UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 9

IN THE MATTER OF:

Iron King Mine Site Dewey-Humboldt, Yavapai County, Arizona

Ironite Products Company Respondent ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTION

U.S. EPA Region 9 CERCLA Docket No. 2006-13

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

TABLE OF CONTENTS

<u>.,l.</u>	JURISDICTION AND GENERAL PROVISIONS	3	
II.	PARTIES BOUND	3	
III.	Definitions	4	
IV.	FINDINGS OF FACT	5	
V	CONCLUSIONS OF LAW AND DETERMINATIONS	7	
VI.	SETTLEMENT AGREEMENT AND ORDER	8	
VΠ.	DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SO		
,	COORDINATOR	8	
VIII.	Work to be Performed	9	
IX.	SITE ACCESS	13	
Χ.	ACCESS TO INFORMATION		
XI.	RECORD RETENTION	15	
XII.	COMPLIANCE WITH OTHER LAWS	15	
XIII.	EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES	16	
XIV.	AUTHORITY OF ON-SCENE COORDINATOR	16	
XV.	PAYMENT OF RESPONSE COSTS	17	
XVI.	DISPUTE RESOLUTION	18	
XVII.	Force Majeure	18	
XVIII. 😘	STIPULATED PENALTIÉS	19	
XIX.	COVENANT NOT TO SUE BY EPA	22	
XX.	RESERVATIONS OF RIGHTS BY EPA	23	
XXI.	COVENANT NOT TO SUE BY RESPONDENTS	24	
XXII.	OTHER CLAIMS	25	
XXIII.	Contribution	26	
XXIV.	INDEMNIFICATION	26	
XXV.	INSURANCE	27	
XXVI.	FINANCIAL ASSURANCE	28	
XXVII.	MODIFICATIONS	29	
XXVIII.	Additional Removal Actions	30	
XXIX.	NOTICE OF COMPLETION OF WORK	30	
XXX.	SEVERABILITY/INTEGRATION/APPENDICES	30	
XXXI	FFFFCTIVE DATE	31	

1. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Ironite Products Company ("Respondent"). This Settlement Agreement provides for the performance of a removal action by Respondent at or in connection with 4 residential properties located near the Iron King Mine along the stream corridor known as the Chaparral Gulch in Dewey-Humboldt, Arizona, the "Iron King Mine Site" or the "Site."
- 2. This settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended ("CERCLA").
- 3. EPA has notified the State of Arizona (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).
- 4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV and V of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest with the United States the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

- 5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such. Respondent's responsibilities under this Settlement Agreement.
- 6. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

- 7. Unless otherwise expressly provided herein, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:
- a. "Action Memorandum" shall mean the EPA Action Memorandum relating to the Site signed on April 11, 2006, by the Regional Administrator, EPA Region 9, or his delegate, and all attachments thereto. The Action Memorandum is attached as Appendix 1.
- b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, et seq.
- c. "Day" shall mean a calendar day. In computing any period of time under this Order, 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.
- d. "Effective Date" shall be the effective date of this Order as provided in Section XXXI.
- e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
- f. "Arizona Department of Environmental Quality ("ADEQ")" shall mean the State environmental protection agency and any successor departments or agencies of the State.
- g. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraph 23 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 33 (emergency response), and Paragraph 58 (work takeover).
- h. "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.

- I. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.
- j. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto. In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.
- k. "Paragraph" shall mean a portion of this Order identified by an Arabic numeral.
 - 1 "Parties" shall mean EPA and Respondent.
- m. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, et seq. (also known as the Resource Conservation and Recovery Act).
 - n. "Respondent" shall mean the Ironite Products Company.
 - o. "Section" shall mean a portion of this Order identified by a Roman numeral.
- p. "Site" shall mean that portion of the Iron King Mine property that includes the Ironite Product Company's property and the Chaparral Gulch Residential area located in the town of Dewey-Humboldt in Yavapai County, Arizona and depicted generally on the map attached as Appendix 2.
 - q. "State" shall mean the State of Arizona.
- r. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and 4) any "hazardous waste" under Arizona Revised Statutes Title 49 § 49-922.
- s. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement.

IV. FINDINGS OF FACT

- 8. The Site includes four privately owned, residential parcels located along the stream corridor known as the Chaparral Gulch in Dewey-Humboldt, Yavapai County, Arizona.
- a. The properties are located on both sides of State Highway 69, in the town of Dewey-Humboldt, Arizona. These properties are situated east north east and directly downslope

of the Iron King Mine. The Iron King Mine occupies 153 acres, the majority of which are covered with tailings and waste rock piles. The four residential parcels are believed to be impacted by erosion, and tailings blow outs, from the Iron King property during rain and flood events. Potential contamination may also be the result of air dispersion of waste sources from the mine and the nearby Humboldt Smelter.

- b. The Iron King Mine consists of several properties, including the mine property, the Ironite Products Company (Ironite") property, and the former fertilizer plant. The Ironite property consists of 62 acres of tailings and 23 acres of fertilizer plant area. The Ironite plant currently produces Ironite fertilizer by mixing tailings with sulfuric acid, urea and water. The former fertilizer plant is located on a waste rock pile south of the mine property on the south side of Iron King Road.
- c. During a 1995 National Pollutant Discharge Elimination System (NPDES) inspection, EPA inspectors noted runoffs and culverts from several areas on the Iron King Mine running into the Chaparral Gulch. In April 2002, sampling performed by the ADEQ during a Preliminary Assessment/Site Inspection (PA/SI) of the Iron King Mine revealed that sediment samples collected from the Chaparral Gulch in the vicinity of the residential areas had concentrations of arsenic and lead above EPA's Residential Preliminary Remediation Goals (PRGs) and ADEQ Soil Remediation Levels (SRLs).
- d. In August 2005, the Superfund Technical Assistance and Response Team conducted a Site assessment of 17 properties in the area. The sample for each property was compared to various background concentrations and the Region 9 Preliminary Remediation Goal (PRG). Based on a visual comparison, all 17 of the properties in the investigation exceeded the PRG for arsenic. The results for 4 parcels were greater than 100 parts per million (ppm) arsenic, and each exceeded the Site-specific background concentration by at least 3 times.
- e. More specific details about the materials at the Site and release conditions are provided in the Action Memorandum Request for a Time-Critical Removal Action at the Chaparral Gulch Residential Site (the "Action Memorandum"), attached to this Settlement Agreement as Appendix 1.
- f. Residential soils contain high concentrations of arsenic, a hazardous substance, that pose a potential threat to human residents by ingestion or inhalation of a hazardous substance. Heavy rains and winds may also transport contaminated soils from the Site causing contaminant dispersal. The materials EPA observed at the Site and referenced in the Action Memorandum are "hazardous substances," as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), by meeting requirements set forth respectively in 40 CFR §§ 261.21(a)(1), 261.22(a)(1), and 261.24.
- g. Threats to public health or the environment stem from the significant potential for releases of hazardous substances, specifically arsenic, at the Site that create an imminent and

