildlife Coordination Act	16 U.S.C. §§ 661 to 667e	Fish and wildlife protection: requires federal agencies involved in actions that will result in the control or modification of any natural stream or body of water for any purpose to protect fish and wildlife resources that may be affected by the action. Requires consultation with the USFWS before impounding, diverting, or controlling waters or before impoundment of diversion waters in order to maintain wildlife resources	Potentially Relevant and Appropriate	The substantive requirements of the Fish and Wildlife Coordination Act that are applicable to the selected remedy would be identified and complied with through the remedial design process. Consultation with the USFWS would be conducted during the design phase. Impacts to water or the stream channel would be monitored during implementation.
	Hazardous and Solid Waste Regulations: Treatment, Storage and Disposal (TSD) facilities	40 CFR 264.18	Location standards and restrictions for hazardous waste TSD facilities.	Potentially relevant and appropriate	Potentially relevant and appropriate to alternatives that involve siting a new disposal facility.
	Hazardous and Solid Waste Regulations: Solid Waste Facilities	40 CFR 257.3(1-4)	Location standards and restrictions for solid waste disposal facilities and for determining the probability of adverse effects on human health and the environment.	Potentially relevant and appropriate	Potentially relevant and appropriate to alternatives that involve siting a new disposal facility.
	Hazardous and Solid Waste Regulations: Municipal Solid Waste Facilities	40 CFR 258.10-15	Location standards and restrictions for municipal solid waste disposal facilities.	Potentially relevant and appropriate	Potentially relevant and appropriate to alternatives that involve siting a new disposal facility.
	National Historic Preservation Act National Historic Landmarks Act	16 USC 470 et seq. 36 CFR 60, 63, 65, & 800 40 CFR 6.301(b & c)	Section 106 of the NHPA process, balances needs of Federal undertaking with the effects the undertaking may have on historic properties. If historic properties or landmarks are eligible for, or included in the National Register of Historic Places exists within remediation areas, remediation activities must be design to minimize the effect on such properties.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions. Previous cultural resources surveys completed of the area do not indicate that historic features are present.
	Native American Graves Protection and Repatriation Act	25 USC 3001 et seq. 43 CFR 10	This pertains to the identification and appropriate disposition of human remains, funerary objects, sacred objects, or objects of cultural patrimony found on Federally controlled lands.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Protection of Floodplains	40 CFR 6.301(b) 40 CFR 6 Appendix A, implementing Executive Order 11988	Requires federal agencies to evaluate the potential effects of actions they may take in a floodplain to avoid adverse impacts associated with direct and indirect development of a floodplain.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Protection of Wetlands	40 CFR 6.301(b) 40 CFR 6 Appendix A, implementing Executive Order 11988	Wetlands protection: Agencies conducting certain activities are required to avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and to not support construction in wetlands if a practical alternative exists.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Migratory Bird Treaty Act	16 U.S.C. §§ 703 et seq. 50 CFR § 10.13	The Act makes it unlawful to hunt, take, capture, kill, or take other various actions, migratory birds and migratory game birds.	Potentially Relevant and Appropriate	The Selection Remedy, through careful remedial design, will be implemented in a manner to avoid taking or killing of protected migratory bird species, including individual birds, their nests, or eggs.



Appendix G-1  
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Remedial Investigation/Focused Feasibility Study  
North Maybe Mine East Mill Dump Sub-Operable Unit



	Standard, Limitation, or Requirement Criteria	Citation	Description of Law or Regulation	Applicability Determination	Description of Applicability
Action	CWA: Storm Water Discharges	40 CFR 122.26	Regulates erosion and sediment control and stormwater management during construction activities greater than 5 acres.	Potentially Applicable	Substantive requirements are potentially applicable to onsite discharges of construction-related stormwater.
	RCRA: Criteria for Municipal Solid Waste Landfills	40 CFR 258.50-56	Groundwater monitoring requirements for engineered disposal facilities to ensure appropriate assessment, monitoring, and protection of groundwater.	Potentially Relevant and Appropriate	Substantive requirements may be appropriate to the groundwater monitoring program to be developed for the site.
	RCRA: Hazardous Waste Facilities	40 CFR 264.97-99	Groundwater monitoring requirements for hazardous waste disposal facilities to ensure appropriate assessment, monitoring, and protection of groundwater	Potentially Relevant and Appropriate	Substantive requirements may be appropriate to the groundwater monitoring program to be developed for the site.
	RCRA: Criteria for Municipal Solid Waste (MSW) Landfills	40 CFR 258.60(a)(1-3)	Closure criteria for capping MSW facilities.	Potentially Relevant and Appropriate	Substantive requirements may be relevant and appropriate to the design of a cap and run-on/run-off control systems.
	RCRA: Criteria for Hazardous Waste TSD facilities	40 CFR 264.117 and 264.228(b)	Closure and post-closure care (maintenance and monitoring) criteria for hazardous waste disposal facilities.	Potentially Relevant and Appropriate	Substantive requirements may be relevant and appropriate to the design of a cap and run-on/run-off control systems.
	Surface Mining Control and Reclamation Act (SMCRA)	30 USC 1201-1326 30 CFR 816.43, 45-47, and 111 30 CFR 784	Governs activities associated with coal exploration and mining.	Potentially relevant and appropriate	Certain requirements may be relevant and appropriate to the design of the cap and run-on/run-off control systems.
<b>State</b>					
Chemical	WQS	IDAPA 58.01.02	Safeguards the quality of state waters and designates uses that are to be protected.	Potentially Applicable	WQS, as promulgated by the state, are potentially applicable to the site. However, the RA alone may not result in compliance with WQS in East Mill Creek downgradient from EMD. Interim measures waiver may be requested.
	WQS: General Surface Water Quality Criteria	IDAPA 58.01.02.200	Establishes narrative water quality criteria for hazardous, deleterious, and radioactive materials; floating, suspended, or submerged matter; excess nutrients; oxygen-demanding materials; and sediment.	Potentially Applicable	Substantive requirements may be potentially applicable to onsite discharges of point-source water (e.g., run-off diversion discharges). However, the recommended alternative alone may not result in compliance with water quality standards in East Mill Creek downgradient from EMD. Interim measures waiver may be requested.
	WQS: Surface Water Quality Criteria for Use Classifications	IDAPA 58.01.02.250 to .253	Establishes numerical surface water quality criteria for beneficial use classifications.	Potentially Applicable	WQS, as promulgated by the state, are potentially applicable to the site. However, this recommended alternative alone may not result in compliance with water quality standards in East Mill Creek downgradient from EMD. Interim measures waiver may be requested.
	WQS: Site Specific Surface Water Quality Criteria	IDAPA 58.01.02.287	Establishes site-specific selenium criteria for the for the Blackfoot River. Applied criteria are fish tissue based.	Potentially Applicable	Site-specific water quality standards for selenium are potentially applicable to jurisdictional waters at the site.
	Ground Water Quality Rule: Ground Water Quality Standards	IDAPA 58.01.11.200	Protects groundwater for beneficial uses, including potable water supplies, establishes use classifications, and establishes water quality criteria for groundwater.	Potentially Applicable	WQS, as promulgated by the state, are potentially applicable to the site.



Appendix G-1  
Summary of Potential ARARs  
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North Maybe Mine East Mill Dump Sub-Operable Unit



	Standard, Limitation, or Requirement Criteria	Citation	Description of Law or Regulation	Applicability Determination	Description of Applicability
Action	Endangered Species	Idaho Code 36-201	Authorizes the Idaho Department of Fish and Game authority to classify threatened or endangered wildlife and protected non-game species.	Potentially Applicable	Potentially applicable. Any state-identified threatened or endangered species not already Federally identified will be protected to the extent practicable.
	Protection of Animals and Birds	Idaho Code 36-1101 to 1103	Prohibits taking of wildlife, birds (including destruction of eggs and nests), and fur-bearing animals except as provided by Idaho Department of Fish and Game hunting regulations.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Surface Mining	Idaho Code 47-1501 to 1519 and IDAPA 20.03.02.140	Establishes standards and authorizes rules implemented by the Idaho Department of Lands for reclaiming lands affected by surface exploration and mining, including recontouring, erosion control and revegetation. Requires implementation of best management practices that prevent the release of hazardous or deleterious constituents, and protect surface water quality.	Potentially Relevant and Appropriate	Substantive requirements may be relevant and appropriate to the design of the remedy.
	Water Quality Standards: Violation of Water Quality Standards	IDAPA 58.01.02.080	Prohibits discharges that violate water quality standards or injure beneficial uses. Allows the agency to authorize short-term exemptions.	Potentially Applicable	Substantive requirements are potentially applicable to on-site actions.
	Hazardous Substance Emergency Response Act	Idaho Code 39-7101 to 7115	Requires notification of hazardous substances release. Requires development and implementation of the Hazardous Material Incident Command and Response Plan. Establishes liability for costs arising from a hazardous substance incident.	Potentially Relevant and Appropriate	Potentially relevant and appropriate if any spills occur during the remedial action.
	Hazardous Waste Management Act of 1983	1993 Session Law Ch. 291, Section 1-8	Revises the definition of restricted hazardous waste. Deletes exemptions for certain mining wastes. Changes the process for the Board to identify hazardous wastes. Allows release of confidential information to safe guard public health and safety.	Potentially Relevant and Appropriate	Sections pertaining to closure and post-closure care may be relevant and appropriate.
	Hazardous Waste Generation	IDAPA 58.01.05.006	Rules for generators of hazardous waste. Purge water from any groundwater sampling should be containerized and labeled as purge water until sampling results are received. Then appropriate disposal pathway can be determined.	Potentially Relevant and Appropriate	Substantive requirements may be relevant and appropriate for consideration during development of a groundwater monitoring program for the site.
	Hazardous Waste Management Act of 1983	Idaho Code 36-4401	Authorizes rules for generation, collection, treatment, storage, disposal, and transport of hazardous waste consistent with RCRA. Requires a permit for treatment, storage, discharge, incineration, release, spilling, placement, or disposal of hazardous wastes. Establishes treatment requirements for certain wastes prior to disposal into or on land. Requires that manifested waste be treated, stored, or disposed of in a permitted facility.	Potentially Relevant and Appropriate	Certain substantive requirements pertaining to closure and post-closure care may be relevant and appropriate.
	Idaho Department of Water Resources (IDWR)	Idaho Code 42-3801-3813 and IDAPA 37.03.07	Requires a permit or compliance with "minimum stand" for alteration of stream channel to protect fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, or water quality. Authorizes the Board to adopt rules to set standards.	Potentially Applicable	Substantive requirements are potentially applicable.
	Rules for the Control of Air Pollution in Idaho: Ambient Air Quality	IDAPA 58.01.01.577	Provides regulatory standards for PM 10 and several other air pollutants.	Potentially Relevant and Appropriate	Substantive requirements are potentially relative and appropriate during remedy construction.
	Water Quality Standards (WQS): Administrative Policy, Protection of Waters of the State	IDAPA 58.01.02.050.02	Protects surface water for beneficial uses.	Potentially Applicable	Water quality standards are promulgated by the state to protect the beneficial uses, and are potentially applicable to the site. This remedial action alone is not likely to result in achieving these standards.
	WQS: Antidegradation Policy	IDAPA 58.01.02.051	Requires that existing water uses and water quality, high quality water and ORWs be maintained and protected.	Potentially Applicable	Antidegradation requirements are potentially applicable.
	Rules for the Control of Air Pollution in Idaho: Rules for Control of Fugitive Dust	IDAPA 58.01.01.650 -.651	Requires that all reasonable precautions be taken to prevent the generation of fugitive dust.	Potentially Applicable	Substantive requirements are potentially applicable to alternatives involving movement of materials.
	WQS: Analytical Procedures	IDAPA 58.01.02.090	Establishes analytical procedures to be used to for compliance with WQS.	Potentially Applicable	Substantive requirements are potentially applicable to all alternatives.



**Appendix G-1**  
**Summary of Potential ARARs**  
**Remedial Investigation/Focused Feasibility Study**  
**North Maybe Mine East Mill Dump Sub-Operable Unit**

	Standard, Limitation, or Requirement Criteria	Citation	Description of Law or Regulation	Applicability Determination	Description of Applicability
	WQS: General Surface Water Use Designations	IDAPA 58.01.02.100, .101, and .150-160	Establishes surface water use designations for waters not otherwise classified. Cold water aquatic and secondary contact recreational are designated beneficial uses for Maybe and Dry Creeks.	Potentially Applicable	WQS are potentially applicable to all alternatives.
	Water Pollution Abatement	1995 Session Law Ch. 352, Section 1 39-3601 to 39-3639	Creates a new Chapter 36 regarding water quality, which protects surface water quality and establishes and environmental remediation fund.	Potentially Relevant and Appropriate	Substantive requirements are potentially relative and appropriate during remedy construction.
	Well Construction Standard Rules	IDAPA 37.03.09	Specifies requirements for well construction and abandonment.	Potentially Applicable	Substantive requirements are potentially applicable to alternatives that involve well construction or abandonment.

