

THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

2009 AUG 17 AM 9:08

FILED
EPA REGION VIII
HEARING CLERK

IN THE MATTER OF:
Evening Star Mine
Jamestown, Colorado

ADMINISTRATIVE SETTLEMENT
AGREEMENT AND ORDER ON CONSENT
FOR REMOVAL ACTION

Boulder County,
Respondent

U.S. EPA Region VIII
CERCLA Docket No. CERCLA-08-2009-0002

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

I.	JURISDICTION AND GENERAL PROVISIONS	3
II.	PARTIES BOUND	3
III.	DEFINITIONS	3
IV.	FINDINGS OF FACT	6
V.	CONCLUSIONS OF LAW AND DETERMINATIONS	8
VI.	SETTLEMENT AGREEMENT AND ORDER	8
VII.	DESIGNATION OF PROJECT COORDINATORS	8
VIII.	WORK TO BE PERFORMED	9
IX.	SITE ACCESS	10
X.	ACCESS TO INFORMATION	11
XI.	RECORD RETENTION	11
XII.	COMPLIANCE WITH OTHER LAWS	12
XIII.	EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES	12
XIV.	AUTHORITY OF ON-SCENE COORDINATOR	13
XV.	PAYMENT OF RESPONSE COSTS	13
XVI.	DISPUTE RESOLUTION	17
XVII.	FORCE MAJEURE	17
XVIII.	STIPULATED PENALTIES	18
XIX.	COVENANT NOT TO SUE BY EPA	19
XX.	RESERVATIONS OF RIGHTS BY EPA	19
XXI.	COVENANT NOT TO SUE BY RESPONDENT	21
XXII.	OTHER CLAIMS	22
XXIII.	CONTRIBUTION	22
XXIV.	INDEMNIFICATION	23
XXV.	INSURANCE	24
XXVI.	FINANCIAL ASSURANCE	24
XXVII.	MODIFICATIONS	25
XXVIII.	NOTICE OF COMPLETION OF WORK	26
XXIX.	PUBLIC COMMENT	26
XXX.	INTEGRATION/APPENDICES	26
XXXI.	EFFECTIVE DATE	27

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and the County of Boulder ("Respondent"). This Settlement Agreement provides for the performance of a removal action by Respondent and the reimbursement of certain response costs incurred by the United States at or in connection with the "Evening Star Mine Site" (the "Site") generally located at Jamestown, in Boulder County, Colorado.

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 Colorado (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 agree that it will not contest 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 in this Settlement Agreement, terms used in this Settlement Agreement which are defined in CERCLA or in regulations

promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "Action Memoranda" shall mean the two Site EPA Action Memoranda and their attachments. The first Action Memorandum was dated October 15, 2007, the second was dated December 5, 2007. Both were signed by the Director of the Preparedness, Assessment, and Emergency Response Programs Office of Ecosystems Protection and Remediation, EPA Region VIII. The "Action Memoranda" are attached as Appendix A.

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 Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXX.

e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

f. "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, Paragraph 44 (emergency response), and Paragraph 64 (work takeover). Future Response Costs shall also include all Interim Response Costs.

g. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9707, 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.

h. "Interim Response Costs" shall mean all costs, including direct and indirect costs, (a) paid by the United States in connection with the Site between December 31, 2008 and the Effective Date; or (b) incurred prior to the Effective Date, but paid after that date.

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

j. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

k. "Parties" shall mean EPA and Respondent.

l. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through December 31, 2008.

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 County of Boulder in Colorado.

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

p. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXIX). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

q. "Site" shall mean the Evening Star Mine Superfund Site, located in a historic mining area within the James Creek Basin, located 1.5 miles west of Jamestown, Boulder County, Colorado. The Site is comprised of a collapsed mine adit and approximately 2,000 cubic yards of mine waste rock material and piles that have elevated levels of lead, copper, and arsenic. The Site's legal description includes the mining parcels Maud S., Maud S. No. 2, Evening Star and Evening Star No. 2 Lodes (Mineral Survey No. 6268), and portions of the Mt. Pleasant Lode (Mineral Survey No. 73). The Site was initially conveyed on December 28, 1889 by a Mineral Survey Plat claim. The Site is at Latitude 40.1194 and Longitude -105.3928. A Site map is attached as Appendix H.

r. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the removal action, as set forth in Appendix C to this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement.

s. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), 2) any pollutant or contaminant

under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

2. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement.

IV. FINDINGS OF FACT

8. The Evening Star Mine Superfund Site is located 1.5 miles west of Jamestown, Colorado, and is part of a historic mining area in the James Creek Basin. The Site contains an estimated 2,000 cubic yards of residual tailings and waste rock resulting from these historic mining operations. The Site's steep topography and unstable foundation is cause for particular concern, as evidenced by a collapsed adit and the formation of a sinkhole. Site drainage patterns reflect that runoff flows through tailings and waste rock, ultimately discharging and loading heavy metals into the Little James Creek.

9. In 2005, EPA commissioned a feasibility study to assess numerous mines in the James Creek Basin. The study estimated that approximately 2,000 cubic yards of waste rock material was present at the Site.

10. Arsenic concentrations in the Site's main tailings pile exceeded an acceptable level, as those concentrations would result in an increased cancer risk of 1 in 10,000 for recreational use as determined by EPA Regional toxicologists. Any level exceeding the 1 in 10,000 increased cancer risk is considered to be a "high level of hazardous substance in the soil."