substantial endangerment to the residents that occupy the Site and people engaging in recreational activities on or in close proximity to the Site.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

- 9. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:
 - a. The Iron King Mine Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
 - b. The contamination found at the Site, as identified in the Findings of Fact above, includes a "hazardous substance" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
 - c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
 - d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is liable for performance of a response action and for response costs incurred and to be incurred at the Site. Respondent is the "owner" and "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1), from which a hazardous substance was released to the Site.
 - e. The conditions described in the Findings of Fact above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C.§ 9601(22).
 - f. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be considered consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

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

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

10. Respondent shall retain one or more contractors to perform the Work and shall notify EPA of the name(s) and qualifications of such contractor(s) within 3 days of the Effective Date. Respondents shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 5 days prior to commencement of such Work. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify EPA of that contractor's name and qualifications within 10 days of EPA's disapproval. The proposed contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002), or equivalent documentation as required by EPA. Any decision not to require submission of the contractor's QMP should be documented in a memorandum from the OSC and Regional QA personnel to the Site file.

Coordinator who shall be responsible for administration of all actions by Respondents required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within 10 days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by all Respondents.

12. EPA has designated Harry Allen of the Emergency Response Section, Response. Planning and Assessment Branch of the Superfund Division, Region 9, as its On-Scene Coordinator ("OSC"). EPA designates Daniel Suter and Hedy Salter as alternate OSCs

in the event Harry Allen is not present at the Site or is otherwise unavailable. During such times, these alternate OSCs are available and have the authority vested in the OSC by the NCP. Except as otherwise provided in this Order, Respondent shall direct all submissions required by this Order to the OSC by over-night mail with a electronic copy by email to the OSC at the following address:

Harry Allen, Federal On-Scene Coordinator Superfund Division, SFD-9-2 EPA, Region 9 75 Hawthorne Street San Francisco, CA 94105 allen harryl@epa.gov

Respondent shall submit two (2) paper copies of each document to EPA.

13. EPA and Respondent shall have the right, subject to Paragraph 11, to change their respective designated OSC or Project Coordinator. Respondent shall notify EPA 3 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

- 14. Respondent shall perform, at a minimum, all actions necessary to implement the Action Memorandum. The actions to be implemented generally include, but are not limited to, the following:
 - a. Removal of surficial contamination by excavating soil within the existing sampling grids to achieve a concentration of 23 ppm arsenic or less at the excavation surface unless an alternative concentration is approved by EPA and documented in an amendment to the Action Memorandum.
 - b. Confirmation sampling and analysis using laboratory analyses.
 - c. Transport and disposal of excavated material on-site at an EPA approved location on the Ironite property or at an EPA approved off-site facility. Disposal of contaminated soils shall be at the direction of the OSC, and pursuant to the EPA approved Work Plan. Any off-site disposal shall be consistent with EPA's procedures for planning and implementing off-site response actions at 40 CFR 300.440.
 - d. Replacement of excavated material with clean fill and restoration of each property to pre-removal conditions replacing patios, fences, trees and shrubs if necessary.

- e. Provide community relations support to the affected residents in coordination with EPA's community involvement program.
- f. Provide EPA a weekly progress report that summarizes work performed and work planned for the upcoming period, and which includes copies of all documentation related to confirmation sampling, off-site disposal or other disposition of wastes including, but not limited to, manifests, waste profiles and analytical data, and disposal costs.

Under circumstances where special considerations are appropriate for the scope of the residential excavation, such as risk to property or significant duress for the resident, an alternative approach to the excavation extent may be deemed appropriate as determined by EPA.

15. Work Plan and Implementation.

- a. Within 10 days after the Effective Date, Respondent shall submit to EPA for approval a draft Work Plan for performing the removal action generally described in Paragraph 14 above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Order. Respondent shall prepare a Quality Assurance Project Plan ("QAPP") as part of the Work Plan. The QAPP should be prepared in accordance with "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001), and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998).
- Work Plan in whole or in part. If EPA requires revisions, Respondent shall submit a revised draft Work Plan within 3 days of receipt of EPA's notification of the required revisions. Respondent shall implement the Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Order.
- c. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement. Respondent shall not commence implementation of the Work Plan developed hereunder until receiving written EPA approval pursuant to Paragraph 15(b).
- 16. Health and Safety Plan. Within 10 days after the Effective Date, Respondent shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-Site work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA

determines that it is appropriate, the plan shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.

17. Quality Assurance and Sampling.

- a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), EPA Guidance for Quality Assurance Project Plans (EPA QA/G-5), Preparation of a U.S. EPA Region 9 Field Sample Plan for EPA-Lead Superfund Projects (Document Control No. 9QA-05-93) and Guidance for the Data Quality Objectives Process (EPA QA/G-4). Soil sampling activities shall utilize proper soil assessment techniques as defined in EPA Document SW-846, Chapter 9 (EPA Environmental Response Team Standard Operating Procedures) or appropriate ASTM standards as guidance for QA/QC and sampling. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements.
- b. Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Respondents shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.
- c. Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondents shall notify EPA not less than 5 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent's implementation of the Work.
- 18. <u>Post-Removal Site Control</u>. In accordance with the Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for post-removal site control consistent with Section 300.415(/) of the NCP and OSWER Directive No. 9360.2-02. Upon EPA approval, Respondent shall implement such controls and shall provide EPA with documentation of all post-removal site control arrangements.