**Acronyms and Abbreviations:**

ARAR = Potentially Applicable or Potentially Relevant and Appropriate Requirement  
CFR = Code of Federal Regulations  
COC = constituents of concern  
CWA = Clean Water Act  
EMD = East Mill Dump  
IDAPA = Idaho Administrative Procedures Act  
IDWR = Idaho Department of Water Resources  
MCL = maximum contaminant level  
MSW = Municipal Solid Waste  
RA = remedial action  
RCRA = Resource Conservation and Recovery Act  
SWQ = surface water quality  
TSD = Treatment, Storage, and Disposal  
U.S.C. = United States Code  
WQS = water quality standards



EAST MILL DUMP SUB-OPERABLE  
UNIT REMEDIAL DESIGN/REMEDIAL  
ACTION  
CONSENT DECREE

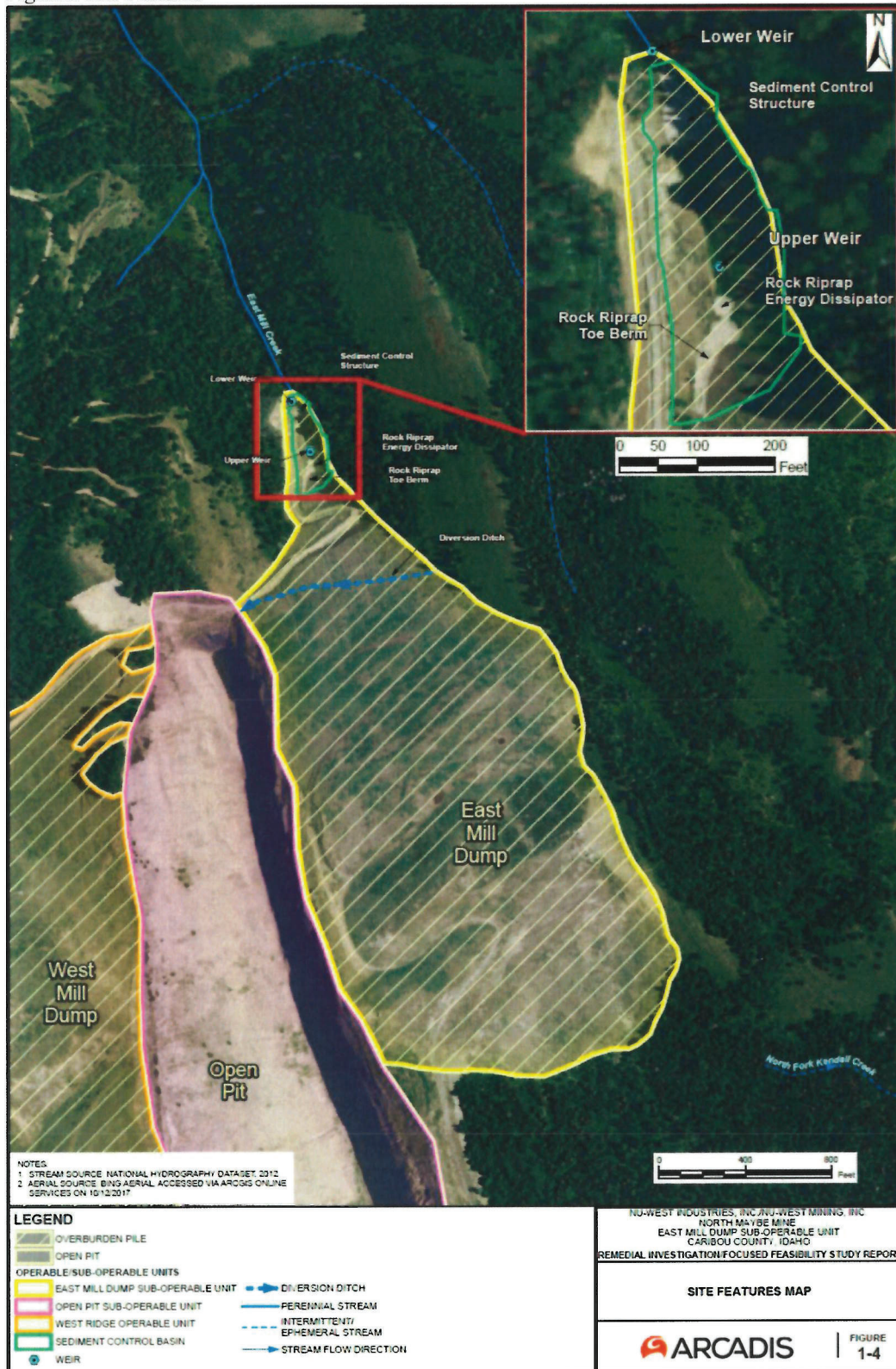
APPENDIX D







Figure 2 Site Features



# EAST MILL DUMP SUB-OPERABLE UNIT REMEDIAL DESIGN/REMEDIAL ACTION CONSENT DECREE

## APPENDIX E



**STATEMENT OF WORK**

**REMEDIAL DESIGN/REMEDIAL ACTION OF THE NORTH MAYBE MINE, EAST  
MILL OPERABLE UNIT, EAST MILL DUMP SUB OPERABLE UNIT**

**CARIBOU COUNTY, IDAHO**

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## 1. INTRODUCTION

- 1.1 Purpose of SOW.** The purpose of this Statement of Work (“SOW”) is to set forth the procedures and requirements for implementing the Work.

The Remedial Design (“RD”) is generally defined as those activities to be undertaken by the Settling Defendants to develop the final plans and specifications, general provisions, and special requirements necessary for the implementation of the remedial action (“RA”). The RA is generally defined as the implementation phase of site response or construction of the response, including necessary operation and maintenance (“O&M”), performance monitoring, and special requirements. The RA is based on the RD to achieve the goals specified in the Record of Decision. This SOW is designed to provide the framework for conducting the RD/RA activities at the North Maybe Mine (“Site”), East Mill Operable Unit (“EMOU”), East Mill Dump Sub-Operable Unit (“EMDSOU”).

**1.2 Structure of the SOW**

- Section 2 (Community Involvement) sets forth the Forest Service’s and Settling Defendants’ responsibilities for community involvement.
- Section 3 (Coordination and Supervision) contains the provisions for selecting the Supervising Contractor and Project Coordinators regarding the Work.
- Section 4 (Remedial Design) sets forth the process for developing the Remedial Design, which includes the submission of specified primary deliverables.
- Section 5 (Remedial Action) sets forth requirements regarding the completion of the Remedial Action, including primary deliverables related to completion of the Remedial Action.
- Section 6 (Reporting) sets forth Settling Defendants’ reporting obligations.
- Section 7 (Deliverables) describes the contents of the supporting deliverables and the general requirements regarding Settling Defendants’ submission of, and the Forest Service’s review of, approval of, comment on, and/or modification of, the deliverables.
- Section 8 (Schedules) sets forth the schedule for submitting the primary deliverables, specifies the supporting deliverables that must accompany each primary deliverable, and sets forth the schedule of milestones regarding the completion of the Remedial Action.
- Section 9 (FWS, State, and Tribes Participation) addresses US Fish and Wildlife Service, State of Idaho, and Shoshone-Bannock Tribes participation.
- Section 10 (References) provides a list of references, including URLs.

- 1.3** The Scope of the Remedy includes the actions described in Section 19 of the Record of Decision, including the design, construction, and implementation of grading and capping the top deck and north slope of the East Mill Dump (“EMD”).

- 1.4** The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the Consent Decree (“Decree”), have the meanings assigned to them in CERCLA, in such regulations, or in the Decree, except that the term “Paragraph” or “¶” means a paragraph of the SOW, and the term “Section” means a section of the SOW, unless otherwise stated.

- 1.5 The Forest Service is the Lead Agency for the Site, with the Idaho Department of Environmental Quality (“IDEQ”), U.S. Fish and Wildlife Service (“FWS”), and Shoshone-Bannock Tribes (“Tribes”) designated as Support Agencies. Hereinafter in this SOW, the “Agencies” refers to the Forest Service working in consultation with the Support Agencies.

## 2. COMMUNITY INVOLVEMENT

- 2.1 As requested by the Forest Service, Settling Defendants shall conduct community involvement activities under oversight of the Forest Service as provided for in, and in accordance with this Section.

### 2.2 Community Involvement Responsibilities

- (a) The Forest Service has the lead responsibility for developing and implementing community involvement activities at the Site. During the Remedial Investigation and Focused Feasibility Study (“RI/FFS”) phase, the Forest Service developed a Community Involvement Plan (“CIP”) for the Site. In accordance with 40 C.F.R. § 300.435(c), the Forest Service shall review the existing CIP and determine whether it should be revised to describe further public involvement activities during the Work that are not already addressed in the existing CIP.
- (b) As requested by the Forest Service, Settling Defendants shall participate in community involvement activities, including participation in public meetings that may be held or sponsored by the Forest Service to explain activities at or relating to the Site.
- (c) **Information for the Community.** As requested by the Forest Service, Settling Defendants shall develop and provide to Forest Service information about the design and implementation of the remedy Including: (1) results from unvalidated sampling as provided under ¶ 7.7(e)(7); (2) schedules prepared under Section 9; (3) dates that Settling Defendants completed each task listed in the schedules; and (4) digital photographs of the Work being performed, together with descriptions of the Work depicted in each photograph, the purpose of the Work, the equipment being used, and the location of the Work. The Forest Service RPM or Project Coordinator may use this information for communication to the public via the Forest Service website, social media, or local and mass media. The information provided to the Forest Service should be suitable for sharing with the public.

## 3. COORDINATION AND SUPERVISION

### 3.1 Project Coordinators

- (a) Settling Defendants’ Project Coordinator must have sufficient technical expertise to coordinate the Work. Settling Defendants’ Project Coordinator may not be an attorney representing Settling Defendants in this matter and may not act as the Supervising Contractor. Settling Defendants’ Project Coordinator may assign

other representatives, including other contractors, to assist in coordinating the Work.

- (b) The Forest Service shall designate and notify the Settling Defendants of the Forest Service's Project Coordinator, which may be the Forest Service RPM, and any Alternate Project Coordinator. The Forest Service may designate other representatives, which may include its employees, contractors, and/or consultants, to oversee the Work. The Forest Service's Project Coordinator/Alternate Project Coordinator will have the same authority as a remedial project manager and/or an on-scene coordinator, as described in the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), including the authority to halt the Work and/or to conduct or direct any necessary response action when it is determined that conditions at the Site constitute an emergency or may present an immediate threat to public health or welfare or the environment due to a release or threatened release of Waste Material.
- (c) Settling Defendants' Project Coordinator shall communicate with the Forest Service's Project Coordinator at least monthly.

**3.2 Supervising Contractor.** Settling Defendants' proposed Supervising Contractor must have sufficient technical expertise to supervise the Work and a quality assurance system that complies with the most recent version of *Quality Systems for Environmental Data and Technology Programs – Requirements with Guidance for Use* (American National Standard), ANSI/ASQC E4 (Feb. 2014).

### **3.3 Procedures for Disapproval/Notice to Proceed**

- (a) Settling Defendants shall designate, and notify the Forest Service, within 10 days after the Effective Date, of the name, title, contact information, and qualifications of the Settling Defendants' proposed Project Coordinator and Supervising Contractor, whose qualifications shall be subject to the Forest Service's review for verification based on objective assessment criteria (*e.g.*, experience, capacity, technical expertise) and do not have a conflict of interest with respect to the project.
- (b) The Forest Service shall issue notices of disapproval and/or authorizations to proceed regarding any proposed Project Coordinator and Supervising Contractor, as applicable. If the Forest Service issues a notice of disapproval, Settling Defendants shall, within 30 days, submit to the Forest Service a list of supplemental proposed Project Coordinators and/or Supervising Contractors, as applicable, including a description of the qualifications of each. Settling Defendants may select any coordinator/contractor covered by an authorization to proceed and shall, within 21 days, notify the Forest Service of Settling Defendants' selection.
- (c) The Forest Service may disapprove the proposed Project Coordinator, the Supervising Contractor, or both, based on objective assessment criteria (*e.g.*,

experience, capacity, technical expertise), if they have a conflict of interest regarding the project, or any combination of these factors.