11. Lead concentrations in the Site's main tailings pile exceeded the level at which EPA toxicologists would expect a 5% probability of elevated blood lead levels in certain recreational users of the Site. Specifically, there were high levels of lead approaching a 1% concentration at the Site, and this is considered a high level of hazardous substance in the soil. Lead concentrations in the main pile are very high, approaching 10,000 parts per million. Furthermore, in addition to lead, copper was present in sufficient areas and amounts on Site to be classified as a high level of hazardous substance.

12. In February of 2007, an EPA On-Scene Coordinator ("OSC") visited the Site and observed that water was flowing from the mine's collapsed adit and meandering across the main mine waste pile. The water flow was determined to have entered the waste rock pile at a sink hole. The water flow via subsurface migration entered a confluence with Little James Creek. The formation of a sinkhole is an indication that the mine waste pile was becoming unstable.

13. The waste rock pile impoundment was partially blocking natural drainage such that severe local precipitation events could cause large surface water flows which could overtop the pile and cause severe erosion and loading in James Creek.

14. In February of 2007, EPA's Superfund Technical Assistance and Response Team ("START") contractor mobilized to the Site to collect soil and water samples and to conduct field measurements of water quality and flow rates. At that point, flow from the adit was less than half of what it had been on the day of the OSC's visit, measuring at 2 gallons per minute ("gpm").

15. In March of 2007, EPA's OSC observed that the flow had decreased to approximately ½ gpm. Flow was documented to enter the waste rock pile at the sinkhole and flow subsurface to the confluence with Little James Creek.

16. EPA has issued two Action Memoranda, dated October 15, 2007 and December 5, 2007, to commence response actions at the Site. The Action Memoranda are attached as Appendix A.

17. The Site is not listed on the National Priorities List ("NPL").

18. The Site removal action involved reshaping, regrading and capping the waste rock tailings piles. EPA installed a buttress wall at the base of the pile and several drainage diversions were established around the Site and on the face of the cap to divert rainfall. The cap was also revegetated to prevent erosion and migration. Respondent assisted the response action by providing personnel and materials for capping and road construction, as well as contributing water for dust suppression. The removal action was completed on September 26, 2008.

19. The Regional Administrator of EPA Region VIII, or her delegatee, has determined that the total past and projected response costs of the United States as or in connection with the Site will not exceed \$500,000, excluding interest.

20. To protect human health and the environment into the future, Site operation and maintenance activities will be needed. These activities will include: removing a road built across U.S. Forest Service land which was installed to access the Site, the addition of rip-rap material below the main waste rock impoundment; and the ongoing security and general maintenance of the tailings and waste rock materials.

21. Respondent is the County of Boulder, Colorado. Respondent's location is at 13th and Pearl Street, Boulder, Colorado. The mailing address is Boulder County Courthouse, Post Office Box 471, Boulder, Colorado 80306.

22. Although the Site has been historically mined, there have been no on-Site operations for almost three decades. Respondent acquired the Site via a General Warranty Deed, dated September 6, 2000 and remains the current owner of the Site. The Deed is attached as Appendix D. As the current owner of the Site, Respondent received a Notice of Potential Liability on October 17, 2007, pursuant to CERCLA Sections 106 and 107, 42 U.S.C. §§ 9606 and 9607.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

23. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

a. The Evening Star 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 "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

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

d. Respondent is the "owner" 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). As such, Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response actions and for response costs incurred and to be incurred at the Site.

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 consistent with the NCP, as provided in Section 300.700(c)(3)(i) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

24. 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. DESIGNATION OF PROJECT COORDINATORS

25. On or before the effective date of this Settlement Agreement, EPA and Respondent shall each designate their own Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this Settlement Agreement.

26. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Respondent has notified EPA that it intends to use Barry Shook, Boulder County Parks and Open Space, as Respondent's Project Coordinator in carrying out Work required by this Settlement Agreement. EPA hereby approves Respondent's use of the foregoing Project Coordinator and Department in performing the Work called for herein. In the event that Respondent desires to change this selection, Respondent shall beforehand notify EPA in writing and such shall be subject to EPA's review. If EPA disapproves in writing of any persons', contractors' or subcontractors' qualifications, Respondent shall notify EPA of the identity and qualifications of the replacement(s) within 30 days of the written notice. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

27. EPA has designated Craig Myers of the Emergency Response Program, Region VIII, as its Project Coordinator, or On-Scene Coordinator ("OSC"). Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the OSC at:

Craig Myers
U.S. EPA Region VIII
Suite 300 (8EPR-ER)
1595 Wynkoop Street
Denver, CO 80202

28. EPA and Respondent shall have the right, subject to Paragraph 26, to change its respective designated OSC or Project Coordinator. Respondent shall notify EPA 15 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

29. Respondent shall perform, at a minimum, all actions necessary to implement the two Site Action Memoranda and the Statement of Work. The actions to be implemented generally include, but are not limited to, removing the road from the U.S. Forest Service land that was installed to access the Site and adding rip-rap material below waste rock impoundments. Such actions also include, but are not limited to, taking over operation and maintenance activities such as maintaining soil cover and vegetation of the re-graded waste rock areas, as well as providing ongoing Site security.

30. Work Plan and Implementation

a. Within 30 days after the Effective Date, Respondent shall submit to EPA for approval a draft Work Plan for performing the response actions generally

described in Paragraph 29 above. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement Agreement.

b. Respondent shall not commence implementation of the Work until receiving written approval of the Work Plan from EPA.

31. Health and Safety Plan. Within 30 days of a request from EPA, Respondent shall submit for EPA review and approval a plan that ensures the protection of the public health and safety during performance of Work under this Settlement Agreement. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan with respect to all Work.

32. Quality Assurance and Sampling.

a. Within 30 days of a request from EPA, Respondent shall submit for EPA review and approval a plan for any sampling necessary as part of Site operation and/or maintenance. Any sampling and/or analyses to be performed pursuant to this Settlement Agreement, if necessary, shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance.