19. Reporting.

- a. Respondent shall submit weekly written progress reports to EPA each Monday concerning actions undertaken pursuant to this Settlement Agreement after the date of receipt of EPA's approval of the Work Plan until termination of this Order, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.
- b. Respondent shall submit 2 copies of all plans, reports or other submissions required by this Settlement Agreement, or any approved work plan. Respondent shall also submit all documents in electronic form.
- c. Any Respondent who owns or controls property at the Site shall, at least 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 EPA and the State of the proposed conveyance, including the name and address of the transferee. Any Respondent who owns or controls property at the Site also agree to require that their successors comply with the immediately proceeding sentence and Sections IX (Site Access) and X (Access to Information).
- 20. Final Report. Within 60 days after completion of all Work required by this Settlement Agreement, Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall also conform with "Superfund Removal Procedures: Removal Response Reporting POLREPS and OSC Reports" (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

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

21. Off-Site Shipments:

- a. Respondent 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 On-Scene Coordinator. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.
 - I. Respondent shall include in the written notification the following information: 1) the name and location of the facility to which the Waste Material is to be shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule for the shipment of the Waste Material; and 4) the method of transportation. Respondent 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.
 - ii. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the removal action. Respondent shall provide the information required by Paragraph 21(a) and 21(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.
- b. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondent 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. Respondent shall only send hazardous substances, pollutants, or contaminants from the Chaparral Gulch residential area to an EPA approved location on-site or to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. SITE ACCESS

- 22. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by the Respondent, the Respondent shall, commencing on the Effective Date, provide EPA and its representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.
- 23. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 10 days after the Effective Date, or as otherwise specified in writing by the OSC. Respondent shall immediately notify EPA 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. Respondent shall describe in writing their efforts to obtain access. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).

24. Notwithstanding any provision of this Settlement Agreement, EPA and the State retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

- 25. Respondent shall provide to EPA and the State, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA and the State, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.
- 26. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA and the State under this Order to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA and the State, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent.
- 27. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA and the State with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

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

XI. RECORD RETENTION

- 29. Until 10 years after Respondent's receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), 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 10 years after Respondents's receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), Respondent 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.
- 30. At the conclusion of this document retention period, Respondent shall notify EPA and the State at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA or the State. Respondent shall deliver any such records or documents to EPA or the State. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA or the State with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondent. 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.
- 31. 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 notification of potential liability by EPA or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

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

Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondent shall identify ARARs in the Work Plan subject to EPA approval.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

- 33. In the event of any action or occurrence during performance of the Work which 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, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer at the EPA Regional Emergency 24-hour telephone number (1-800-300-2193) of the incident or Site conditions. In the event that Respondent fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).
- 34. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the OSC at (415) 972-3063 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within 5 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 of CERCLA, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, et seq.

XIV. AUTHORITY OF ON-SCENE COORDINATOR

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

XV. PAYMENT OF RESPONSE COSTS

- 36. Payments for Future Response Costs.
- a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a Regionally-prepared cost summary, which includes direct and indirect costs incurred by EPA and its contractors. Respondent shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 38 of this Settlement Agreement.
- b. Respondents shall make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making payment and EPA Site/Spill ID number 09NU. Respondent shall send the check(s) to the following address:.

U.S. Environmental Protection Agency Region 9 Superfund P.O. Box 371099M Pittsburgh, PA 15251

- c. At the time of payment, Respondents shall send a cover letter with any check and the letter shall identify the Iron King Mine Site by name and make reference to this Settlement Agreement, including the EPA docket number stated above (Docket No. 2006-13). Respondent shall send notification of any amount paid, including a photocopy of the check, simultaneously to the EPA OSC.
- d. The total amount to be paid by Respondent pursuant to Paragraph 36(a) shall be deposited in the Iron King Mine Humboldt Smelter Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.
- 37. In the event that the payments for Future Response Costs are not made within 30 days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance. The interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.

38. Respondent may dispute all or part of a bill for Future Response Costs submitted under this Order, if Respondent alleges that EPA has made an accounting error, or if Respondent alleges that a cost item is inconsistent with the NCP. If any dispute over costs is resolved before payment is due, the amount due will be adjusted as necessary. If the dispute is not resolved before payment is due, Respondent shall pay the full amount of the uncontested costs to EPA as specified in Paragraph 36 on or before the due date. Within the same time period, Respondent shall pay the full amount of the contested costs into an interest-bearing escrow account. Respondent shall simultaneously transmit a copy of both checks to the persons listed in Paragraph 36 above. Respondent shall ensure that the prevailing party or parties in the dispute shall receive the amount upon which they prevailed from the escrow funds plus interest within 10 days after the dispute is resolved.

XVI. DISPUTE RESOLUTION

- 39. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.
- 40. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify EPA in writing of their objection(s) within 5 days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondents shall have 10 days from EPA's receipt of Respondent's written objection(s) to resolve the dispute through formal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA.
- 41. Any agreement reached by the parties pursuant to this Section shall be in writing and shall, upon signature by both parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Section Chief level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

XVII. FORCE MAJEURE

- 42. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a force majeure. For purposes of this Settlement Agreement, a force majeure is defined as any event arising from causes beyond the control of Respondent, or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the Work, or increased cost of performance, or a failure to attain action levels set forth in the Action Memorandum.
- 43. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 24 hours of when Respondent first knew that the event might cause a delay. Within 3 days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.
- 44. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Settlement Agreement that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

XVIII. STIPULATED PENALTIES

45. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 46 and 47 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the activities under this Settlement Agreement or any work plan or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of law, this Settlement Agreement, and any plans or other documents

approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

46. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 46(b):

Penalty Per Violation Per Day	Period of Noncompliance	
\$ 1,000.00		1st through 14th day
\$ 5,000.00		15th through 30th day
\$ 10,000.00	•	31st day and beyond

b. Compliance Milestones:

- I. The Respondent shall prepare and submit the Work Plan by 10 days after the Effective Date.
- ii. The Respondent shall mobilize to the Site one week after EPA approval of the Work Plan.
- iii. All work on the Site shall be completed by August 1, 2006 unless EPA at its sole discretion extends the period in writing.
- iv. A final report for the Site shall be completed and submitted by 60 days after the Work is completed.