- (d) Settling Defendants may change their Project Coordinator and/or Supervising Contractor, or both, by following the procedures of ¶¶ 3.3(a) and 3.3(b).
- (e) Notwithstanding the procedures of ¶¶ 3.3(a) through 3.3(d), Settling Defendants proposed, and the Forest Service has approved, the following initial Project Coordinator and Supervising Contractor:

**Project Coordinator:** Jon Bronson, Sr. Manager Remediation,  
Nu-West Industries, Inc. and Nu-West Mining Inc.  
421 West 2<sup>nd</sup> S  
Soda Springs, ID 83276  
Phone: 208-547-1900  
Cell: 208-252-2406  
E-mail: Jon.Bronson@nutrien.com

**Supervising Contractor:** J. Benjamin Latham,  
Principal, Arcadis, US Inc.  
630 Plaza Dr. Suite 100  
Highlands Ranch, CO 80129  
Phone: 303-471-3571  
Cell: 303-506-8838  
E-mail: ben.latham@arcadis.com

#### 4. REMEDIAL DESIGN

**4.1 Remedial Design Work Plan (“RDWP”).** Settling Defendants shall submit a RDWP for Forest Service approval. At the discretion of the Forest Service Project Coordinator, the RDWP may be submitted concurrently with the RD documents. The RDWP must include:

- (a) Plans for implementing all Remedial Design activities identified in this SOW, in the RDWP, or required by the Forest Service to be conducted to develop the Remedial Design;
- (b) A description of the overall management strategy for performing the Remedial Design, including a proposal for phasing of design and construction, if applicable;
- (c) A description of the proposed general approach to contracting, construction, operation, maintenance, and monitoring of the Remedial Action as necessary to implement the Work;
- (d) A description of the responsibility and authority of all organizations and key personnel involved with the development of the Remedial Design;

- (e) Descriptions of any areas requiring clarification and/or anticipated problems (*e.g.*, data gaps);
- (f) Description of any proposed pre-design investigation, if needed, or presentation of previous RD-related data that has been collected (*i.e.*, borrow source investigation, geotechnical data collection).;
- (g) Descriptions of any applicable permitting requirements and other regulatory requirements;
- (h) Description of plans for obtaining access in connection with the Work, such as property acquisition, property leases, and/or easements; and
- (i) The Health and Safety Plan (“HASP”) (as described in ¶ 7.7 (Supporting Deliverables));
- (j) A Field Sampling Plan (“FSP”) and Quality Assurance Project Plan (“QAPP”); will be submitted with the RDWP, unless Settling Defendants explain and the Forest Service agrees that these plans need not be updated.
- (k) If Settling Defendants contend that existing data demonstrates that no additional data gaps exist for the development of the RD, an explanation with all supporting data and information in support of that contention. If the Forest Service agrees that additional data collection is not needed for the development of the RD, the PDI will not be required.

**4.2 Institutional Controls Implementation and Assurance Plan (“ICIAP”).** Settling Defendants shall submit a proposed ICIAP for Forest Service approval. The ICIAP should describe measures to implement, maintain, and monitor the Institutional Controls (“ICs”) at the EMDSOU, outlining substantive restrictions or notices needed to protect exposure pathways and risks (including risks to recreational users), as well as duration needed and area affected. The ICIAP shall describe measures needed to commence implementing ICs as early as is feasible, including before Forest Service approval of the 100% design under ¶ 4.7. The ICIAP also should include procedures for effective and comprehensive review of implemented ICs, procedures to periodically review and determine if the ICs are having their intended effect, and if not, procedures for the development, approval and implementation of alternative, more effective ICs. ) Settling Defendants also shall consider including in the ICIAP the establishment of effective Long-Term Stewardship procedures including those described in EPA Memorandum: *Advanced Monitoring Technologies and Approaches to Support Long-Term Stewardship* (July 20, 2018).

**4.3** Settling Defendants shall communicate regularly with the Forest Service to discuss design issues as necessary, as directed or determined by the Forest Service.

**4.4 Pre-Design Investigation (“PDI”).** The purpose of the PDI is to address data gaps by conducting additional field investigations. Settling Defendants may submit in writing a request that the Forest Service permit PDI activities be omitted because all data needs to

support the RD are believed to have been addressed during design feasibility data collection efforts completed as part of the RI/FFS. Previous data collected to support the RD will be described and summarized in the RDWP (*e.g.*, geotechnical data), including conclusions and recommendations for Remedial Design, including design parameters and criteria.

- (a) **PDI Work Plan.** If the Forest Service requests, Settling Defendants shall submit a PDI Work Plan (“PDIWP”) for Forest Service approval. The PDIWP must include:
  - (1) An evaluation and summary of existing data and description of data gaps;
  - (2) A sampling plan including media to be sampled, contaminants or parameters for which sampling will be conducted, location (areal extent and depths), and number of samples; and
  - (3) Cross references to quality assurance/quality control (“QA/QC”) requirements set forth in the QAPP as described in ¶ 7.7(d).
- (b) Following the PDI, if performed, Settling Defendants shall submit a PDI Evaluation Report for approval. This report must include:
  - (1) Summary of the investigations performed;
  - (2) Summary of investigation results;
  - (3) Summary of validated data (*i.e.*, tables and graphics);
  - (4) Data validation reports and laboratory data reports;
  - (5) Narrative interpretation of data and results;
  - (6) Results of statistical and modeling analyses;
  - (7) Photographs documenting the work conducted; and
  - (8) Conclusions and recommendations for Remedial Design, including design parameters and criteria.
- (c) The Forest Service may require Settling Defendants to supplement the PDI Evaluation Report and/or to perform additional pre-design studies.

**4.5 Draft Remedial Design.** Settling Defendants shall submit the Draft Remedial Design for the Forest Service’s comment. The Draft Remedial Design must include:

- (a) A design criteria report, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995);
- (b) Preliminary drawings and specifications;



- (c) Descriptions of permit requirements, if applicable;
- (d) Preliminary O&M Plan
- (e) A description of how the Remedial Action will be implemented in a manner that minimizes environmental impacts in accordance with EPA's *Principles for Greener Cleanups* (Aug. 2009);
- (f) A description of monitoring and control measures to protect human health and the environment, such as air monitoring, and measures to reduce and manage traffic, noise, odors, and dust, during the Remedial Action in accordance with the Community Involvement Handbook pp. 53-66 (text box on p. 55);
- (g) Any proposed revisions to the Remedial Action Schedule that is set forth in ¶ 8.3 (Remedial Action Schedule); and
- (h) Updates as needed of all supporting deliverables required. The following additional supporting deliverables, as needed, described in ¶ 7.7 (Supporting Deliverables): Field Sampling Plan; Quality Assurance Project Plan; Site Wide Monitoring Plan; Community Impacts Mitigation Plan, Construction Quality Assurance/Quality Control Plan; and Transportation and Off-Site Disposal Plan.

**4.6 Pre-Final (95%) Remedial Design.** Settling Defendants shall submit the Pre-Final Remedial Design for the Forest Service's comment. The Pre-Final Remedial Design must be a continuation and expansion of the previous design submittal and must address the Forest Service's comments regarding the Draft Remedial Design. The Pre-Final Remedial Design will serve as the approved Final Remedial Design if the Forest Service approves the Pre-Final Remedial Design without comments. The Pre-Final Remedial Design must include:

- (a) A complete set of construction drawings and specifications that are: (1) certified by a registered professional engineer; and (2) suitable for procurement.
- (b) A survey and engineering drawings showing existing EMDSOU features, such as elements, property borders, easements, and EMDSOU conditions;
- (c) Pre-final versions of the same elements and deliverables as are required for the Draft Remedial Design;
- (d) A specification for photographic documentation of the Remedial Action; and
- (e) Updates of all supporting deliverables required to accompany Draft Remedial Design.

**4.7 Final (100%) Remedial Design.** Settling Defendants shall submit the Final (100%) Remedial Design for Forest Service approval. The Final Remedial Design must address the Forest Service's comments on the Pre-Final Remedial Design and must include final versions of all Pre-Final Remedial Design deliverables.

## 5. REMEDIAL ACTION

**5.1 Remedial Action Work Plan (“RAWP”).** Settling Defendants shall submit a RAWP for Forest Service approval as an attachment to the [Pre-]Final Remedial Design that includes:

- (a) A proposed Remedial Action Construction Schedule in a format such as a Gantt chart,
- (b) An updated HASP that covers activities during the Remedial Action.
- (c) Plans for satisfying permitting requirements, as applicable, including obtaining permits for off-site activity and for satisfying substantive requirements of permits for on-site activity.

**5.2 Independent Quality Assurance Team (“IQAT”).** Settling Defendants may elect to use an IQAT to evaluate the quality of the Work. If Settling Defendants elect to use an IQAT, Settling Defendants shall notify the Forest Service of Settling Defendants’ designated IQAT. The IQAT must be independent of, and cannot include the Supervising Contractor. Settling Defendants may hire a third party for this purpose. Settling Defendants’ notice, if required, must include the names, titles, contact information, and qualifications of the members of the IQAT. The IQAT, if used, will have the responsibility to determine whether Work is of expected quality and conforms to applicable plans and specifications. The IQAT, if used, will have the responsibilities as described in ¶ 2.1.3 of the *Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties*, EPA/540/G-90/001 (Apr. 1990).

### 5.3 Meetings and Inspections

- (a) **Preconstruction Conference.** Settling Defendants shall hold a preconstruction conference with the Forest Service and others as directed or approved by the Forest Service and as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). Settling Defendants or the Forest Service shall prepare minutes of the conference and shall distribute the minutes to all Parties.
- (b) **Periodic Communications.** During the construction portion of the Remedial Action (Remedial Action Construction), Settling Defendants shall communicate at least monthly with the Forest Service, and others as directed or determined by the Forest Service, to discuss construction issues. Settling Defendants or the Forest Service shall distribute an agenda and list of attendees to all Parties prior to each meeting or telephone call. Settling Defendants or the Forest Service shall prepare minutes of the meetings or calls and shall distribute the minutes to all Parties.
- (c) **Inspections**

- (1) The Forest Service or its representative shall conduct periodic inspections of the Work. The Supervising Contractor, Settling Defendants' Project Coordinator or another representative of the Settling Defendants may accompany the Forest Service or its representative during any inspections.
- (2) Upon notification by the Forest Service of any deficiencies in the Remedial Action Construction, Settling Defendants shall take all necessary steps to correct the deficiencies and/or bring the Remedial Action Construction into compliance with the approved Final Remedial Design, any approved design changes, and/or the approved RAWP. If applicable, Settling Defendants shall comply with any schedule provided by the Forest Service in its notice of deficiency.

#### 5.4 Permits

- (a) As provided in CERCLA § 121(e), and Section 300.400(e) of the NCP, no permit is required for any portion of the Work conducted entirely on-site (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-site requires a federal or state permit or approval, Settling Defendants shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.
- (b) Settling Defendants may seek relief under the provisions of Section **XII** (Force Majeure) of the Decree for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval referenced in ¶ 5.4(a) and required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.
- (c) Nothing in the Decree or this SOW constitutes a permit issued under any federal or state statute or regulation.

#### 5.5 Emergency Response and Reporting

- (a) **Emergency Action.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the EMDSOU and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Settling Defendants shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized Forest Service staff (as specified in ¶ 5.5(c)) orally; and (3) take such actions in consultation with the authorized Forest Service staff and in accordance with all applicable provisions of the HASP, the ERP, and any other deliverable approved by the Forest Service under the SOW.
- (b) **Release Reporting.** Upon the occurrence of any event during performance of the Work that Settling Defendants required to report under CERCLA § 103 or

Section 304 of the Emergency Planning and Community Right-to-Know Act (“EPCRA”), Settling Defendants shall immediately notify the authorized Forest Service staff orally.

- (c) The “authorized Forest Service staff” for purposes of immediate oral notifications and consultations under ¶ 5.5(a) and ¶ 5.5(b) is the Forest Service Project Coordinator or, if the Forest Service Project Coordinator is unavailable, the Forest Service Alternate Project Coordinator.
- (d) For any event covered by ¶ 5.5(a) and ¶ 5.5(b), Settling Defendants shall:
  - (1) within 14 days after the onset of such event, submit a report to the Forest Service describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and
  - (2) within 30 days after the conclusion of such event, submit a report to the Forest Service describing all actions taken in response to such event.
- (e) The reporting requirements under ¶ 5.5 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

## 5.6 Off-Site Shipments

- (a) Settling Defendants may ship hazardous substances, pollutants, and contaminants from the EMDSOU to an off-Site facility only if they comply with CERCLA § 121(d)(3), and 40 C.F.R. § 300.440. Settling Defendants will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Settling Defendants obtain a prior determination from the Forest Service that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).
- (b) Settling Defendants may ship Waste Material from the EMDSOU to an out-of-state waste management facility only if, prior to any shipment, they provide notice to the appropriate state environmental official in the receiving facility’s state and to the Forest Service Project Coordinator. This notice requirement will not apply to any off-Site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Settling Defendants also shall notify the state environmental official referenced above and the Forest Service Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Settling Defendants shall provide the notice after the award of the contract for Remedial Action construction and before the Waste Material is shipped.
- (c) Settling Defendants may ship Investigation Derived Waste (“IDW”) from the EMDSOU to an off-Site facility only if they comply with CERCLA § 121(d)(3), 40 C.F.R. § 300.440, *EPA’s Guide to Management of Investigation Derived*

*Waste*, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the Record of Decision. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 CFR § 261.4(e) shipped off-site for treatability studies, are not subject to 40 C.F.R. § 300.440.