33. Post-Removal Site Controls. Respondent shall perform post-removal site controls consistent with Section 300.415(f) of the NCP, OSWER Directive No. 9360.2-02, and the approved Work Plan. Respondent shall provide EPA with documentation of all post-removal site control arrangements.

34. Final Report. Within 30 days after completion of riprap installation and road removal, Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement.

IX. SITE ACCESS

35. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by Respondent, Respondent shall, commencing on the Effective Date, provide EPA, the State, and their 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.

36. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

37. 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. Respondent shall also make available to EPA and the State, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

38. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA and the State under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they is submitted to EPA and the State, or if EPA has notified Respondent that the documents or information is 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.

39. 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 assert such a privilege in lieu of providing documents, they 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 document(s), 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.

40. 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

41. Until 10 years after Respondent's receipt of EPA's notification pursuant to Section XXVII. (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention

policy to the contrary. Until 10 years after Respondent's receipt of EPA's notification pursuant to Section XXVII (Notice of Completion of Work), Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

42. 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 is privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, they 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.

43. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the 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

44. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable 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.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

45. 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 at 303-312-7067, or in the event of his/her unavailability, Curtis Kimbel, Emergency Response Unit, EPA Region 8 Preparedness, Assessment and Emergency Response Program, at 303-312-6108, and the Region 8 Emergency Response Spill Report Hotline, at 1-800-227-8914 of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

46. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the OSC at 303-312-7067 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

XIV. AUTHORITY OF ON-SCENE COORDINATOR

47. 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

48. Payment for Past Response Costs.

a. Within 30 days after the Effective Date, Respondent shall pay to EPA \$193,572.52 for Site Past Response Costs. Respondent 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, the Evening Star Mine Site, EPA Region VIII, Site/Spill ID Number 08MU, and the EPA docket number for this action. Respondent shall send the check(s) to:

Regular mail:

U.S. Environmental Protection Agency
Cincinnati Finance Center
Post Office Box 979076
St. Louis, MO 63197-9000

Express Mail:

U.S. Bank
Government Lockbox 979076
US EPA Superfund Payments
1005 Convention Plaza

St. Louis, MO 63101

or other such address as EPA may designate in writing or by wire transfer to:

Federal Reserve Bank of New York
ABA: 021030004
Account Number: 68010727

Wire transfers must be sent to the Federal Reserve Bank in New York.

b. At the time of payment, Respondent shall send notice that such payment has been made by email to accountsreceivable@uswd.epa.gov, and to:

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

and

Mike Rudy
US EPA Region VIII
Suite 300 (8FNF-RC)
1505 Wynkoop Street
Denver, CO 80202

c. The total amount to be paid by Respondents pursuant to Paragraph 48(a) shall be deposited by EPA in the Evening Star Mine Site 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.

49. 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, which will include a cost summary package, that will require payment of identified Future (and, for the first billing, Interim Response) Costs. Respondent shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 53 of this Settlement Agreement.

b. Respondent 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 08ML. Respondent shall send the check(s) to:

Regular mail:

US Environmental Protection Agency
Cincinnati Finance Center

Post Office Box 979076
St. Louis, MO 63197-9000

Express Mail:

U.S. Bank
Government Lockbox 979076
US EPA Superfund Payments
1005 Convention Plaza
SL-MO-C2-GL
St. Louis, MO 63101

or other such address as EPA may designate in writing or by wire transfer to:

Federal Reserve Bank of New York
ABA: 021030004
Account Number: 68010727

Wire transfers must be sent to the Federal Reserve Bank in New York.

c. At the time of payment, Respondent shall send notice that such payment has been made by email to acctreceivable.com@dau.epa.gov, and to:

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

and

Mike Rudy
US EPA Region VIII
Suite 300 (8ENF-RC)
1595 Wynkoop Street
Denver, CO 80202

d. The total amount to be paid by Respondents pursuant to Paragraph 48(a) shall be deposited by EPA in the Evening Star Mine Site 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.

50. In the event that the payment for Past Response Costs is not made within 30 days of the Effective Date, or the payments for Future Response Costs is not made within 30 days of Respondent's receipt of a bill, Respondent shall pay interest on the unpaid balance. The interest on Past Response Costs shall begin to accrue on the Effective Date and shall continue to accrue until the date of payment. 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.

51. Respondent may contest payment of any Future Response Costs billed under Paragraph 49 if they determine that EPA has made a mathematical error, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 30-day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 49. Simultaneously, Respondent shall establish an interest-bearing escrow account in a federally insured bank duly chartered in the State of Colorado and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in

Section XVI (Dispute Resolution). If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 49. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 49. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanism for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XVI. DISPUTE RESOLUTION

51. 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.

52. 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 its objection(s) within 30 days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have 60 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.

53. 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 Assistant Regional Administrator level or higher will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. 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

54. 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.

56. 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 15 days of when Respondent first knew that the event might cause a delay. Within 30 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 they intend 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.

57. 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 is 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

58. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 59 and 60 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (*Force Majeure*). "Compliance" by Respondent shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RIFS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

59. Stipulated Penalty Amounts – Work and Deliverables.

a. The following stipulated penalties shall accrue per day for any noncompliance other than that identified in Paragraph 60:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500	1 st through 14 th day
\$ 1,500	15 th through 30 th day
\$ 37,500	31 st day and beyond

60. For monthly progress reports, stipulated penalties shall accrue in the amount of \$150 per violation, for the first week of noncompliance; \$250 per day, per violation, for the 8th through 14th day of noncompliance; \$500 per day, per violation, for the 15th day through the 30th day; and \$5,000 per day, per violation, for all violations lasting beyond 30 days.