47. Stipulated Penalty Amounts - Reports.

The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports or other written documents pursuant to Paragraphs 14, 15,16,19, 20, 21, 30, 33 and 34:

Penalty Per Violation Per Day	Period of
	Noncompliance
\$ 1,000.00	1st through 14th day
\$ 5,000.00	15th through 30th day
\$ 10,000.00	31st day and beyond

- 48. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 58 of Section XX, Respondents shall be liable for a stipulated penalty in the amount of \$500,000.00.
- 49. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and 2) with respect to a decision by the EPA Management Official at the Section Chief level or higher, under Paragraph 41 of Section XVI (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.
- 50. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraphs regardless of whether EPA has notified Respondent of a violation.
- 51. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invoke the dispute resolution procedures under Section XVI (Dispute Resolution). All payments to EPA under this Section shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to [insert the Regional Lockbox number and address], shall indicate that the payment is for stipulated penalties, and shall reference the EPA Region and Site/Spill ID Number 09NU, the EPA Docket Number 2006-13, and the name and address of the party making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to EPA as provided in Paragraph 12, and to the OSC.

- 52. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.
- 53 Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.
- 54. If Respondent fail to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 50. Nothing in this Order shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Order or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(l) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 106(b) or 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX, Paragraph 58. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XIX. COVENANT NOT TO SUE BY EPA

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

XX. RESERVATIONS OF RIGHTS BY EPA

- Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.
- 57. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
 - a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
 - b. liability for costs not included within the definition of Future Response Costs;
 - c. liability for performance of response actions other than the Work;
 - d. criminal liability;
 - e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
 - f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and

- g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.
- Respondent has ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XV (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENTS

- 59. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:
 - a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
 - b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the State Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Site.

Except as provided in Paragraph 61 (Waiver of Claims), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 57 (b),©, and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

- 60. 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).
- 61. Respondents agree not to assert any claims and to waive all claims or causes of action that they may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if
 - a. the materials contributed by such person to the Site containing hazardous substances did not exceed the greater of I) 0.002% of the total volume of waste at the Site, or ii) 110 gallons of liquid materials or 200 pounds of solid materials.
 - b. This waiver shall not apply to any claim or cause of action against any person meeting the above criteria if EPA has determined that the materials contributed to the Site by such person contributed or could contribute significantly to the costs of response at the Site.

XXII. OTHER CLAIMS

- 62. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or their directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.
- 63. Except as expressly provided in Section XXI, and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.
- 64. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. CONTRIBUTION

65.

- a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613 (f)(2), and that Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement are the Work and Future Response Costs.
- b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B)of CERCLA, 42 U.S.C. § 9613 (f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Future Response Costs.

c. Except as provided in Section XXI of this Settlement Agreement, nothing in this Settlement Agreement precludes the United States or Respondent from asserting any claims, causes of action, or demands for indemnification, contribution or cost recovery against any persons not parties to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613 (f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

XXIV. <u>INDEMNIFICATION</u>

- 66. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to 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 Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.
- 67. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 68. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating

to the Site, including, but not limited to, claims on account of construction delays.

XXV. INSURANCE

69. At least 7 days prior to commencing any on-Site work under this Order, Respondent shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of one million dollars, combined single limit. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the Settlement Agreement, Respondent 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 Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

- 70. Within 10 days of the Effective Date, Respondent shall establish and maintain financial security in the amount of \$250,000.00 in one or more of the following forms:
 - a. A surety bond guaranteeing performance of the Work;
 - b. One or more irrevocable letters of credit equaling the total estimated cost of the Work;
 - c. A trust fund;
 - d. A guarantee to perform the Work by one or more parent corporations or subsidiaries, or by one or more unrelated corporations that have a substantial business relationship with at least one of Respondents; or

- e. A demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f)
- 71. If Respondents seek to demonstrate the ability to complete the Work through a guarantee by a third party pursuant to Paragraph 70(a) of this Section, Respondent shall demonstrate that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f). If Respondent seek to demonstrate their ability to complete the Work by means of the financial test or the corporate guarantee pursuant to Paragraph 70(d) or (e) of this Section, they shall resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section are inadequate, Respondent shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 70 of this Section. Respondent's inability to demonstrate financial ability to complete the Work shall not excuse performance of any activities required under this Order.
- 72. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 70 of this Section, Respondent may reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security upon approval by EPA. In the event of a dispute, Respondent may reduce the amount of the security in accordance with the written decision resolving the dispute.
- 73. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and approval by EPA, provided that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. MODIFICATIONS

- 74. The OSC may make modifications to any plan or schedule in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the OSC's oral direction. Any other requirements of this Settlement may be modified in writing by mutual agreement of the parties.
- 75. If Respondent seek permission to deviate from any approved work plan or schedule, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 74.
- 76. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVIII. ADDITIONAL REMOVAL ACTION

77. If EPA determines that additional removal actions not included in an approved plan are necessary to protect public health, welfare, or the environment, EPA will notify Respondent of that determination. Unless otherwise stated by EPA, within 30 days of receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Respondents shall submit for approval by EPA a Work Plan for the additional removal actions. The plan shall conform to the applicable requirements of Section VIII (Work to Be Performed) of this Settlement Agreement. Upon EPA's approval of the plan pursuant to Section VIII, Respondent shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. This Section does not alter or diminish the OSC's authority to make oral modifications to any plan or schedule pursuant to Section XXVII (Modifications).

XXIX. NOTICE OF COMPLETION OF WORK

78. When EPA determines, after EPA's review of the Final Report, that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including payment of Future Response Costs, or record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXX. <u>SEVERABILITY/INTEGRATION/APPENDICES</u>

79. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondent has sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondent shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

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

Appendix 1: The Action Memorandum entitled "Request for a Time-Critical Removal Action at the Chaparral Gulch Residential Site. Dewey-Humboldt, Yavapai County, Arizona," dated April 11, 2006.

Appendix 2: Site Map

XXXI. EFFECTIVE DATE

81. This Settlement Agreement shall be effective upon signature by the Regional Administrator or his delegatee.

The undersigned representative of Respondent certifies that it is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party it represents to this document.