## 5.7 Certification of Remedial Action Completion

- (a) **Remedial Action Completion Inspection.** Settling Defendants shall schedule an inspection to review the construction and operation of the remedy and to review whether the remedy is functioning properly and as designed. This inspection also is for the purpose of obtaining the Forest Service's Certification of Remedial Action Completion. The inspection must be attended by Settling Defendants and the Forest Service and/or their representatives.
- (b) **Remedial Action Report.** Following the inspection, Settling Defendants shall submit a Remedial Action Report to the Forest Service requesting the Forest Service's Certification of Remedial Action Completion. The Remedial Action Report must: (1) include certifications by a registered professional engineer and by Settling Defendants' Project Coordinator that the Remedial Action is complete; (2) include as-built drawings signed and stamped by a registered professional engineer; (3) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011), as supplemented by *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017); and (4) be certified in accordance with ¶ 7.5 (Certification).
- (c) If the Forest Service concludes that the Remedial Action is not Complete, the Forest Service shall so notify Settling Defendants. The Forest Service's notice must include a description of any deficiencies. The Forest Service's notice may include a schedule for addressing such deficiencies or may require Settling Defendants to submit a schedule for the Forest Service approval. Settling Defendants shall perform all activities described in the notice in accordance with the schedule.
- (d) If the Forest Service concludes, based on the initial or any subsequent Remedial Action Report requesting Certification of Remedial Action Completion, that the Remedial Action is Complete, Forest Service shall so certify to Settling Defendants. This certification will constitute the Certification of Remedial Action Completion for purposes of the Decree. Certification of Remedial Action Completion will not affect Settling Defendants' remaining obligations under the Decree.

- 5.8 **Periodic Review Support Plan ("PRSP").** Settling Defendants shall submit the PRSP for Forest Service approval. The PRSP addresses the studies and investigations that Settling Defendants shall conduct to support the Forest Service's reviews of whether the Remedial Action is protective of human health and the environment in accordance with

CERCLA § 121(c) (also known as “Five-Year Reviews”) attaining the Remedial Action Objectives. Ongoing monitoring to assess performance of the EMDSOU remedy will be conducted at the Creeks Sub Operable Unit (“CSOU”). Settling Defendants shall develop the plan in accordance with *Comprehensive Five-year Review Guidance*, OSWER 9355.7-03B-P (June 2001), and any other relevant five-year review guidance.

## 5.9 Certification of Work Completion

- (a) **Work Completion Inspection.** Settling Defendants shall schedule an inspection for the purpose of obtaining the Forest Service’s Certification of Work Completion. The inspection must be attended by Settling Defendants and the Forest Service and/or their representatives.
- (b) **Work Completion Report.** Following the inspection, Settling Defendants shall submit a report to the Forest Service requesting the Forest Service’s Certification of Work Completion. The report must: (1) include certifications by a registered professional engineer and by Settling Defendants’ Project Coordinator that the Work, including all O&M activities, is complete; and (2) be certified in accordance with ¶ 7.5 (Certification).
- (c) If the Forest Service concludes that the Work is not complete, the Forest Service shall so notify Settling Defendants. The Forest Service’s notice must include a description of the activities that Settling Defendants must perform to complete the Work. The Forest Service’s notice must include specifications and a schedule for such activities or must require Settling Defendants to submit specifications and a schedule for Forest Service approval. Settling Defendants shall perform all activities described in the notice or in the Forest Service-approved specifications and schedule.
- (d) If the Forest Service concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, the Forest Service shall so certify in writing to Settling Defendants. Issuance of the Certification of Work Completion does not affect the following continuing obligations: (1) activities under the Periodic Review Support Plan; (2) obligations under Sections **VII** (Property Requirements), and **XVIII** (Records) of the Decree; (3) Institutional Controls obligations as provided in the ICIAP; (4) Operations, maintenance, and monitoring under the O&M Plan; and (5) reimbursement of Forest Service’s Future Response Costs under Section **XI** (Payments for Response Costs) of the Decree.

## 6. REPORTING

- 6.1 **Progress Reports.** Commencing with the month following lodging of the Decree and until the Forest Service approves the Remedial Action Completion, Settling Defendants shall submit progress reports to the Forest Service on a monthly basis, or as otherwise requested by the Forest Service. The reports must cover all activities that took place during the prior reporting period, including:



- (a) The actions that have been taken toward achieving compliance with the Decree;
- (b) A summary of all results of sampling, tests, and all other data received or generated by Settling Defendants;
- (c) A description of all deliverables that Settling Defendants submitted to the Forest Service;
- (d) A description of all activities relating to Remedial Action Construction that are scheduled for the next month;
- (e) An updated Remedial Action Construction Schedule, together with information regarding percentage of completion, delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays;
- (f) A description of any modifications to the work plans or other schedules that Settling Defendants proposed or that have been approved by the Forest Service; and
- (g) A description of all activities undertaken in support of the CIP during the reporting period and those to be undertaken in the next month.
- (h) **Notice of Progress Report Schedule Changes.** If the schedule for any activity described in the Progress Reports, including activities required to be described under ¶ 6.1(d), changes, Settling Defendants shall notify Forest Service of such change at least seven days before performance of the activity.

## 7. DELIVERABLES

- 7.1 Applicability.** Settling Defendants shall submit deliverables for Forest Service approval or for Forest Service comment as specified in the SOW. If neither is specified, the deliverable does not require the Forest Service's approval or comment. Paragraphs 7.2 (In Writing) through 7.4 (Technical Specifications) apply to all deliverables. Paragraph 7.5 (Certification) applies to any deliverable that is required to be certified. Paragraph 7.6 (Approval of Deliverables) applies to any deliverable that is required to be submitted for Forest Service approval.
- 7.2 In Writing.** All deliverables under this SOW must be in writing unless otherwise specified.
- 7.3 General Requirements for Deliverables.** All deliverables must be submitted by the deadlines in the Remedial Design Schedule or Remedial Action Schedule, as applicable. Settling Defendants shall submit all deliverables to the Forest Service in electronic form. Hard copies of final submittals will be provided by request only. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 7.4. All other deliverables shall be submitted to the Forest Service in the electronic form specified by the Forest Service RPM. If any deliverable includes maps, drawings, or other exhibits



that are larger than 8.5” by 11”, Settling Defendants shall provide the Forest Service with paper copies of such exhibits if requested.

#### **7.4 Technical Specifications**

- (a) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (“EDD”) format. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (b) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format; and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (“NAD83”) or World Geodetic System 1984 (“WGS84”) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (“FGDC”) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (“EME”), complies with these FGDC and EPA metadata requirements and is available at <https://edg.epa.gov/EME/>.
- (c) Each file must include an attribute name for each site unit or sub-unit submitted. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.
- (d) Spatial data submitted by Settling Defendants does not, and is not intended to, define the boundaries of the Site.

#### **7.5 Certification.** All deliverables that require compliance with this paragraph must be signed by the Settling Defendants’ Project Coordinator, or other responsible official of Settling Defendant, and must contain the following statement:

I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the remedy, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than 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.

#### **7.6 Approval of Deliverables**

(a) **Initial Submissions**

- (1) After review of any deliverable that is required to be submitted for Forest Service approval under the Decree or the SOW, the Forest Service shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.
- (2) The Forest Service also may modify the initial submission to cure deficiencies in the submission if: (i) the Forest Service determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

- (b) **Resubmissions.** Upon receipt of a notice of disapproval under ¶ 7.6(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 7.6(a), Settling Defendants shall, within 30 days or such longer time as specified by the Forest Service in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, the Forest Service may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring Settling Defendants to correct the deficiencies; or (5) any combination of the foregoing.

- (c) **Implementation.** Upon approval, approval upon conditions, or modification by the Forest Service under ¶ 7.6(a) (Initial Submissions) or ¶ 7.6(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the Decree; and (2) Settling Defendants shall take any action required by such deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under ¶ 7.6(a) or ¶ 7.6(b) does not relieve Settling Defendants of any liability for stipulated penalties under Section **XIV** (Stipulated Penalties) of the Decree. Approval of plans, design-required submittals (*i.e.*, shop drawings, design details, etc.), and specifications by the Forest Service does not relieve the Defendants, their contractor, or any subcontractors of responsibility for the adequacy of the design and professional responsibilities.

- (d) If: (1) an initially submitted deliverable contains a material defect and the conditions are met for modifying the deliverable under ¶ 7.6(a)(2); or (2) a resubmitted deliverable contains a material defect; then the material defect constitutes a lack of compliance for purposes of this Paragraph.

**7.7 Supporting Deliverables.** Settling Defendants shall submit each of the following supporting deliverables for the Forest Service approval, except as specifically provided.

Settling Defendants shall develop the deliverables in accordance with all applicable regulations, guidance, and policies (see Section 10 (References)). Settling Defendants shall update each of these supporting deliverables as necessary or appropriate during the course of the Work, and/or as requested by the Forest Service.

- (a) **Health and Safety Plan (“HASP”).** The HASP describes all activities to be performed to protect on site personnel and area residents from physical, chemical, and all other hazards posed by the Work. Settling Defendants shall develop the HASP in accordance with EPA’s *Emergency Responder Health and Safety Manual* and Occupational Safety and Health Administration (“OSHA”) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should cover Remedial Design activities and should be, as appropriate, updated to cover activities during the Remedial Action and updated to cover activities after Remedial Action completion. The Forest Service does not approve the HASP but will review it to ensure that all necessary elements are included and that the plan provides for the protection of human health and the environment. If approved by the Forest Service, the Settling Defendants may submit a HASP combined with other similar project sites so long as the site-specific conditions of the EMDSOU are considered.
- (b) **Emergency Response Plan (“ERP”).** The ERP must describe procedures to be used in the event of an accident or emergency at the EMDSOU (for example, power outages, water impoundment failure, treatment plant failure, slope failure, etc.). The ERP may be submitted as a component of the HASP. The ERP must include:
  - (1) Name of the person or entity responsible for responding in the event of an emergency incident;
  - (2) Plan and date(s) for meeting(s) with the local community, including local, State, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals;
  - (3) Spill Prevention, Control, and Countermeasures (“SPCC”) Plan (if applicable), consistent with the regulations under 40 C.F.R. part 112, describing measures to prevent, and contingency plans for, spills and discharges;
  - (4) Notification activities in accordance with ¶ 5.5(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under CERCLA § 103 or EPCRA § 304; and
  - (5) A description of all necessary actions to ensure compliance with ¶ 5.5 in the event of an occurrence during the performance of the Work that causes or threatens a release of Waste Material from the EMDSOU that constitutes an emergency or may present an immediate threat to public health or welfare or the environment.

- (c) **Field Sampling Plan (“FSP”).** The FSP addresses all sample collection activities. The FSP (unless waived by the Forest Service in accordance with ¶ 4.1(j)) must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. Settling Defendants shall develop the FSP (unless waived by the Forest Service in accordance with ¶ 4.1(j)) in accordance with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G 89/004 (Oct. 1988).
- (d) **Quality Assurance Project Plan (“QAPP”).** The QAPP (unless waived by the Forest Service in accordance with ¶ 4.1(j)) must include a detailed explanation of Settling Defendants’ quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance, and monitoring samples. Settling Defendants shall develop the QAPP (unless waived by the Forest Service in accordance with ¶ 4.1(j)) in accordance with EPA Directive CIO 2105.1 (Environmental Information Quality Policy, 2021), the most recent version of *Quality Management Systems for Environmental Information and Technology Programs – Requirements with Guidance for Use*, ASQ/ANSI E-4 (Feb. 2014, and *Guidance for Quality Assurance Project Plans*, EPA QA/G-5, EPA Office of Environmental Information (Dec. 2002). Settling Defendants shall collect, produce, and evaluate all environmental information at the EMDSOU in accordance with the approved QAPP.
- (e) **Site Wide Monitoring Plan (“SWMP”).** The purpose of the SWMP, if needed, is to obtain baseline information regarding the extent of contamination in affected media at the Site; to obtain information, through short- and long- term monitoring, about the movement of and changes in contamination throughout the Site, before and during implementation of the Remedial Action; to obtain information regarding contamination levels to determine whether Performance Standards are achieved; and to obtain information to determine whether to perform additional actions, including further Site monitoring.