61. In the event that EPA assumes performance of a portion or all of the Work, Respondents shall be liable for a stipulated penalty in the amount of \$60,000.

XIX. COVENANT NOT TO SUE BY EPA

62. 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, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon receipt by EPA of the Past Response Costs due under Section XV of this Settlement Agreement and any interest due for failure to pay Past Response Costs as required by Section XV of this Settlement Agreement. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondent of its 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

63. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or

from the Site. Further, nothing in this Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

b4. The covenant not to sue set forth in Section XVIII 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 definitions of Past Response Costs or Future Response Costs;

c. liability for performance of response action 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.

65. Work Takeover. In the event EPA determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner 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. Respondents 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 Respondents 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 RESPONDENT

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

a. any direct or indirect claim for reimbursement from the 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 Colorado 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 Work, Past Response Costs, or Future Response Costs.

Except as provided in Section XX, Paragraph 69 (Non-Exempt De Micromis), 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 64 (b), (c), 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.

67. 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).

68. Respondent agrees 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 all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

69. Non-Exempt De Micromis. The waiver in Paragraph 66 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating

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

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act or "RCRA"), 42 U.S.C. § 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise, or

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

XXII. OTHER CLAIMS

70. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

71. Except as expressly provided in Section XX, Paragraph 69 (Non-Exempt De Micromis) and Section XVIII (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

72. 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

73.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 Agreement is the Work, Past Response Costs, 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 have, as of the Effective Date, resolved its liability to the United States for the Work, Past Response Costs, and Future Response Costs.

c. Except as provided in Section XX, Paragraph 69 (Non-Exempt De Micromis), 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 Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

XXIV. INDEMNIFICATION

74. Respondent shall indemnify, to the extent permitted by law, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to 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 its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

75. 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.

76. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition,

Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondent 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

77. At least 30 days prior to commencing any on-Site work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of \$ 1 million, combined single limit, naming EPA as an additional insured. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

78. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of \$ 71,880.45 in one or more of the following forms, in order to secure the full and final completion of Work by Respondent:

- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA;
- c. a trust fund administered by a trustee acceptable in all respects to EPA;
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work.

79. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion.

In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) is 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 78, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

80. 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 78 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XVI (Dispute Resolution). Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

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

XXVII. MODIFICATIONS

82. The OSC may make modifications to any plan or schedule or Statement of Work 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 Agreement may be modified in writing by mutual agreement of the parties.

83. If Respondent seeks permission to deviate from any approved work plan or schedule or Statement of Work, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 82.

84. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives regarding reports, plans, specifications, schedules, or any other

writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVIII. NOTICE OF COMPLETION OF WORK

85. When EPA determines, after 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, but not limited to post-removal site controls, 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 Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXIX. PUBLIC COMMENT

86. Final acceptance by EPA of Section XV (Payment of Response Costs) of this Settlement Agreement shall be subject to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i), which requires EPA to publish notice of the proposed settlement in the Federal Register, to provide persons who are not parties to the proposed settlement an opportunity to comment, solely, on the cost recovery component of the settlement, and to consider comments filed in determining whether to consent to the proposed settlement. EPA may withhold consent from, or seek to modify, all or part of Section XV of this Settlement Agreement if comments received disclose facts or considerations that indicate that Section XV of this Settlement Agreement is inappropriate, improper or inadequate. Otherwise, Section XV shall become effective when EPA issues notice to Respondent that public comments received, if any, do not require EPA to modify or withdraw from Section XV of this Settlement Agreement.

XXX. INTEGRATION/APPENDICES

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

-Appendix A" contains the Site Action Memorandum dated October 15, 2007, and the Site Action Memorandum dated December 5, 2007.

"Appendix B" is a map of the Evening Star Mine Superfund Site.

"Appendix C" is the Site Statement of Work.

"Appendix D" is Respondent's Site property acquisition General Warranty Deed, dated September 6, 2000.


XXXI. EFFECTIVE DATE

88. This Settlement Agreement shall be effective the day upon which this Settlement Agreement has been signed by all EPA Officials, with the exception of Section XV (Payment of Response Costs), which shall be effective when EPA issues notice to Respondents that public comments received, (if any), do not require EPA to modify or withdraw from Section XV of this Settlement Agreement.

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

Agreed this 11th day of JUNE, 2009

For Respondent, Boulder County

We 

Title Chair, Board of
County Commissioners

It is so ORDERED AND AGREED this 8th day of July, 2009

BY:

Matthew Cohn DATE: 7/8/09
Matthew Cohn, Assistant Director
Legal Enforcement Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

BY:

Kelley Land DATE: 6/20/09
Kelley Land, Director Acting
RCRA & CERCLA Technical Enforcement Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

BY:

David Ostrander DATE: 11/1/09
David Ostrander, Director
Preparedness, Assessment, and Emergency Response Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

EFFECTIVE DATE:

5/17/09



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

Ref: EPR-ER

ACTION MEMORANDUM

SUBJECT: Fund-Lead Time Critical Removal Action at the Evening Star Mine Site near the town of Jamestown, Boulder County, Colorado

FROM: Craig Myers, On Scene Coordinator
Emergency Response Team

THROUGH: Steve Way, Acting Supervisor
Emergency Response Unit

TO: David Ostrander, Director
Preparedness, Assessment, and Emergency Response Programs
Office of Ecosystems Protection and Remediation

Site ID: 08MU

Category of Removal: Time-Critical, Fund-Lead

I. **PURPOSE**

The purpose of this Action Memorandum is to request and document approval of a proposed Time Critical Removal Action (TCRA) at the Evening Star Mine site (Site) in Boulder County, Colorado. The proposed action is to contain and isolate exposed mine waste rock material with elevated levels of arsenic and lead.