Agreed this Lay of May, 2006.

For Respondent, Ironite Products Company by

T;+1.

It is so ORDERED and Agreed this 12th day of May, 2006.

Daniel Meer, Chief
Response, Planning and Assessment Branch

Superfund Division

Region 9

U.S. Environmental Protection Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX

75 Hawthorne Street San Francisco, CA 94105

MEMORANDUM

DATE:

APR 1 1 2006

SUBJECT:

Request for a Time-Critical Removal Action at the Chaparral Gulch

Rung

Residential Site, Dewey-Humboldt, Yavapai County, Arizona

FROM:

Harry Allen, On-Scene Coordinator

Emergency Response Section (SFD-9-2)

THROUGH:

Peter Gurial, Chief

Emergency Response Section (SFD-9-2)

TO:

Daniel Meer, Chief

Response, Planning & Assessment Branch (SFD-9)

I. PURPOSE

The purpose of this Action Memorandum is to obtain approval to spend up to \$756,000 in direct costs to mitigate threats to human health and the environment posed by the presence of mine wastes at the Chaparral Gulch Residential Site ("Site"). The Site is located within the Town of Dewey-Humboldt, in Yavapai County, Arizona.

The Action Memorandum would serve as approval for the expenditure required for U.S. EPA, to take actions described herein to abate imminent and substantial endangerment to residents of properties contaminated by hazardous substances. The proposed removal of hazardous substances would be undertaken pursuant to Section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9604(a)(1), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 CFR § 300.415.

II. SITE CONDITIONS AND BACKGROUND

Site Status: Non-NPL

Category of Removal: Time-Critical

CERCLIS ID: N/A SITE ID: 09NU

A. Site Description

1. Physical Location

The Site consists of 4 privately owned, residential parcels located along the stream corridor known as the Chaparral Gulch in Dewey-Humboldt, Yavapai County, AZ. The Site is divided by Highway 69, the Chaparral Gulch passes beneath the highway, and flows to the east southeast (see Figure 1 for a Site Location Map).

2. Site characteristics

The Site consists of four residential properties along the Chaparral Gulch situated northeast and east of the Iron King Mine. The properties are located on both sides of State Highway 69, in the town of Dewey-Humboldt, Arizona. The Iron King Mine occupies 153 acres approximately 1/4 mile west of the town of Dewey-Humboldt, Arizona (see Figure 2 for a Site Map).

The majority of the Iron King Mine is covered by tailings and waste rock piles. There are five retention ponds, at least five mine shafts, and a glory hole. The Iron King Mine consists of three properties - the mine property (a.k.a. Kuhles property), Ironite Products Company ("Ironite") property, and the former fertilizer plant (a.k.a. Nolan property). The Ironite property consists of 62 acres of tailings and 23 acres of fertilizer plant area. The Ironite plant currently produces Ironite fertilizer by mixing tailings with sulfuric acid, urea and water. The former fertilizer plant is located on a waste rock pile south of the mine property on the south side of Iron King Road.

A smelter is situated along the Chaparral Gulch as well. It occupies 182 acres and is situated along the eastern boundary of the investigation area. The Chaparral Gulch crosses the smelter property on the southeastern side of town. Large and small piles of yellow-orange tailings, slag, and grey smelter ash are present throughout the smelter property.

These four residential parcels are believed to be impacted by erosion, and tailings blow outs, from the nearby Iron King Mine during rain and flood events. Potential contamination may also be the result of air dispersion of waste sources from the mine and nearby Humboldt Smelter. Historical soil sampling results at the Site, generated by AZ Department of Environmental Quality (ADEQ), indicate that arsenic and lead levels prompted further investigation along the gulch.

During a 1995 National Pollutant Discharge Elimination System (NPDES) inspection, EPA inspectors noted runoffs and culverts from several areas on the Iron King Mine running into the Chaparral Gulch. In April 2002, sampling performed by the ADEQ during a Preliminary Assessment/Site Inspection (PA/SI) of the Iron King Mine revealed that sediment samples collected from the Chaparral Gulch in the vicinity of the residential areas had concentrations of arsenic and lead above EPA's Residential Preliminary Remediation Goals (PRGs) and ADEQ Soil Remediation Levels (SRLs). Elevated arsenic levels were also detected in background samples. A separate PA/SI



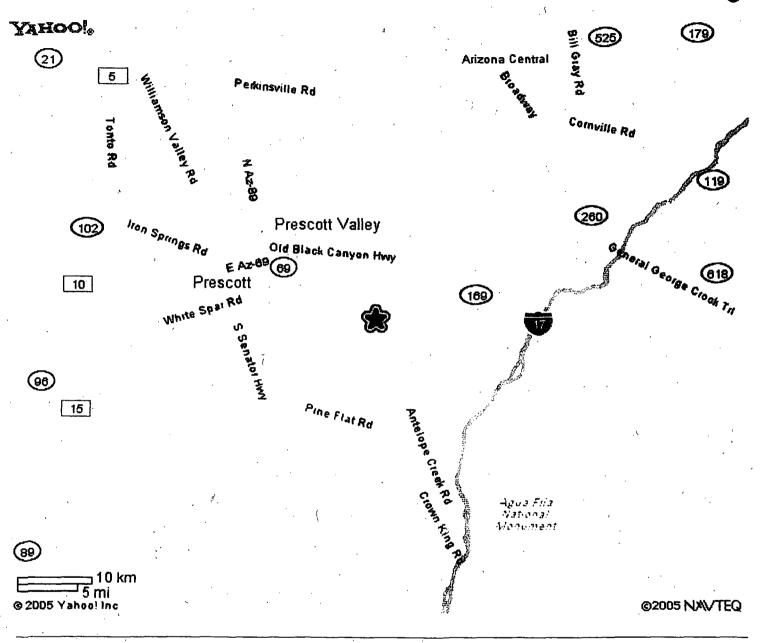




Figure 1: Site Location Map Chaparral Gulch Residential Site Humboldt, Yavapai, Arizona