Currently, all baseline information regarding the extent of contamination is believed to have been collected as part of the RI/FFS and no additional data collection is anticipated. Should the Forest Service determine that additional data collection is necessary, it will notify Settling Defendants of such. Additionally, EMDSOU related off-site surface water and groundwater monitoring is ongoing at the CSOU. Data that are collected at the CSOU that are used to assess the EMDSOU or the performance of the EMDSOU remedy will be submitted as part of the CSOU project through annual Data Summary Reports (“DSRs”) in accordance with the CSOU SOW and work plans. The CSOU monitoring program may be modified as needed through the annual work planning process and development of relevant work plan addenda (“WPAs”) to assess the EMDSOU site and remedy data needs. To the extent the CSOU annual work planning process and relevant WPAs involve the EMDSOU, they will be updated with the following:

- (1) Description of the environmental media to be monitored;

- (2) Description of the data collection parameters, including existing and proposed monitoring devices and locations, schedule and frequency of monitoring, analytical parameters to be monitored, and analytical methods employed;
  - (3) Description of how performance data will be analyzed, interpreted, and reported, and/or other Site-related requirements;
  - (4) Description of verification sampling procedures;
  - (5) Description of deliverables that will be generated in connection with monitoring, including sampling schedules, laboratory records, monitoring reports, and monthly and annual reports to Forest Service and State agencies;
  - (6) Description of proposed additional monitoring and data collection actions (such as increases in frequency of monitoring, and/or installation of additional monitoring devices in the affected areas) in the event that results from monitoring devices indicate changed conditions (such as higher than expected concentrations of the contaminants of concern or groundwater contaminant plume movement);
- (f) **Construction Quality Assurance Plan (“CQAP”) and Construction Quality Control Plan (“CQCP”).** The purpose of the CQAP is to describe planned and systemic activities that provide confidence that the Remedial Action construction will satisfy all plans, specifications, and related requirements, including quality objectives. The purpose of the CQCP is to describe the activities to verify that Remedial Action construction has satisfied all plans, specifications, and related requirements, including quality objectives. The CQAP/CQCP (“CQA/CP”) must:
- (1) Identify, and describe the responsibilities of, the organizations and personnel implementing the CQA/CP;
  - (2) Describe the Performance Standards required to be met to achieve Completion of the Remedial Action;
  - (3) Describe the activities to be performed: (i) to provide confidence that Performance Standards will be met; and (ii) to determine whether Performance Standards have been met;
  - (4) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the CQA/CP;
  - (5) Describe industry standards and technical specifications used in implementing the CQA/CP;
  - (6) Describe procedures for tracking construction deficiencies from identification through corrective action;

- (7) Describe procedures for documenting all CQA/CP activities; and
  - (8) Describe procedures for retention of documents and for final storage of documents.
- (g) **Operations and Maintenance Plan (“O&M Plan”).** The O&M Plan describes the requirements for inspecting, operating, and maintaining the Remedial Action. Settling Defendants shall develop the O&M Plan in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017). The O&M Plan must include the following additional requirements:
- (1) Description of Performance Standards required to be met to implement the Record of Decision;
  - (2) Description of activities to be performed: (i) to provide confidence that Performance Standards will be met; and (ii) to determine whether Performance Standards have been met;
  - (3) **O&M Reporting.** Description of records and reports that will be generated during O&M, such as daily operating logs, laboratory records, records of operating costs, reports regarding emergencies, personnel and maintenance records, monitoring reports, and monthly and annual reports to the Agencies;
  - (4) Description of corrective action in case of systems failure, including: (i) alternative procedures to prevent the release or threatened release of Waste Material which may endanger public health and the environment or may cause a failure to achieve Performance Standards; (ii) analysis of vulnerability and additional resource requirements should a failure occur; (iii) notification and reporting requirements should O&M systems fail or be in danger of imminent failure; and (iv) community notification requirements; and
  - (5) Description of corrective action to be implemented in the event that Performance Standards are not achieved; and a schedule for implementing these corrective actions.
- (h) **Amendments.** Minor field modifications to deliverables, including design, may be made orally by the RPM and shall be memorialized in writing as a Change Order (CO) within ten (10) days; provided, however, that the modification effective date shall be the date of the RPM’s oral direction. Design changes identified as necessary to the approved final design prior to initiation of construction shall be documented with an CO and submitted to the RPM for review. Comments (if any) will be provided to the Settling Defendants on the CO. Settling Defendants shall address and incorporate the comments and shall submit a final CO to the RPM for approval prior to implementing the changes noted in the CO.



- (1) Maps, text, and tables shall clearly show any modifications of the CO as a result of incorporation of the comments (i.e. red line version of document with changes).
- (2) Each revised CO shall be submitted within 15 days after receipt of the RPM comments. The Final shall be submitted within fifteen (15) days after receipt of the RPM comments on the revised CO.
- (3) Modification to any plan or schedule may be made, in writing, by the RPM. In the event Settling Defendants disagree with any modification proposed under this Paragraph, such disagreement shall be resolved in accordance with the provisions of Section **XIII** ("Dispute Resolution") of the Consent Decree.

## **8. SCHEDULES**

**8.1 Applicability and Revisions.** All deliverables and tasks required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the Remedial Design and Remedial Action Schedules set forth below. Settling Defendants may submit proposed revised Remedial Design Schedules or Remedial Action Schedules for the Forest Service approval. Upon the Forest Service's approval, the revised Remedial Design and/or Remedial Action Schedules supersede the Remedial Design and Remedial Action Schedules set forth below, and any previously-approved Remedial Design and/or Remedial Action Schedules.

### **8.2 Remedial Design Schedule**

	<b>Description of Deliverable, Task</b>	<b>¶ Ref.</b>	<b>Deadline</b>
1	RDWP	4.1	30 days after Forest Service Authorization to Proceed regarding Supervising Contractor (¶ 3.3).
2	PDIWP (as needed)	4.3	30 days after Forest Service Authorization to Proceed regarding Supervising Contractor (¶ 3.3).
3	ICIAP	4.2	30 days after Forest Service Authorization to Proceed regarding Supervising Contractor (¶ 3.3).
4	Draft Remedial Design	4.4	30 days after Forest Service Authorization to Proceed regarding Supervising Contractor (¶ 3.3).
5	Pre-Final Remedial Design	4.5	30 days after Forest Service comments on Draft Remedial Design
6	Final Remedial Design	4.6	14 days after Forest Service comments on Pre-Final Remedial Design



**8.3 Remedial Action Schedule**

	Description of Deliverable / Task	¶ Ref.	Deadline
1	Commence to Implement ICIAP	4.2	60 days after Forest Service Notice of Authorization to Proceed with Remedial Action, or as component of the RD if approved by Forest Service.
2	Award Remedial Action contract		60 days after Forest Service Notice of Authorization to Proceed with Remedial Action
3	RAWP	5.1	60 days after Forest Service Notice of Authorization to Proceed with Remedial Action, or as component of the RD if approved by Forest Service.
4	Designate IQAT (if needed)	5.2	
5	Pre-Construction Conference	5.2(a)	60 days after Approval of RAWP as field conditions allow
6	Start of Construction		90 days after Approval of RAWP as field conditions allow
7	Completion of Construction	5.6	
8	Remedial Action Completion Inspection	5.6(a)	14 days after Completion of Construction
9	Remedial Action Report	5.6(b)	90 days after Final Inspection
10	Periodic Review Support Plan	5.7	Five years after Start of Remedial Action Construction

**9. USFWS, STATE, and TRIBES PARTICIPATION**

- 9.1 Copies.** Settling Defendants shall, at any time they send a deliverable or any other communications to the Forest Service, send a copy of such deliverable or communication to the Support Agencies. The Forest Service shall, at any time it sends a notice, authorization, approval, disapproval, or certification to Settling Defendants, send a copy of such document to the Support Agencies.
- 9.2 Project Coordinator.** The State, Tribe and USFWS shall designate and notify Forest Service and the Settling Defendants of its Project Coordinator and Alternate Project Coordinator. The State, Tribe, or USFWS may designate other representatives, including its employees, contractors and/or consultants to oversee the Work. For any meetings and inspections in which the Forest Service's Project Coordinator participates, the Support

Agencies Project Coordinator also may participate. Settling Defendants shall notify the State and Tribe reasonably in advance of any such meetings or inspections.

**9.3 Review and Comment.** The Support Agencies will have a reasonable opportunity for review and comment prior to:

- (a) Any Forest Service notice to proceed under ¶ 3.3 (Procedures for Disapproval/Notice to Proceed);
- (b) Any Forest Service approval or disapproval under ¶ 7.6 (Approval of Deliverables) of any deliverables that are required to be submitted for Forest Service approval; and
- (c) Any disapproval of, or Certification of Remedial Action Completion under ¶ 5.7 (Certification of Remedial Action Completion), and any disapproval of, or Certification of the Work Completion under ¶ 5.9 (Certification of Work Completion).

If any Support Agency does not provide comments to the Forest Service on any action listed in ¶ 9.2(a)-(c) within 30 days of USFS requesting review and comment, USFS may proceed as it deems appropriate under ¶ 7.6 (Approval of Deliverables).

## **10. REFERENCES**

**10.1** The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the three EPA web pages listed in ¶ 10.2:

- (a) A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).
- (b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).
- (c) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).
- (d) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
- (e) Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G90/001 (Apr. 1990).
- (f) Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).

- (g) Guide to Management of Investigation-Derived Wastes, OSWER 9345.3-03FS (Jan. 1992).
- (h) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 1992).
- (i) Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Nov. 1992).
- (j) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. part 300 (Oct. 1994).
- (k) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).
- (l) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).
- (m) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (n) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, EPA/540-R-01-007 (June 2001).
- (o) Guidance for Quality Assurance Project Plans, EPA QA/G-5, EPA Office of Environmental Information (Dec. 2002) <https://www.epa.gov/quality/guidance-quality-assurance-project-plans-epa-qag-5>.
- (p) Institutional Controls: Third-Party Beneficiary Rights in Proprietary Controls, OECA (Apr. 2004).
- (q) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (r) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (s) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2005), <https://www.epa.gov/geospatial/epa-national-geospatial-data-policy>.
- (t) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (u) Principles for Greener Cleanups (Aug. 2009), <https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups>.
- (v) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).

- (w) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).
- (x) Recommended Evaluation of Institutional Controls: Supplement to the “Comprehensive Five-Year Review Guidance,” OSWER 9355.7-18 (Sep. 2011).
- (y) Plan EJ 2014: Legal Tools, EPA Office of General Counsel (Dec. 2011), <https://www.epa.gov/environmentaljustice/plan-ej-2014-legal-tools>.
- (z) Construction Specifications Institute’s MasterFormat, available from the Construction Specifications Institute, <http://www.csinet.org/masterformat>.
- (aa) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sep. 2012)
- (bb) Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012), <https://semspub.epa.gov/work/HQ/175446.pdf>.
- (cc) Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012), <https://semspub.epa.gov/work/HQ/175449.pdf>.
- (dd) EPA’s Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), [https://www.epaosc.org/\\_HealthSafetyManual/manual-index.htm](https://www.epaosc.org/_HealthSafetyManual/manual-index.htm).
- (ee) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (ff) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).
- (gg) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).
- (hh) Quality Management Systems for Environmental Information and Technology Programs -- Requirements with Guidance for Use, ASQ/ANSI E-4 (February 2014), available at <https://webstore.ansi.org/>.
- (ii) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), <https://www.epa.gov/superfund/superfund-post-construction-completion>.
- (jj) Advanced Monitoring Technologies and Approaches to Support Long-Term Stewardship (July 20, 2018), <https://www.epa.gov/enforcement/use-advanced-monitoring-technologies-and-approaches-support-long-term-stewardship>.

- (kk) Superfund Community Involvement Handbook, OLEM 9230.0-51 (March 2020). More information on Superfund community involvement is available on the Agency's Superfund Community Involvement Tools and Resources web page at <https://www.epa.gov/superfund/superfund-community-involvement-tools-and-resources>.
- (ll) EPA directive CIO 2105.1 (Environmental Information Quality Policy, 2021), [https://www.epa.gov/sites/production/files/2021-04/documents/environmental\\_information\\_quality\\_policy.pdf](https://www.epa.gov/sites/production/files/2021-04/documents/environmental_information_quality_policy.pdf).