II. **SITE CONDITIONS**

Conditions existing at the Site meet the criteria for initiating a TCRA under 40 CFR §300.415(b)(2), which is part of the National Contingency Plan (NCP). This Removal will address mine waste rock material with elevated levels of lead and arsenic that pose a human health and environmental threat in the form of inhalation exposure as well as addressing the threat of potential mass heavy metal loading of Little James Creek. A near drainage-wide effort is currently underway to reduce the impacts to Little James Creek. In the summer of 2006, EPA conducted a TCRA at the Bueno Streamside Tailings, located less than one mile downstream from the Evening Star, to cap and armor the piles against erosion. Starting in the fall of 2007, Boulder County, through a Brownfields grant, will also begin remediation of the Argo Mine and

Mill Site, which is a contiguous claim to the Evening Star Mine. In addition to the above actions, a private firm is conducting a voluntary cleanup, under the State of Colorado's Voluntary Cleanup Program, of the Burlington Mine, which is a claim just below the Argo mine. Based on waste rock volume and proximity to the Little James Creek, the Evening Star Mine is the next largest mine site in the drainage in terms of significant threat to human health and the environment.

A. Site Description & Removal Site Evaluation

In 2005, the US EPA commissioned a feasibility study to assess numerous mines in the James Creek basin (Little James Creek Mine Site Draft Feasibility Assessment Report, April 2005). The study estimated that approximately 2,000 cubic yards of waste rock material was present at the Site.

In February of 2007, the EPA On-Scene Coordinator (OSC) visited the Site to evaluate current conditions. It was observed that, although the spring melt had not yet begun, water was flowing from the mine's collapsed adit. The flow meandered across the top of the waste rock pile, ultimately flowing down the western edge of the pile. The OSC observed drainage patterns in the waste rock pile indicating the routine presence of flows of up to 4 times the volumetric flow rate present at the date of the OSC's Site visit. These higher flows have obviously caused the adit drainage to flow across the top and down over the face of the pile in the past.

On February 9th, and again on March 19th, under direction from the OSC, the Superfund Technical Assistance and Response Team (START) contractor mobilized to the Site collected soil and water samples, and conducted field measurements of water quality and flow rates. The first day that START was at the Site, the flow from the adit was less than half of what it had been on the day of the OSC's visit. It was measured to be 2 gallons per minute (GPM). On March 19th, the OSC observed that the flow had decreased to approximately ½ GPM, it entered the waste rock pile at a sinkhole, and it flowed via subsurface to the confluence with Little James Creek. The formation of a sinkhole can be an indication that the pile is becoming unstable.

B. Other Actions to Date

No cleanup or response actions have taken place on the Site to date.

C. State & Local Authorities' Role

1. Colorado Department of Public Health and the Environment (CDPHE)

CDPHE has been kept apprised of EPA's plans and actions at the Site. CDPHE has no active role, and there is no State funding available for conducting this removal action.

2. Boulder County

Boulder County is the current owner of the Site. To date, Boulder County has funded the Topographical Survey to assist EPA in volume calculation and remedy design. In addition,

Boulder County has also agreed to provide in-kind assistance, including soil for the proposed waste rock pile cover, other material needs that may arise, reconstructing the road to the Site to facilitate the cleanup and providing design services to design the storm water management features necessary to protect the capped material.

III. THREATS TO PUBLIC HEALTH AND WELFARE OR ENVIRONMENT

EPA has evaluated all of the factors in 40 CFR 300.415 for a removal action at the Site as follows.

A. Threats to Public Health or Welfare

1. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations or the food chain (300.415(b)(2)(i))

The Site is located 1.5 miles west of Jamestown, CO. No one resides at the Site. However, the Site is owned by Boulder County and is accessible to anyone who wishes to make the quarter-mile walk from the roadside pull-out onto the Site. Primary access to the Site is restricted by a locked gate on the access road. There is a small parking area off of the main road, where recreational users obviously park and hike/bike/ride onto the site.

Arsenic concentrations in the main pile are in exceedance of the acceptable level corresponding to an increased cancer risk of 1 in 10,000 (1E-04) for recreational use as determined by EPA Regional toxicologists.

Lead concentrations in the main pile exceed the level at which the EPA toxicologists would expect a 5% probability of elevated blood lead levels in certain recreational users of the site. A table containing sample results and a letter detailing the toxicological evaluation are attached (Attachments 1 and 4, respectively).

2. High Levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate. (300.415(b)(2)(iv))

Arsenic concentrations in the main pile are in exceedance of the acceptable level corresponding to an increased cancer risk of 1 in 10,000 (1E-04) for recreational use as determined by EPA Regional toxicologists. A table containing sample results and a letter detailing the toxicological evaluation are attached. Any level exceeding the 1 in 10,000 increased cancer risk level is considered to be a "high level of hazardous substance in soil." In addition to the arsenic, high levels of lead – levels approaching 1% – are present at the site, also constituting high levels of hazardous substance in soil. The OSC has observed waste rock material in the ephemeral drainage below the site, indicating that material has migrated off site in the past. This, coupled with the surface flow patterns across the face of the main pile observed by the OSC and the very high levels of lead and arsenic in the soil, indicates that further migration of high levels of hazardous substances is a distinct possibility.