> TDD: 09-06-02-0006 Project: 0621.01RS



Site Location



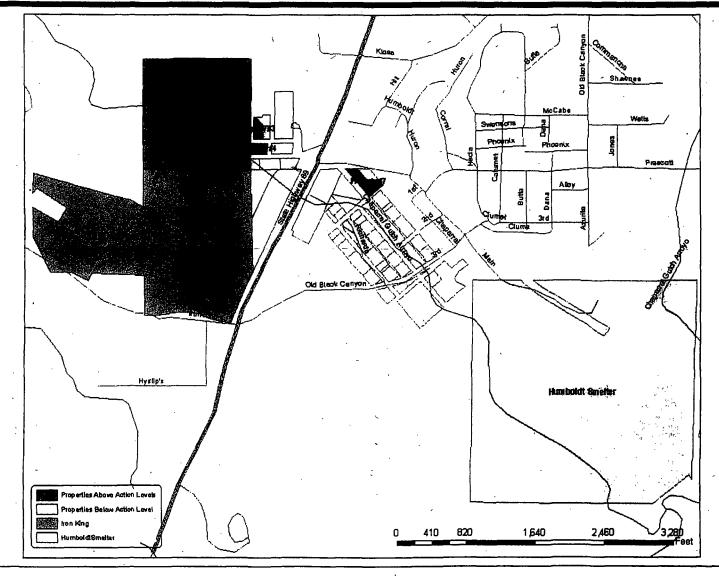




Figure 2: Chaparral Gulch Residential Site Humboldt, Yavapai, Arizona



was prepared for the Humboldt Smelter Site.

3. Removal site evaluation

In 2005, USEPA completed a removal assessment at the Chaparral Gulch Residential Site that included soil sampling and analyses at 17 privately owned, residential parcels located along the Chaparral Gulch stream corridor. Field sampling activities occurred between August 15 and 17, 2005 and were conducted by the Superfund Technical Assessment and Response Team (START) in accordance with the approved Sampling and Analysis Plan (SAP).

Residential property sample locations were set using a random start point and the grid spacing for each property as described in the SAP and determined by the Visual Sampling Plan (VSP) software. Nine surface samples and one subsurface sample were collected from each property. Surface samples were collected at 0-6 inches below ground surface and subsurface samples were collected at approximately 1.5 feet bgs. All of the soil samples were analyzed for lead and arsenic.

USEPA calculated the 95% upper confidence limit (UCL) on the mean concentration of each contaminant in all surface samples at each parcel using ProUCL software. The software package generates normal and multiple transformed statistics and recommends the appropriate UCL for the data distribution being evaluated. The subsurface results were collected for review purposes only. The subsurface sample results were not evaluated quantitatively.

Surface sampling design allowed USEPA to develop representative exposure concentration for each residential property. The measure of exposure for assessment of risk is the average concentration of a contaminant throughout a property. The premise is based on the assumption that over a long enough period of time, a resident would contact all parts of the property. A resident would not be exposed to only the maximum or any other particular detected concentrations of a chemical. A conservative estimate of the average concentration of a chemical across a property is the 95 percent upper-confidence limit (95% UCL) on the mean. The use of an upper confidence limit of the mean (95 % UCL) provides reasonable confidence that the true site average will not be underestimated.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

The sample UCL for each property was compared to various background concentrations and the Region 9 Preliminary Remediation Goal (PRG). Based on a visual comparison, all 17 of the properties in the investigation exceeded the PRG for arsenic. The UCL results for 4 parcels (i.e., parcels 2, 3, 4, 7) were greater than 100 ppm arsenic and each exceeded the Site-specific background UCL concentration by at least 3 times. The statistical analysis sheets for each of the selected parcels are

attached (see ProUCL Reports attached).

Similarly, the START Final Report determined that these properties were significantly different than the background concentration, based on the Mann-Whitney (non-parametric) test. For these reasons, EPA believes that four parcels significantly exceed 100 ppm arsenic and the background UCL. The START Final Report is included in the Administrative Record.

Table 4.1 - Past Analytical Results

Property Identifier	Mean Arsenic Concentration (ppm)	Arsenic Upper Confidence Level (95% UCL) Concentration (ppm)	Site-Specific Background 95% UCL	EPA PRG/ ADEQ SRL
2	<u>108</u>	<u>145</u>	32	22 (EPA PRG) 10 (AZ SRL)
3	<u>83</u>	111		
4	<u>124</u>	<u>145</u>		
7	99	356		

Source: ecology&environment, Inc, (START) sampling result, October 2005.

Statistical data generated using ProUCL.

Notes: Bolded results indicate that measured concentrations exceed applicable health-based benchmarks and background UCL. Underlined results indicate properties exceeding the Removal Action Trigger level. mg/kg (milligram/kilogram) or parts per million (ppm). UCL - Upper Confidence Limit; PRG - EPA R9's Preliminary Remediation Goal, SRL - ADEQ's Soil Remediation Level

The Site-specific mean background arsenic concentration was 23 parts per million (ppm). The sample population included results from eight background sampling locations. Since the site-specific arsenic background concentration was greater than both the Residential PRG for arsenic (22 ppm) and the ADEQ SRL for arsenic (10 ppm), the background arsenic UCL concentration of 32 ppm, was used as a screening level. The mean and UCL concentrations including the outlier are 31 ppm and 47 ppm respectively (see ProUCL reports attached).

5. NPL status

The Chaparral Gulch Residential Site is not on the National Priorities List (NPL). In 2002, ADEQ conducted a PA/SI at the Iron King Mine Site (CERCLIS ID No. AZ0000309013). In 2004, ADEQ conducted a PA/SI at the Humboldt Smelter Site (CERCLIS ID NO. AZN000906020). The Hazard Ranking System was utilized to evaluate each site. The two site reports are included in the Administrative Record.

The PA/SI reports identified observed contamination and observed releases of hazardous substances at both the Iron King Mine Site and at the Humboldt Smelter Site. These sites may be combined under the name Iron King Mine-Humboldt Smelter Site for future investigative purposes and future actions.

Current conditions at the Chaparral Gulch Residential Site pose imminent and substantial endangerment (see Sections III and IV) at four residential properties exclusively. The proposed Removal Action will complete all work at the Chaparral Gulch Residential Site but will not complete work at the Iron. King Mine-Humboldt Smelter Site.

B. Other Actions to Date

No other response actions have occurred at the Site to date.