**10.2** A more complete list may be found on the following EPA web pages:

- (a) Laws, Policy, and Guidance at <https://www.epa.gov/superfund/superfund-policy-guidance-and-laws>;
- (b) Search Superfund Documents at <https://www.epa.gov/superfund/search-superfund-documents>; and
- (c) Test Methods Collections at: <https://www.epa.gov/measurements/collection-methods>.

**10.3** For any regulation or guidance referenced in the Decree or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Settling Defendants receive notification from the Forest Service of the modification, amendment, or replacement.

EAST MILL DUMP SUB-OPERABLE  
UNIT REMEDIAL DESIGN/REMEDIAL  
ACTION  
CONSENT DECREE

APPENDIX F



## **GUARANTEE AGREEMENT**

This **GUARANTEE AGREEMENT**, dated as of March 29, 2019 (this "**Guarantee**"), is made by Nutrien Ltd., a Corporation organized and existing under the laws of Canada ("**Guarantor**"), to and for the benefit of the United States Department of Agriculture, Forest Service ("**USFS**"). This Guarantee is made on behalf of Nu-West Mining, Inc. and Nu-West Industries, Inc. ("**Respondents**"), which are affiliates of Guarantor.

### **RECITALS**

**WHEREAS**, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9607 et seq. ("**CERCLA**"), Respondents have entered into Administrative Settlement Agreements and Orders on Consent/Consent Orders with USFS (the "**Settlement Agreements**"), as identified in Exhibit C, for certain work to be performed at the South Maybe Canyon Mine, North Maybe Mine, Champ Mine and Mountain Fuel Mine Sites (the "**Sites**") near Soda Springs, Idaho;

**WHEREAS**, each Settlement Agreement requires that Respondents provide financial assurance to USFS to ensure completion of the work required to be conducted by Respondents under the Settlement Agreements;

**WHEREAS**, in order to provide such financial assurance required by the Settlement Agreements, Respondents have agreed to provide USFS with a guarantee, issued by Guarantor, of Respondents' obligations arising under the Settlement Agreements, as set forth more fully in this Guarantee;

**WHEREAS**, Respondents are each subsidiaries of Guarantor, and the Guarantor will receive substantial benefits from the agreements made by and between USFS and Respondents as set forth in the Settlement Agreements; and

**WHEREAS**, Guarantor has agreed to, among other things, guarantee payment and performance in full of the Guaranteed Obligations (as hereinafter defined) and undertake such other commitments to USFS or for USFS's benefit as set forth in this Guarantee.

### **AGREEMENT**

**NOW, THEREFORE**, in consideration of the promises contained herein, and in satisfaction of the terms and conditions of the Settlement Agreements, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Guarantor hereby agrees as follows:

### **ARTICLE I DEFINITIONS**

#### **1.1 Defined Terms**

The following terms when used in this Guarantee shall have the following meanings:

"**Affiliate**" means, when used with respect to a specified entity, another entity that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the entity specified.



**"Annual Audited Financial Statements"** means an entity's annual audited financial statements prepared in accordance with U.S. Generally Accepted Accounting Principles or International Financial Reporting Standards.

**"Control"** means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of an entity, whether through the ownership or control of voting securities, partnership interests or other equity interests, by contract, or otherwise, and **"Controlling"** and **"Controlled"** shall have meanings correlative thereto.

**"Guaranteed Obligations"** means and includes all obligations and liabilities; howsoever arising, owed by Respondents to USFS of every kind and description (whether or not for the payment of money), direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising, pursuant to the terms of the Settlement Agreements.

**"Guarantor"** is Nutrien Ltd., a Canadian corporation.

**"Settlement Agreements"** are the 2012 Administrative Settlement Agreements and Orders on Consent/Consent Orders for the Sites.

**"Sites"** are the South Maybe Canyon Mine, North Maybe Mine, Champ Mine, and Mountain Fuel Mine Sites located near Soda Springs, Idaho, as more fully defined in the Settlement Agreements.

**"USFS"** is the United States Department of Agriculture, Forest Service.

## **1.2 General Definitions**

Unless otherwise defined herein or unless the context otherwise requires, capitalized terms used in this Guarantee have the meanings provided in the Settlement Agreements.

# **ARTICLE II GUARANTEE**

## **2.1 Guarantee**

- (a) Guarantor hereby irrevocably guarantees to USFS the prompt payment in full and the prompt performance in full of the Guaranteed Obligations in accordance with the terms of this Guarantee.
- (b) Guarantor agrees that if for any reason Respondents fail to pay or perform when due any of the Guaranteed Obligations, Guarantor shall promptly pay or perform the same on the date such payment or performance of such Guaranteed Obligation is due or required under the Settlement Agreements.
- (c) Without limiting the foregoing, Guarantor acknowledges and agrees that, upon the occurrence and during the continuance of a "Work Takeover" as specified in each Settlement Agreement, at the election of USFS, Guarantor shall within thirty (30) days after written demand from USFS deposit into an account specified by USFS, 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 USFS.

## 2.2 Obligations Continuing and Irrevocable

- (a) The obligations of Guarantor hereunder constitute a continuing and irrevocable guarantee of payment and performance of the Guaranteed Obligations and are in no way conditioned on or contingent upon any attempt to enforce, in whole or in part, Respondents' liabilities and obligations to USFS in the event of Respondents' default or a Work Takeover under the Settlement Agreements. Each failure by Guarantor to pay or perform a Guaranteed Obligation shall give rise to a separate cause of action hereunder to the United States, and the United States, on behalf of USFS, may bring separate suits as each cause of action arises.
- (b) USFS may, at any time and from time to time (whether or not after revocation or termination of this Guarantee) without the consent of or notice to Guarantor, except such notice as may be required by applicable law:
  - (i) to the extent allowed by the Settlement Agreements, including any amendments to the Settlement Agreements, change the manner, place and terms of payment or performance of any Guaranteed Obligation;
  - (ii) exercise or refrain from exercising any rights against Respondents or others (including Guarantor) or otherwise act or refrain from acting;
  - (iii) add or release any other guarantor from its obligations without affecting or impairing the obligations of Guarantor hereunder;
  - (iv) settle or compromise any Guaranteed Obligations or any obligations' and liabilities incurred directly or indirectly in respect thereof;
  - (v) consent to or waive any breach of, or any act, omission or default under, the Settlement Agreements; and/or
  - (vi) act or fail to act in any manner referred to in this Guarantee which may deprive Guarantor of its right to subrogation against Respondents to recover full indemnity for any payments or performances made pursuant to this Guarantee or of its right of contribution against any other entity.
- (c) This is a continuing Guarantee and all obligations to which it applies or may apply under the terms hereof shall be conclusively presumed to have been created in reliance hereon. In the event that, notwithstanding the provisions of Section 2.2(a) above, this Guarantee shall be deemed revocable in accordance with applicable law, then any such revocation shall become effective only upon receipt by USFS of written notice of revocation signed by Guarantor. To the extent permitted by applicable law, no revocation or termination hereof shall affect, in any manner, rights arising under this Guarantee with respect to Guaranteed Obligations arising prior to receipt by USFS of written notice of such revocation or termination.



### ARTICLE III REPRESENTATIONS AND WARRANTIES

#### 3.1 Guarantor Representations and Warranties

Guarantor represents and warrants to and in favor of USFS, as of the date of this Guarantee, that:

- (a) Existence. Guarantor is duly organized and validly existing under the laws of the jurisdiction of its incorporation and is qualified to do business in such jurisdiction and in each other jurisdiction in which the conduct of its business requires such qualification, and where the failure to obtain such qualification would have a material adverse effect on the business of Guarantor.
- (b) Power and Authorization. Guarantor has full power and authority to enter into and execute this Guarantee. This Guarantee has been duly authorized, executed and delivered by Guarantor.
- (c) No Conflict. The execution, delivery and performance by Guarantor of this Guarantee and the execution, delivery, and performance by Respondents of the Settlement Agreements do not and will not (a) violate any provision of (i) any legal requirement applicable to Guarantor, (ii) the organizational and other corporate governance documents of Guarantor or (iii) any order, judgment or decree of any court or agency or governmental instrumentality binding on Guarantor, (b) conflict with, result in a breach of, or constitute a default under any material contractual obligation of Guarantor, (c) result in or require the creation or imposition of any lien upon any of the properties or assets of Guarantor; or (d) require any approval or consent of any person or entity, except for such approvals or consents which will be obtained on or before the date of this Guarantee and which have been disclosed in writing to USFS.
- (d) Enforceable Obligations. This Guarantee constitutes a legal, valid, and binding obligation of Guarantor, enforceable in accordance with its terms, except to the extent that enforceability may be limited by applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors' rights generally.
- (e) Compliance with Law, Fraud.
  - (i) Guarantor (i) is not in violation of any applicable legal requirements in any material respect and (ii) is not subject to or in default in any material respect with respect to any final judgments, writs, injunctions, decrees, rules or regulations of any court or any federal, state, provincial, Canadian, municipal or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, in the case of either (i) or (ii), which would have a material adverse effect on the ability of Guarantor to perform its obligations under this Guarantee.
  - (ii) Guarantor is not executing this Guarantee with any intention to hinder, delay or defraud any present or future creditor or creditors of Guarantor.
- (f) Relationship To Respondents. Guarantor is a corporate parent of Respondents.

- (g) No Bankruptcy Filing. Guarantor is not contemplating either the filing of a petition by it under any bankruptcy or insolvency laws or the liquidation of all or a major portion of its assets or property, and Guarantor has no knowledge of any person contemplating the filing of any such petition against it.

#### **ARTICLE IV COVENANTS**

Guarantor hereby covenants and agrees for the benefit of USFS, until this Guarantee is terminated, as follows:

##### **4.1 Maintenance of Corporate Existence**

Guarantor shall maintain and preserve its existence and all material rights, privileges and franchises necessary in the normal conduct of its business. Guarantor shall notify USFS in writing within 60 days after any change in its name or place of business or chief executive office, or change in its type of organization or jurisdiction of organization.

##### **4.2 Compliance with Laws**

Guarantor shall promptly comply, or cause compliance, in all material respects with all legal requirements to the extent any noncompliance with such legal requirements could have a material adverse effect on the ability of Guarantor to perform and discharge its obligations under this Guarantee.

##### **4.3 Notice of Bankruptcy or Insolvency, Etc.**

Guarantor shall notify USFS within 10 days after the occurrence of any of the following: filing by the Guarantor of a petition seeking to take advantage of any laws relating to bankruptcy, insolvency, reorganization, winding up or composition or adjustment of debts; Guarantor's consent to (or failure to contest in a timely manner) any petition filed against it in an involuntary case under such bankruptcy or other laws; Guarantor's application for (or consent to or failure to contest in a timely manner) the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator, or the like of itself or of all or a substantial part of its assets; Guarantor's making a general assignment for the benefit of creditors; or Guarantor's taking any corporate action for the purpose of effecting any of the foregoing.

##### **4.4 Further Assurances**

Guarantor shall promptly provide USFS with such financial information and documents related to this Guarantee and the Guaranteed Obligations that USFS may reasonably request.

##### **4.5 Compliance with Financial Measures**

Guarantor shall at all times during the term of this Guarantee comply with and satisfy the financial measures and conditions set forth in either Exhibit A or Exhibit B attached hereto. Guarantor shall also notify USFS immediately if, at any time during the term hereof, Guarantor fails or has reason to believe that it may fail any of the financial measures set forth in either Exhibit A or Exhibit B.

##### **4.6 Submission of Documents**

For so long as this Guarantee is in effect, within 120 days after the close of each fiscal year of Guarantor, Guarantor shall submit to USFS:



- (a) a letter signed by Guarantor's Chief Financial Officer certifying Guarantor's compliance with the financial conditions and measures set forth in either Exhibit A or Exhibit B, which letter shall be substantially in the form of Exhibit C attached hereto; and
- (b) a copy of Guarantor's audited financial statements for its latest completed fiscal year, and a copy of the Guarantor's independent certified public accountant's or chartered accountant's report on examination of such financial statements, which report on examination shall be unqualified or, if qualified, Guarantor has requested a waiver of the unqualified requirement and the USFS has approved such waiver request; and
- (c) a special report from Guarantor's independent certified public accountant or chartered accountant to Guarantor attesting to Guarantor's compliance with the financial conditions and measures set forth in either Exhibit A or Exhibit B, which special report shall be substantially in the form of Exhibit D hereto.