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released (300.415(b)(2)(v))

The site is generally dry during most of the year. It is located on a south facing slope, causing the site to dry relatively quickly after precipitation events. This tends to promote dusty conditions during high winds or during certain recreational activities as outlined in the attached toxicological memo – Attachment 4

The waste rock impoundment partially blocks a natural ephemeral drainage. Severe local precipitation events could cause large surface water flows, overtopping the pile and causing severe erosion and loading in James Creek. The OSC has observed that waste rock material has migrated along the drainage between the pile and James Creek, indicating both historical migration offsite and probable future migration.

4. The availability of other appropriate Federal or State response mechanisms to respond to the release (300.415(b)(2)(vii))

There are no other appropriate Federal or State response mechanisms that have the authority or resources, respectively, to respond to this release.

B. Threats to the Environment

1. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations or the food chain (300.415(b)(2)(i))

The waste rock at the Site has metals concentrations far exceeding the EPA Ecological Soil Screening Levels for mammals, in many cases by 100 to 1000 times. A toxicological evaluation (Eco-Soil Screening Levels) is attached as Attachment 4 for reference.

2. High Levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate. (300.415(b)(2)(iv))

Lead concentrations in the main pile are very high, approaching 10,000 parts per million. This level is nearly 2,000 times the EPA Eco-Soil Screening Level and is considered to be a high level of hazardous substance in soil. In addition to lead, copper is present at sufficient levels to be classified as a high level of hazardous substance. Levels on site correspond to 10 to 15 times the EPA Eco-Soil Screening level, posing a threat to aquatic plant life downstream (see paragraph 8 in Attachment 4 – Toxicological Evaluation). The OSC has observed waste rock material in the ephemeral drainage below the site, indicating that material has migrated off site in the past. This, coupled with the surface flow patterns across the face of the main pile observed by the OSC and the very high levels of lead and copper in the soil, indicates that further migration of high levels of hazardous substances is a distinct possibility.

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released (300.415(b)(2)(v))

The waste rock impoundment partially blocks a natural ephemeral drainage. Severe local precipitation events could cause large surface water flows, overtopping the pile and causing severe erosion and loading in James Creek. The OSC has observed that waste rock material has migrated along the drainage between the pile and James Creek, indicating both historical migration offsite and probable future migration.

4. The availability of other appropriate Federal or State response mechanisms to respond to the release (300.415(b)(2)(vii))

There are no other appropriate Federal or State response mechanisms that have the authority or resources, respectively, to respond to this release.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site may present an endangerment to public health or the environment for the reasons given above.

V. PROPOSED ACTIONS / ESTIMATED COSTS

A. Proposed Actions

The objectives of the proposed action are to protect human health and the environment by consolidating and capping waste rock in one central location and armoring against erosion. Human health will be protected by removing the threat of direct contact or inhalation (capping), and the environment will be protected by consolidating the waste rock in one central location and armoring against erosion, thus reducing or eliminating the threat of mass heavy metal loading of Little James Creek.

The objectives will be accomplished as follows:

1. Consolidate the waste rock piles,
2. Isolate and stabilize the waste rock that is blocking the ephemeral drainage and mitigate the threat of continued erosion and off-site migration. The existing loading chute that is situated on top of the main waste rock pile will have to be removed as part of this activity to ensure proper grade and soil cover integrity,
3. Construct a clean vegetative cover to mitigate the threat of direct contact by recreational users of the site, as well as wildlife present on the site, and
4. Revegetate the covered waste rock pile and other disturbed areas to minimize future wind and hydraulic erosion at the Site.

The overall approach for the removal action involves: (1) excavation/scraping of waste rock present upslope from the mine adit, if possible; if not possible due to extreme slope angles, these areas will be covered and re-vegetated to the extent practicable, (2) consolidation of excavated waste rock with the existing main pile, (3) grading/shaping the waste rock pile to promote slope stability and proper runoff, (4) implementing drainage controls to protect against run-on and to armor the ephemeral drainage side of the re-graded waste rock pile against erosion from spring runoff/flash flooding; (5) placement of 12 inches of alkaline clean cover material and 6 to 12 inches of soil amended with growth media over the re-graded waste rock pile, and (6) re-vegetation of the covered waste rock pile and any areas disturbed during the course of the removal.

Prior to initiation of construction, storm water best management practices (BMPs) will be implemented to control delivery of sediment and other pollutants to surface waters.

Excavated/scraped materials will be placed on top of remaining exposed waste rock at the Site and stabilized in place. No waste rock will be hauled off-Site or permanently placed in areas of the Site that are clean. These actions will collectively reduce the footprint of the area where waste rock is stored and to which a soil cover will be applied. The final configuration and size of the waste rock repository is not known at this time.

Following excavation, the Site will be graded and shaped to promote natural drainage and to eliminate depressions. Areas of the Site where waste rock remains in place will be covered with approximately 12 inches of alkaline soil cover and 6 to 12 inches of soil amended with a growth media. Disturbed areas will be re-vegetated with an appropriate mix of native plant species that are suited to the soil conditions and climate.

Fill material for the cover will be obtained from Boulder County to the extent practicable. Fill material used for the cover will be clean (not contaminated with tailings or waste rock), and consist of material that is suitable for recreational use and that will support re-vegetation.

B. Contribution to remedial performance

No long-term remedial actions are planned for this Site at this time. The proposed time-critical removal action is to contain, consolidate and isolate the waste rock and contaminated soils on site. This is consistent with the presumptive remedy for low-level threat metals in soils (not targeted for treatment), as identified in EPA's Presumptive Remedy for Metals-in-Soil Sites document (September, 1999).

C. Description of alternative technologies

Engineering alternatives that have been considered include removing the waste rock pile for off-site disposal. The volume of material involved and transportation and disposal costs make this alternative impracticable from a budgetary and financial perspective.