C. State and Local Authorities' Roles

1. State and local actions to date

The ADEQ Remedial Projects Section, PA/SI Section and Voluntary Cleanup Program have participated during the course of Site assessment and Removal Action planning activities. EPA and ADEQ have reached consensus that EPA will take the lead on enforcement and removal activities pertaining to this Site.

EPA has received a Request for Federal Action from ADEQ. In their letter dated April 3, 2006, ADEQ also provided comments on EPA's proposed residential excavation approach for this Removal Action.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Current Site conditions pose the threat of potential future releases of a hazardous substance, namely arsenic. The likelihood of direct human exposure, via ingestion and/or inhalation of hazardous substances, and the threat of potential future releases and migration of those substances, pose an imminent and substantial endangerment to public health, and/or welfare, or the environment based on the factors set forth in the NCP, 40 CFR § 300.415(b)(2). These factors include:

1. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations or the food chain

As described in Section II.A.4, high concentrations of arsenic have been detected in samples of residential soils at the Site. Much of the contaminated material is very fine-grained and therefore likely to result in human exposure via inhalation or ingestion. Arsenic may be entrained in naturally and mechanically generated dust and/or transported on shoes and clothing of residents passing over contaminated areas. Gardening and other yard work also may result in exposure to contamination.

Analytical results indicate that concentrations of heavy metals identified in these media exceed background and EPA's PRGs. Acute inhalation exposure to high levels

of arsenic can cause throat and lung irritation and may exacerbate asthma. Chronic long-term exposure to arsenic via ingestion may result in nausea, vomiting, circulatory disorders, peripheral neuropathy, and skin disorders including hyperpigmentation and cancers.

Contamination is readily accessible to on-site full-time residents and potentially nearby part-time and/or full-time. Persons living on these contaminated properties, or engaging in recreational activities on or in close proximity to the properties are likely to come into contact with uncontrolled hazardous substances present within the mine wastes. Recreational activities in the vicinity of the Site include horse-riding and use of all-terrain vehicles (ATVs) and dirt-bikes. Children have been observed riding ATVs within residential area under investigation.

2. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

Heavy rains and winds may transport contaminated soils from the Site causing contaminant dispersal and increasing the likelihood of exposure.

3. Availability of other appropriate Federal or State response mechanisms to respond to the release

The Site is located on private land and is therefore not under the jurisdiction of any other Federal agency. State authorities have provided a Request for Federal Action letter. This letter is included in the Administrative Record for the Site.

IV. ENDANGERMENT DETERMINATION

Actual and threatened releases of hazardous substances from this site, if not addressed by implementing a Time-Critical Removal Action may continue to present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

USEPA proposes to mitigate imminent and substantial threats to human health, welfare, or the environment by taking steps to prevent the release of arsenic. The removal action will include the following objectives to prevent direct human contact with environmental arsenic in residential soils on at four properties:

- Remove surficial contamination by excavating soil within the existing sampling grids to achieve a concentration of 23 ppm arsenic or less at the excavation surface.
- Conduct confirmation sampling and analysis using X-Ray Fluorescence (XRF) and laboratory analyses.
- Transport and dispose excavated material at an off-site facility.
- Replace excavated material with clean fill, restore property to pre-removal conditions replacing patios, fences, trees and shrubs if necessary.

Under circumstances where special considerations are appropriate for the scope of the residential excavation, such as risk to property or significant duress for the resident, an alternative approach to the excavation extent may be deemed appropriate.

2. Contribution to remedial performance

This removal action would complete all clean-up activities at the Chaparral Gulch Residential Site.

The long-term cleanup plan for the site:

It is expected that this removal action will eliminate any threat of direct or indirect contact with or inhalation of hazardous substances at these residential properties. There is no known groundwater contamination at the Site.

Threats that will require attention prior to the start of a long-term cleanup:

USEPA has identified imminent threats posed by arsenic contamination at Chaparral Gulch Résidential Site. The mitigation actions described above will constitute a permanent remedy for the Site.

Sources of the contamination may require long-term cleanup. In future actions, these sources comprise the Iron King Mine-Humboldt Smelter Site. USEPA will coordinate with ADEQ to evaluate the risk of human health effects based on other mine wastes exposure pathways that may be present at the Iron King Mine-Humboldt Smelter Site.

The extent to which the removal will ensure that threats are adequately abated:

The removal of surficial hazardous substances contamination by excavation and disposal will abate the threats described in Section III.

Consistency with the long-term remedy:

USEPA asserts that the Time-Critical Removal proposed for the Site is consistent with addressing the larger issue of potential exposures posed by the Iron

King Mine-Humboldt Smelter Site.

3. Applicable or relevant and appropriate requirements (ARARs)

Section 300.415(j) of the NCP provides that removal actions must attain ARARs to the extent practicable, considering the exigencies of the situation.

Section 300.5 of the NCP defines <u>applicable requirements</u> as cleanup standards, standards of control, and other substantive environmental protection 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 circumstances at a CERCLA site.

Section 300.5 of the NCP defines <u>relevant and appropriate</u> requirements as 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, or contaminant, remedial action, location, or other circumstances at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site and are well-suited to the particular site.

Because CERCLA on-site response actions do not require permitting, only substantive requirements are considered as possible ARARs. Administrative requirements such as approval of, or consultation with administrative bodies, issuance of permits, documentation, reporting, record keeping, and enforcement are not ARARs for the CERCLA actions confined to the site.

The following ARARs have been identified for the proposed response action. All can be attained.

<u>Federal ARARs:</u> The CERCLA Off-Site Disposal Rule OSWER Directive 9347.3-8FS; and the U.S. Department of Transportation of Hazardous Materials Regulations 49 CFR Part 171, 172 and 173.

State ARARs: USEPA has considered the SRLs in the selection of a cleanup level as stated above.

4. Project schedule

It is estimated that removal activities will take approximately 25 working days to complete.

B. Estimated Costs

Regional Removal Allowance Costs

Cleanup Contractor

\$ 550,000

Extramural Costs Not Funded from the Regional Allowance

START Contractor

80,000

Extramural Subtotal

\$ 630,000

Extramural Contingency (20%)

\$ 126,000

TOTAL, Removal Action Project Ceiling \$ 756,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the site conditions, the nature of the hazardous substances documented on site, and the potential exposure pathways to nearby populations described in Sections III and IV above, actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues with the Site identified at this time.