## **ARTICLE V SUBROGATION; ETC.**

### **5.1 Waiver**

Guarantor hereby unconditionally and irrevocably waives and relinquishes, to the maximum extent permitted by applicable legal requirements, all rights and remedies accorded to sureties or guarantors and agrees not to assert or take advantage of any such rights or remedies, including:

- (a) any right to require USFS to proceed against Respondents or any other person or to pursue any other remedy in USFS's power before proceeding against Guarantor;
- (b) any defense that may arise by reason of the incapacity, lack of power or authority, dissolution, merger, or termination of Guarantor, Respondents, or any other person or the failure of USFS to file or enforce a claim against the estate (in administration, bankruptcy or any other proceeding) of Guarantor or Respondents, or any other person;
- (c) promptness, diligence, demand, presentment, protest and notice of any kind (except any notices required by this Guarantee), including notice of the existence, creation or incurring of any new or additional indebtedness or obligation or of any action or non-action on the part of Respondents or USFS;
- (d) any defense based upon an election of remedies by USFS, which destroys or otherwise impairs the subrogation rights of Guarantor, the right of Guarantor to proceed against Respondents or another person for reimbursement, or both;
- (e) any defense based on any offset against any amounts which may be owed by any person to Guarantor for any reason whatsoever;
- (f) any defense based on any act, failure to act, delay or omission whatsoever on the part of Respondents or the failure by Respondents to do any act or thing or to observe or perform any covenant, condition or agreement to be observed or performed by it under the Settlement Agreements;

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- (g) any defense based upon any statute or rule of law, which provides that the obligation of a surety must be neither larger in amount nor in other respects more burdensome than that of the principal;
- (h) any defense, setoff or counterclaim which may at any time be available to or asserted by Respondents against USFS or any other person under the Settlement Agreements;
- (i) any duty on the part of USFS to disclose to Guarantor any facts USFS may now or hereafter know about Respondents or the Site, regardless of whether USFS has reason to believe that any such facts materially increase the risk beyond that which Guarantor intends to assume, or have reason to believe that such facts are unknown to Guarantor, or have a reasonable opportunity to communicate such facts to Guarantor, since Guarantor acknowledges that Guarantor is fully responsible for being and keeping informed of the financial condition of Respondents and of all circumstances bearing on the risk of non-payment or non-performance of any Guaranteed Obligation;
- (j) any defense based on any change in the time, manner or place of any payment or performance under, or in any other term of, the Settlement Agreements, or any other amendment, renewal, extension, acceleration, compromise or waiver of or any consent or departure from the terms of the Settlement Agreements;
- (k) any right to assert the bankruptcy or insolvency of Respondents or any other person as a defense hereunder or as the basis for rescission hereof and any defense arising because of USFS's institution of any proceeding under the Federal Bankruptcy Code; and
- (l) any other circumstance (including any statute of limitations), any act or omission by Respondents, or any existence of or reliance on any representation by Respondents or USFS that might otherwise constitute a defense available to, or discharge of, any guarantor or surety.

## **5.2 Subrogation**

Until this Guarantee is terminated in accordance with Section 6.16 below, neither Guarantor nor Respondents shall exercise any right of subrogation or enforce any remedy which it now may have or may hereafter have against any person in respect of the Guaranteed Obligations, whether or not such claim, right or remedy arises in equity, under contract, by statute, under common law or otherwise.

## **5.3 Bankruptcy**

- (a) The obligations of Guarantor under this Guarantee shall not be altered, limited or affected by any proceeding, voluntary or involuntary, involving the bankruptcy, reorganization, insolvency, receivership, liquidation or arrangement of Respondents or any Affiliate thereof, or by any defense which Respondents or any Affiliate thereof may have by reason of any order, decree or decision of any court or administrative body resulting from any such proceeding.
- (b) Guarantor hereby irrevocably waives, to the extent it may do so under applicable legal requirements, any protection against enforcement of this Guarantee to which it may be entitled under the Federal Bankruptcy Code or equivalent provisions of the laws or regulations of any other jurisdiction with respect to any proceedings, or any successor provision of law of similar import, in the event of any bankruptcy event with respect to



Respondents. Specifically, in the event that the trustee (or similar official) in a bankruptcy event with respect to Respondents or the debtor-in-possession takes any action (including the institution of any action, suit or other proceeding for the purpose of enforcing the rights of Respondents under this Guarantee), Guarantor shall not assert any defense, claim or counterclaim denying liability hereunder on the basis that this Guarantee or the Settlement Agreements are executory contracts or "financial accommodations" that cannot be assumed, assigned or enforced or on any other theory directly or indirectly based on the Federal Bankruptcy Code, or equivalent provisions of the law or regulations of any other jurisdiction with respect to any proceedings or any successor provision of law of similar import. If a bankruptcy event with respect to Respondents shall occur, Guarantor agrees, after the occurrence of such bankruptcy event, to reconfirm in writing, to the extent permitted by applicable legal requirements and at USFS'S written request, its pre-petition waiver of any protection to which it may be entitled under the Federal Bankruptcy Code or equivalent provisions of the laws or regulations of any other jurisdiction with respect to proceedings and, to give effect to such waiver, Guarantor consents to the assumption and enforcement of each provision of this Guarantee by the debtor-in-possession or Respondents' trustee in bankruptcy.

#### **5.4 Reinstatement**

This Guarantee and the obligations of Guarantor hereunder shall continue to be effective or be automatically reinstated if and to the extent that for any reason any payment or performance by or on behalf of Guarantor in respect of the Guaranteed Obligations is rescinded or otherwise restored to Guarantor or Respondents, whether as a result of any proceedings in bankruptcy or reorganization or otherwise, all as if such payment or performance had not been made, and Guarantor agrees that it will indemnify USFS on demand for a reasonable costs and expenses (including reasonable fees of counsel) incurred by USFS in connection with any such rescission or restoration.

### **ARTICLE VI MISCELLANEOUS**

#### **6.1 Voidable Transfer Contingency**

If enforcement of the liability of Guarantor under this Guarantee for the full amount of the Guaranteed Obligations would be an unlawful or voidable transfer under any applicable fraudulent conveyance or fraudulent transfer law or any comparable law, then the liability of Guarantor hereunder shall be reduced to the highest amount for which such liability may then be enforced without giving rise to an unlawful or voidable transfer under any such law.

#### **6.2 Successions or Assignments**

This Guarantee is binding upon Guarantor and its successors and permitted assigns. Guarantor may not assign any of its obligations hereunder without the prior written consent of USFS (and any purported assignment in violation of this Section shall be void).

#### **6.3 Other Waivers**

No delay or omission on the part of USFS in exercising any of its rights (including those under this Guarantee) and no partial or single exercise thereof and no action or non-action by USFS, with or without notice to Guarantor, Respondents, or any other person, shall constitute a waiver of any rights or shall affect or impair this Guarantee.



**6.4 Headings**

The headings in this Guarantee are for convenience of reference only and shall not constitute a part of this Guarantee for any other purpose or be given any substantive effect.

**6.5 Remedies Cumulative**

Each and every right and remedy of USFS hereunder shall be cumulative and shall be in addition to any other right or remedy given hereunder or under the Settlement Agreements, or now or hereafter existing at law or in equity.

**6.6 Severability**

Any provision of this Guarantee that may be determined by competent authority to be prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

**6.7 Amendments**

This Guarantee may be amended, waived or otherwise modified only with the written consent of Guarantor and the written consent of USFS and otherwise, in accordance with the terms of the Settlement Agreements.

**6.8 Jurisdiction**

Guarantor agrees that any legal action or proceeding by or against Guarantor or with respect to or arising out of this Guarantee may be brought by the United States in or removed to the United States District Court for the District of Idaho. By execution and delivery of this Guarantee, Guarantor accepts, for itself and in respect of its property, generally and unconditionally, the non-exclusive jurisdiction of the aforesaid court. Guarantor irrevocably consents to the service of process out of the aforementioned court in any manner permitted by law. Any such process or summons in connection with any such action or proceeding may also be served by mailing a copy thereof by certified or registered mail, or any substantially similar form of mail, addressed to Guarantor as provided for notices hereunder. Guarantor hereby waives any right to stay or dismiss any action or proceeding under or in connection with this Guarantee or the Settlement Agreements brought before the foregoing court on the basis of forum non-conveniens. Nothing herein shall affect the right of USFS to bring legal action or proceedings in any other competent jurisdiction.

**6.9 Governing Law**

This Guarantee and the rights and obligations of the Guarantor shall be governed by, and construed in accordance with, federal law of the United States.

**6.10 Integration of Terms**

This Guarantee, together with the Settlement Agreements, is intended as a final expression of Guarantor's agreement and is intended as a complete and exclusive statement of the terms and conditions thereof.

**6.11 Notices**

Any communications hereto or notices provided herein to be given may be given to the following addresses:

If to Guarantor:

**Jon Bronson, P.E.**  
**Nu West Industries, Inc.**  
**95 East Hooper**  
**Soda Springs, Idaho 83276**  
**Phone: (208) 547-1900 (ext. 13)**  
**Cell: (208) 252-2406**  
**E-mail: jon.bronson@nutrien.com**

Notice provided to Respondents under the Settlement Agreements shall constitute notice to Guarantor.

If to USFS:

Sherri A. Clark  
Deputy Director of Engineering  
USDA Forest Service Region 4  
4350 Cliffs Drive  
Pocatello, ID 83201  
Telephone: (208) 236-7519  
Facsimile: (208) 236-7573  
E-mail: sherriacklark@fs.fed.us

With a copy to:

James E. Alexander  
USDA Office of the General Counsel  
333 SW 1<sup>st</sup> Av.  
Room 457  
Portland, OR 97204  
Telephone: (503) 808-5976  
Facsimile: (503) 808-5977  
E-mail: james.alexander@usda.ogc.gov

All notices or other communications required or permitted to be given hereunder shall be in writing and shall be considered as properly given (a) if delivered in person, (b) if sent by overnight delivery service (including Federal Express, UPS and other similar overnight delivery Services), (c) if mailed by first class United States Mail, postage prepaid, registered or certified with return receipt requested, (d) if sent by facsimile or (e) if sent via other electronic means (including electronic mail). Notice so given shall be effective upon receipt by the addressee, except that communication or notice so transmitted by facsimile or other direct written electronic means shall be deemed to have been validly and effectively given on the day on which it is transmitted if transmitted before 5:00 p.m., recipient's time, and if transmitted after that time, on the next following Work Day; provided, however, that (i) if any notice is tendered to an addressee and the delivery thereof is refused by such addressee, such notice shall be effective upon such tender, and (ii) with respect to any notice given via facsimile or other electronic means, the sender of such message shall promptly provide the addressee with an original copy of such notice by any of the means specified in clauses (a), (b) or (c) above. Respondent and the USFS shall have the right to change its address for notice hereunder to any other location within the continental United States by giving five days' notice to the other in the manner set forth above.



**6.12 Collection Expenses**

Without regard to any limitation set forth in this Guarantee, if USFS prevails in pursuit of any remedy against Guarantor hereunder, Guarantor shall pay to USFS upon demand therefore, all reasonable attorneys' fees and all other costs and expenses incurred by the United States in enforcing this Guarantee (and such fees, costs and expenses shall be deemed to be part of the Guaranteed Obligations).

**6.13 Limitations on Liability**

No claim shall be made by Guarantor against USFS or any of its employees, attorneys or agents for any loss of profits, business or anticipated savings, special or punitive damages or any indirect or consequential loss whatsoever in respect of any breach or wrongful conduct (whether or not the claim therefor is based on contract, tort or duty imposed by law), in connection with, arising out of or in any way related to the transactions contemplated by this Guarantee or the Settlement Agreements or any act or omission or event occurring in connection therewith; and Guarantor hereby waives, releases and agrees not to sue upon any such claim for any such damages, whether or not accrued and whether or not known or suspected to exist in their favor.

**6.14 Time**

Time is of the essence of this Guarantee.

**6.15 Termination**

Subject to Section 5.4, this Guarantee and all of the obligations of Guarantor hereunder shall terminate upon the earlier of (a) payment and performance in full of all Guaranteed Obligations in accordance with the Settlement Agreements and (b) the substitution of a different financial assurance mechanism in accordance with the terms of each Settlement Agreement, as consented to in writing by USFS. Unless earlier terminated pursuant to the foregoing sentence, this Guarantee shall survive any foreclosure proceedings instituted, commenced, or completed against Respondents.

**6.16 Settlement Agreements**

Guarantor acknowledges that it has been provided with copies of the Settlement Agreements and has read and is familiar with the provisions of the Settlement Agreements. This Guarantee shall not in any way alter the terms of the Settlement Agreements. If a conflict between the terms of the Settlement Agreements and the-terms of this Guarantee shall occur or exist at any time, the terms of the Settlement Agreements shall control.

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IN WITNESS WHEREOF, the Guarantor by its duly authorized representative, intending to be legally bound, have caused this Guarantee to be duly executed and delivered as of the date first above written.