D. Engineering Evaluation/Cost Analysis (EE/CA)

This proposed action is for a TCRA. An EE/CA therefore is not required.

E. Applicable or relevant and appropriate requirements (ARARs)

The NCP requires that removal actions attain ARARs under federal or state environmental or facility siting laws to the extent practicable, considering the exigencies of the situation. The proposed removal action will attain or exceed ARARs, including state water quality standards and the National Historic Preservation Act, to the extent practicable. A list of ARARs and TBCs is attached.

F. Estimated Costs

Cost Estimate: A table containing cost estimate for the Removal project ceiling is shown below:

Extramural Costs:

Emergency Response Cleanup (ERRS)	\$ 250,000
Total START/ERT (including multiplier)	\$ 75,000
Subtotal, Extramural Costs	\$ 325,000
Contingency (20%)	\$ 50,000
TOTAL, REMOVAL PROJECT CEILING	\$ 375,000

VI. EXPECTED CHANGE IN SITUATION IF ACTION DELAYED OR NOT TAKEN

Delayed action would result in continued potential for exposure by nearby populations and continued threat of erosion and off-Site migration of waste rock to Little James Creek.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

A separate addendum will provide a confidential summary of current and potential future enforcement actions.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated at:

Total Removal Ceiling	\$ 375,000
EPA's Direct Intramural Costs	20,000
Subtotal	\$ 395,000
Regional Indirect Cost (35%)*	\$ 138,250
ESTIMATED TOTAL PROJECT COST	\$ 533,250

* 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-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of the 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 total cost estimates nor deviation of actual costs from this estimate will affect the United States' right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected Removal Action for the Evening Star Mine Site, Boulder County, Colorado, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the Site.

Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a Removal, and I recommend your approval of the proposed Removal Action. The total project ceiling if approved will be \$533,250. Of this, an estimated \$375,000 comes from the Regional removal allowance.

Approve: _____

David Ostrander, Director

Preparedness, Assessment, and Emergency Response Programs

Office of Ecosystems Protection and Remediation

Date: 10/15/07

Disapprove: _____

David Ostrander, Director

Preparedness, Assessment, and Emergency Response Programs

Office of Ecosystems Protection and Remediation

Date: _____

Attachments:

- Attachment 1 - Table - Soil sample results
- Attachment 2 - ARARs and TBCs List
- Attachment 3 - Site Map
- Attachment 4 - Toxicological Evaluation Letter

SUPPLEMENTAL DOCUMENTS

Support/reference documents that may be helpful to the reader and/or have been cited in the report may be found in the Administrative Record File at the Superfund Records Center for EPA Region 8, 1595 Wynkoop Street, Denver, Colorado 80202.

Attachment 1 - Soil Sample Results Table

Sample #	Analyte	Result
ESSO04031907	ANTIMONY	46.0
ESSO01031907	ANTIMONY	2.9
ESSO03031907	ANTIMONY	42.0
ESSO05031907	ANTIMONY	1.7
ESSO02031907	ANTIMONY	3.8
ESSO05031907	ARSENIC	4.5
ESSO04031907	ARSENIC	450.0
ESSO03031907	ARSENIC	340.0
ESSO02031907	ARSENIC	45.0
ESSO01031907	ARSENIC	55.0
ESSO05031907	CADMIUM	0.1
ESSO01031907	CADMIUM	6.7
ESSO04031907	CADMIUM	28.0
ESSO03031907	CADMIUM	20.0
ESSO02031907	CADMIUM	1.7
ESSO01031907	COPPER	250.0
ESSO05031907	COPPER	15.0
ESSO04031907	COPPER	600.0
ESSO02031907	COPPER	550.0
ESSO03031907	COPPER	290.0
ESSO02031907	LEAD	3,700.0
ESSO03031907	LEAD	4,400.0
ESSO01031907	LEAD	2,300.0
ESSO05031907	LEAD	23.0
ESSO04031907	LEAD	9,800.0
ESSO01031907	MANGANESE	59.0
ESSO05031907	MANGANESE	190.0
ESSO03031907	MANGANESE	37.0
ESSO04031907	MANGANESE	28.0
ESSO02031907	MANGANESE	68.0
ESSO02031907	MERCURY	1.4
ESSO01031907	MERCURY	2.3
ESSO04031907	MERCURY	4.0
ESSO05031907	MERCURY	0.1
ESSO03031907	MERCURY	2.6
ESSO05031907	NICKEL	16.0
ESSO03031907	NICKEL	0.5
ESSO01031907	NICKEL	0.6
ESSO04031907	NICKEL	0.6
ESSO02031907	NICKEL	0.6
ESSO03031907	SELENIUM	2.3
ESSO01031907	SELENIUM	1.3
ESSO05031907	SELENIUM	1.5
ESSO04031907	SELENIUM	2.1
ESSO02031907	SELENIUM	1.3
ESSO05031907	ZINC	76.0
ESSO04031907	ZINC	4,300.0
ESSO03031907	ZINC	2,900.0
ESSO02031907	ZINC	380.0
ESSO01031907	ZINC	840.0

Note: unless otherwise noted, all concentrations are in mg/kg.

Attachment #2

POTENTIAL ARARs

FEDERAL

- a. National Historic Preservation Act (16 USC Section 470; 40 CFR Section 6.301 (b); and 36 CFR Part 800)
- b. Endangered Species Act (16 USC Section 1531; 40 CFR Subpart C, Section 6.302 (h); and 50 CFR part 402)
- c. Clean Water Act (33 USC Sections 1314 and 1342; 40 CFR part 122)
 - i. Stormwater requirements may be Relevant and Appropriate, permit exempt via CERCLA 121(e)
- d. Resource Conservation and Recovery Act (RCRA) Subtitle C (capping and placement requirements are relevant and appropriate), and Subtitle D (solid waste disposal relevant and appropriate).