VIII. ENFORCEMENT

Please see the attached Confidential Enforcement Addendum for a discussion regarding potentially responsible parties. In addition to the extramural costs estimated for the proposed action, a cost recovery enforcement action also may recover the following intramural costs:

Intramural Costs¹

U.S. EPA Direct Costs

\$ 75,000

^{1 .} Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual costs from this estimate will affect the United States' right to cost recovery.

U.S. EPA Indirect Costs (35.28%)

\$ 293,177

TOTAL Intramural Costs

\$ 4368,177

The total USEPA extramural and intramural costs for this removal action, based on full-cost accounting practices, that will be eligible for cost recovery are estimated to be \$1,124,177.

IX. U.S. EPA RECOMMENDATION

Sherry Fielding, USEPA, OEM, HQ Pat Port, U.S. Department of Interior

This decision document represents the selected removal action for the Chaparral Gulch Residential Siite, Dewey-Humboldt, Yavapai County, Arizona developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Because conditions at the site meet the NCP criteria for a Time-Critical Removal Action, USEPA enforcement staff recommend the approval of the removal action proposed in this Action Memorandum. The total project ceiling if approved will be \$1,124,177, of which an estimated \$756,000 comes from the Regional Removal Allowance. Approval may be indicated by signing below.

Approve:	Daniel Meer, Chief Response, Planning and Assessment Branch	11 April 2006 Date
D		· · · · · · · · · · · · · · · · · · ·
Disapprove:	Daniel Meer, Chief Response, Planning and Assessment Branch	Date
Enforcement /	Addendum	
Attachments:		
Index to the Photograph	e Administrative Record	·

Samantha Roberts, Arizona Department of Environmental Quality

bcc: H. Allen, SFD-9-2 M. Benson, ORC-3 C. Reiner, SFD-9-2 C. Temple, SFD-9-2 Site File

ATTACHMENT I INDEX TO THE ADMINISTRATIVE RECORD

- 1. Final Preliminary Assessment/Site Inspection Report, Iron King Mine Site. Prepared for ADEQ. October 2002.
- 2. Final Preliminary Assessment/Site Inspection Report, Humboldt Smelter Site. Prepared for ADEQ. April 2004.
- 3. Final Report. Iron King Mine Site, Humboldt, Arizona. Prepared by Ecology & Environment, Inc. October 2005.
- 4. Letter from: Amanda Stone, Director, Waste Programs Division, ADEQ to: Keith Takata, Director, Superfund Division, U.S. EPA Region 9. March 2006.

ATTACHMENT II PHOTOGRAPH LOG

ATTACHMENT II PHOTOGRAPH LOG

CHAPARRAL GULCH RESIDENTIAL SITE ATTACHMENT II PHOTOGRAPH LOG



Photo 1. Overview of Chaparral Gulch residences 2, 3 and 4. Iron King Mine and Highway 69 in background.



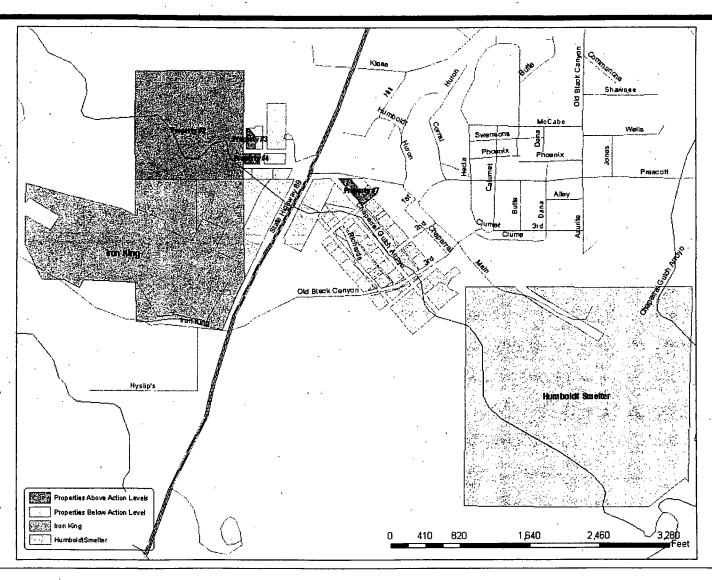
Photo 2. Overview of property 2, Chaparral Gulch and Iron King Mine in background.

CHAPARRAL GULCH RESIDENTIAL SITE ATTACHMENT II PHOTOGRAPH LOG



Photo 5. View of Chaparral Gulch residences adjacent to Humboldt Smelter property, smelter stack in background.



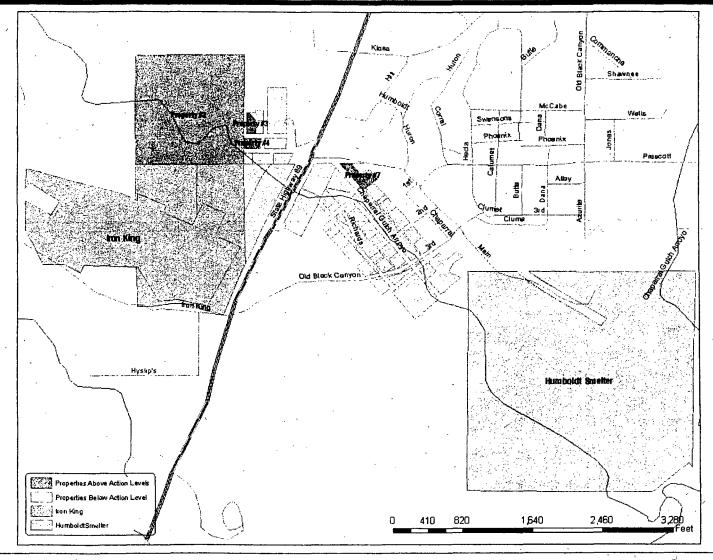




Iron King Mine Site Humboldt, Yavapai, Arizona









Iron King Mine Site Humboldt, Yavapai, Arizona