**Nutrien Ltd., a Canadian corporation, as  
Guarantor**

By: 

Name: **Pedro Farah**

Title: **EVP & CFO**

## EXHIBIT A

### Section 4.5(a) Financial Conditions

As calculated from the data contained in Guarantor's Annual Audited Financial Statement, the Guarantor must:

- (A) Satisfy two of the following three ratios: (1) a ratio of total liabilities to Net Worth less than 2.0; (2) a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and (3) a ratio of current assets to current liabilities greater than 1.5; and
- (B) Have a Net Working Capital and Tangible Net Worth each at least six times the Total Value of Environmental Obligations; and
- (C) Have a Tangible Net Worth of at least \$10 million; and
- (D) Have assets located in the United States amounting to at least 90 percent of total assets or at least six times the Total Value of Environmental Obligations,

### Defined Terms for Exhibit A and Exhibit B

**"Net Working Capital"** means current assets minus current liabilities.

**"Net Worth"** means total assets minus total liabilities.

**"Tangible Net Worth"** means the value of tangible assets included in the calculation of Net Worth; this value would not include the value of intangibles such as goodwill and rights to patents or royalties.

**"Total Value of Environmental Obligations"** means the sum of:

- (a) the sum of the dollar amounts of financial assurance required by each Settlement Agreement or the relevant portion if multiple financial assurance mechanisms are being used;
- (b) the total dollar amount of financial assurance provided by the Guarantor through the use of a financial test and/or guarantees for CERCLA settlements other than that embodied in the Settlement Agreements; and
- (c) the total dollar amount of financial assurance provided by the Guarantor through the use of a financial test and/or a guarantee for purposes of any facility regulated under federal environmental programs of the United States other than CERCLA, including but not limited to hazardous waste Treatment, Storage, and Disposal ("TSD") facilities under 40 CFR parts 264 and 265, Municipal Solid Waste Landfill ("MSWLF") facilities under 40 CFR part 258, Underground Injection Control ("UIC") facilities under 40 CFR part 144, Underground Storage Tank ("UST") facilities under 40 CFR part 280, and Polychlorinated Biphenyl ("PCB") storage facilities under 40 CFR part 761.

**EXHIBIT B**

Section 4.5(b) Financial Conditions

The Guarantor must have:

- (A) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and
- (B) Tangible Net Worth at least six times the Total Value of Environmental Obligations; and
- (C) Tangible Net Worth of at least \$10 million; and
- (D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the Total Value of Environmental Obligations.

**EXHIBIT C**

CFO Letter





Nutrien Ltd.  
Suite 1700, 211 19<sup>th</sup> Street East  
Saskatoon, SK, S7K 5R6

March 25, 2024

Dear United States Department of Agriculture, Forest Service and Idaho Department of Environmental Quality:

I am the Chief Financial Officer of Nutrien Ltd. (the "Company"), a Canadian corporation. This letter is in support of the Company's use of a financial test to demonstrate financial assurance by the Company, through a Guarantee Agreement dated March 29, 2019, for the obligations of the Company's Affiliates, Nu-West Industries, Inc. and Nu-West Mining, Inc. ("Respondents") under the Administrative Settlement Agreements and Orders on Consent/Consent Orders (the "USFS Settlement Agreements") for the South Maybe Canyon Mine, North Maybe Mine, Champ Mine, and Mountain Fuel Mine Sites between Respondents and the United States Department of Agriculture, Forest Service ("USFS"), entered into pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9607 et seq. ("CERCLA"), and also through and under a Guarantee Agreement dated March 25, 2019, ("GTC Settlement Agreement") for the Georgetown Canyon Mine Site entered into under CERCLA and Idaho state law, between Respondents, USFS, and the State of Idaho. The USFS Settlement Agreements and the GTC Settlement Agreement are collectively referred to herein as the "Settlement Agreements". This letter confirms the Company's satisfaction of certain financial criteria, as set forth more fully below, that makes the Company and Respondents eligible to utilize the financial test as financial assurance under the Settlement Agreements.

1. The total dollar amount of financial assurance required by Section XXXII of each Settlement Agreement and covered by the Company's use of the financial test is \$24,500,000, and is shown for each Settlement Agreement as follows:

(a) South Maybe Canyon Mine Site Administrative Settlement Agreement and Order on Consent/Consent Order for a Non-Time-Critical Removal Action (Effective Date: August 28, 2012): \$15,000,000.

(b) Champ Mine Site Administrative Settlement Agreement and Order on Consent/Consent Order for Performance of a Remedial Investigation and Feasibility Study (Effective Date: August 16, 2012): \$2,000,000.

(c) Mountain Fuel Mine Site Administrative Settlement Agreement and Order on Consent/Consent Order for Performance of a Remedial Investigation and Feasibility Study (Effective Date: August 16, 2012): \$2,000,000.

(d) North Maybe Mine Site Administrative Settlement Agreement and Order on Consent/Consent Order for Performance of Remedial Investigations and Feasibility Studies for the East Mill Operable Unit (Effective Date: December 6, 2012): \$2,000,000.

(e) South Maybe Canyon Mine Site Administrative Settlement Agreement and Order on Consent/Consent Order for Performance of Remedial Investigations and Feasibility Studies (Effective Date: February 14, 2013): \$2,000,000.

(f) Georgetown Canyon Mine Site Consent Order/Administrative Settlement Agreement and Order on Consent for Performance of a Remedial Investigation and Feasibility Study (Effective Date: March 13, 2014): \$1,500,000.

2. The Company is not a signatory to CERCLA settlements (other than the Settlement Agreements) under which the Company is providing financial assurance to the Environmental Protection Agency ("EPA") or USFS through the use of a financial test. The total dollar amount of such financial assurance covered by a financial test is equal, in the aggregate, to zero dollars (\$0).

3. The Company is not the owner and/or operator of facilities for which the Company has demonstrated financial assurance through a financial test, including but not limited to hazardous waste Treatment, Storage, and Disposal ("TSD") facilities under 40 CFR parts 264 and 265, Municipal Solid Waste Landfill ("MSWLF") facilities under 40 CFR part 258, Underground Injection Control ("UIC") facilities under 40 CFR part 144, Underground Storage Tank ("UST") facilities under 40 CFR part 280, and Polychlorinated Biphenyl ("PCB") storage facilities under 40 CFR part 761. The total dollar amount of such financial assurance covered by a financial test is equal, in the aggregate, to zero dollars (\$0).

4. The Company does not guarantee the CERCLA settlement obligations and/or the MSWLF, TSD, UIC, UST, PCB, and/or other facility obligations of other guaranteed parties. The total dollar amount of such CERCLA settlement and regulated facility obligations so guaranteed is equal, in the aggregate, to zero dollars (\$0).

5. The Company is not required to file a Form 10K with the Securities and Exchange Commission ("SEC") for the Company's latest fiscal year.

6. The Company's fiscal year ends on December 31st. I hereby certify that the figures for the following items are derived from the Company's independently audited, year-end financial statements for its latest completed fiscal year, ended December 31, 2023, and further certify as follows:

A. The aggregate total of the dollar amounts shown in Paragraphs 1 through 4 above equals \$24,500,000.

B. The current rating of the Company's senior unsecured debt is BBB as issued by S&P and Baa2 as issued by Moody's Investor Services.

C. Company's tangible net worth equals: \$10,870 million

D. Company's total assets in the U.S. equal: \$25,270 million

E. Is line C at least 6 times line A? (Yes/No): Yes

F. Is line C at least \$10 million? (Yes/No): Yes

G. Are at least 90% of Company's assets located in the U.S.? (Yes/No): No If "No," complete line H.

H. Is line D at least 6 times line A? (Yes/No): Yes

I hereby certify that, to the best of my knowledge after thorough investigation, the information contained in this letter 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.

Signature:  \_\_\_\_\_

Name: Pedro Farah

Title: Executive Vice President & Chief Financial Officer

Date: March 25, 2024

**EXHIBIT D**

**Auditors' Letter**





KPMG LLP  
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Canada  
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## **AGREED-UPON PROCEDURES REPORT**

To Board of Directors of Nutrien Ltd.

### ***Purpose of this Agreed-Upon Procedures Report***

Our report is solely for the purpose of providing Nutrien Ltd. (the “Company”) with information necessary to fulfill its responsibility in confirming selected financial data (hereinafter referred to as the “subject matter” and “purpose”) contained in the attached letter from Pedro Farah, the Company’s Executive Vice President & Chief Financial Officer, dated March 25, 2024, to the United States Department of Agriculture, Forest Service (“USFS”), Region 4 and the Idaho Department of Environmental Quality (the “CFO Letter”). We have been advised by the Company that the CFO Letter has been or will be submitted to the USFS in support of the Company’s Affiliates, Nu-West Industries, Inc. and Nu-West Mining, Inc. (“Respondents”), use of a financial test to demonstrate financial assurance for the Respondents’ obligations under Administrative Settlement Agreements and Orders on Consent/Consent Orders between Respondents and USFS for the South Maybe Canyon Mine, North Maybe Mine, Champ Mine, and Mountain Fuel Mine Sites, and under a Consent Order/Administrative Settlement Agreement and Order on Consent between Respondents, USFS, and the State of Idaho for the Georgetown Canyon Mine Site (collectively, the “Settlement Agreements”).

The procedures outlined below were performed solely to assist Respondents and the Company in complying with the financial assurance requirements contained in the Settlement Agreements.

Our report may not be suitable for another purpose.

### ***Responsibilities of the Engaging Party***

Nutrien Ltd. has acknowledged that the agreed-upon procedures are appropriate for the purpose of the engagement.

Nutrien Ltd. is responsible for the subject matter on which the agreed-upon procedures are performed.

### ***Practitioner's Responsibilities***

We have conducted the agreed-upon procedures engagement in accordance with the Canadian Standard on Related Services (CSRS) 4400, Agreed-Upon Procedures Engagements.

An agreed-upon procedures engagement involves our performing the procedures that have been agreed with Nutrien Ltd. and reporting the findings, which are the factual results of the agreed-upon procedures performed.



We make no representation regarding the appropriateness of the agreed-upon procedures.

This agreed-upon procedures engagement is not an assurance engagement. Accordingly, we do not express an opinion or an assurance conclusion.

Had we performed additional procedures, other matters might have come to our attention that would have been reported.

### ***Professional Ethics and Quality Management***

We have complied with ethical requirements, including those pertaining to independence, relevant to assurance engagements in Canada.

Our firm applies Canadian Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### ***Procedures and Findings***

The procedures we performed, and our associated findings are as follows:

1. We confirm that we have audited the consolidated financial statements of Nutrien Ltd. as of and for the fiscal year ended December 31, 2023, in accordance with Generally Accepted Auditing Standards in Canada and the standards of the Public Company Accounting Oversight Board (US), and our report is included in Nutrien Ltd.'s 2023 Annual Report ("Audited Financials").
2. Using data set forth in the Audited Financials, we recalculated the amount of the Company's Tangible Net Worth as of December 31, 2023, as \$10,870 million by subtracting the amount of Intangible assets and Goodwill of \$14,331 million from the amount of total Shareholders' equity of \$25,201 million. We compared the amount of the Company's Tangible Net Worth as so calculated with the amount set forth in Line 6(C) of the CFO Letter ("Tangible Net Worth") and found such amounts to be in agreement.
3. We compared the amount of the Company's total assets located in the United States as of December 31, 2023, of \$25,270 million (as such amount was derived by the Company from its underlying accounting records of wholly owned subsidiaries domiciled in the United States, which support the Audited Financials, and notified to us in writing) with the amount set forth in Line 6(D), of the CFO Letter, and found such amounts to be in agreement. For the purposes of this calculation, total assets exclude any amounts due to the Company, or the above subsidiaries, from any wholly owned subsidiary of the Company.
4. We recalculated the Company's Tangible Net Worth (as set forth in Line 2 above) and observed this amount to be greater than or equal to \$10 million.
5. The dollar amount identified in Line 6(A), of the CFO Letter is hereinafter referred to as the "Financial Assurance Amount." We recalculated the Company's Tangible Net Worth (as set forth in Line 2 above) and observed this amount to be greater than or equal to an amount calculated as 6 times the Financial Assurance Amount.
6. We recalculated the Company's total assets located in the United States (as set forth in Line 3 above) and observed this amount to be greater than or equal to an amount calculated as 6 times the Financial Assurance Amount.



Our report is intended solely for the Board of Directors of Nutrien Ltd. and is not intended to be and should not be used by anyone other than these specified parties; provided, however, that we acknowledge and agree that the Company may provide this report to the USFS and the Idaho Department of Environmental Quality in support of the Company's financial assurance demonstration under the Settlement Agreements.

A handwritten signature in black ink that reads "KPMG LLP". The signature is written in a cursive, stylized font and is underlined with a single horizontal stroke.

Chartered Professional Accountants

Saskatoon, Saskatchewan

March 25, 2024