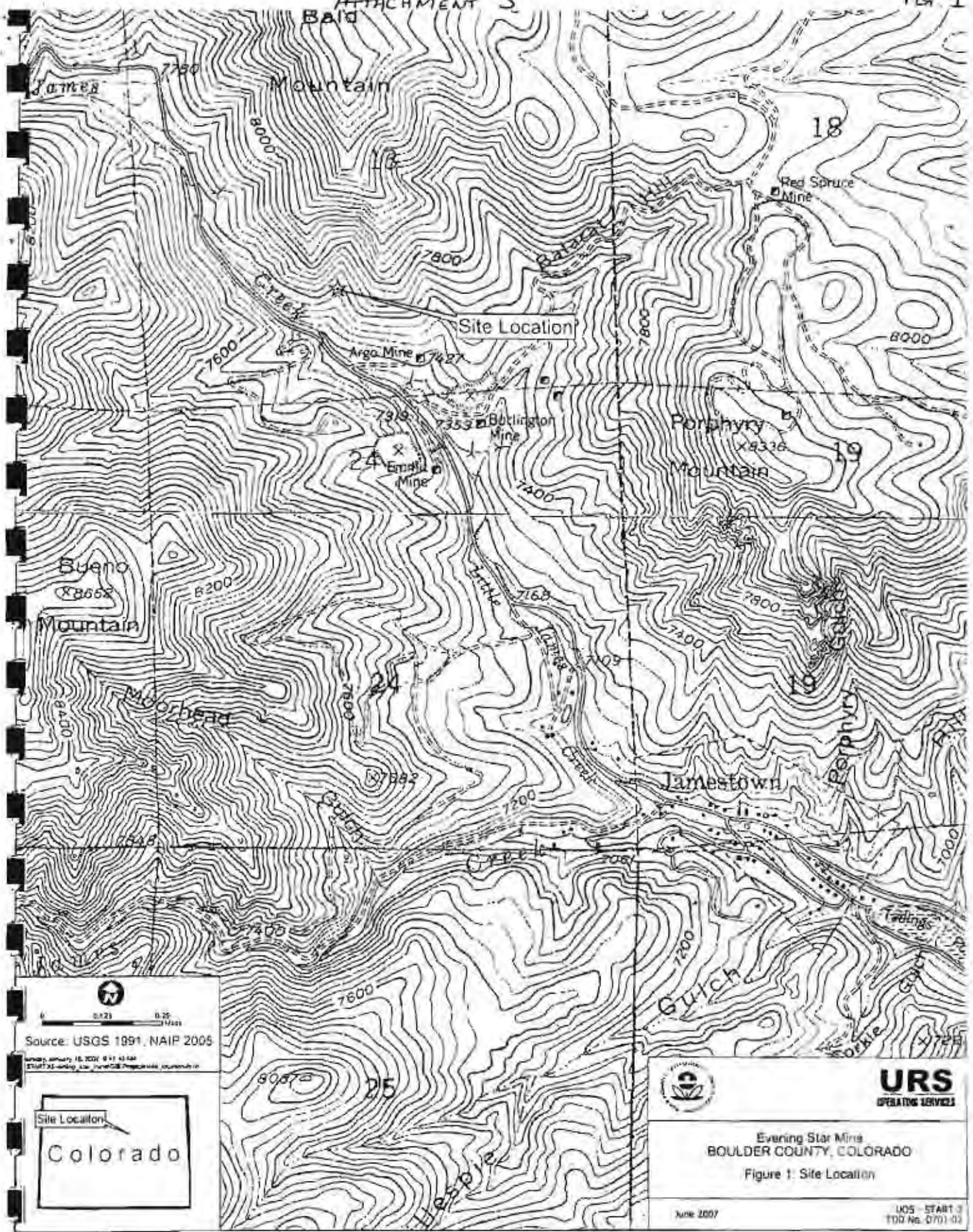
Specifically, RCRA hazardous waste requirements are not applicable to these mining wastes in accordance with 40 CFR 261.4(b)(7) (the Bevill exemption). In addition, many RCRA regulations are not applicable because this removal action consolidates mining wastes in an on-site repository. Nevertheless, certain RCRA hazardous waste regulations (which are identical to state hazardous waste regulations) concerning covering waste piles and run-on/run-off controls have been determined to be relevant and appropriate in the handling of these wastes.


RCRA regulations found at 40 CFR 264.310(a), and (b)(1), and (5) (regarding final cover, run-on and run-off controls), which are identical to state solid waste regulations, are relevant and appropriate requirements for the consolidation site to be used for waste management and disposal, although the 40 CFR Part 258 standards for solid wastes provides more specific guidance

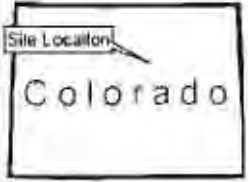
- e. DOT Hazardous Material Transportation Regulations (49 CFR Parts 107, 171 – 177)

STATE

- a. Colorado Water Quality Control Act (C.R.S 25-8-101 to 703)
- b. Colorado Discharge Permit Regulations (5 C.C.R. 10002-2, Section 6.1.0)
- c. Colorado Groundwater Standards (5 C.C.R. 1002-8, Section 3.11.0)
- d. Colorado Solid Waste Standards (CRS 30-20-101 to 118)
- e. Colorado Mined Land Reclamation Act (CRS 34-32-101 to 125)
- f. Colorado Environmental Real Covenants Act (CRS 25-15-301 to 327)

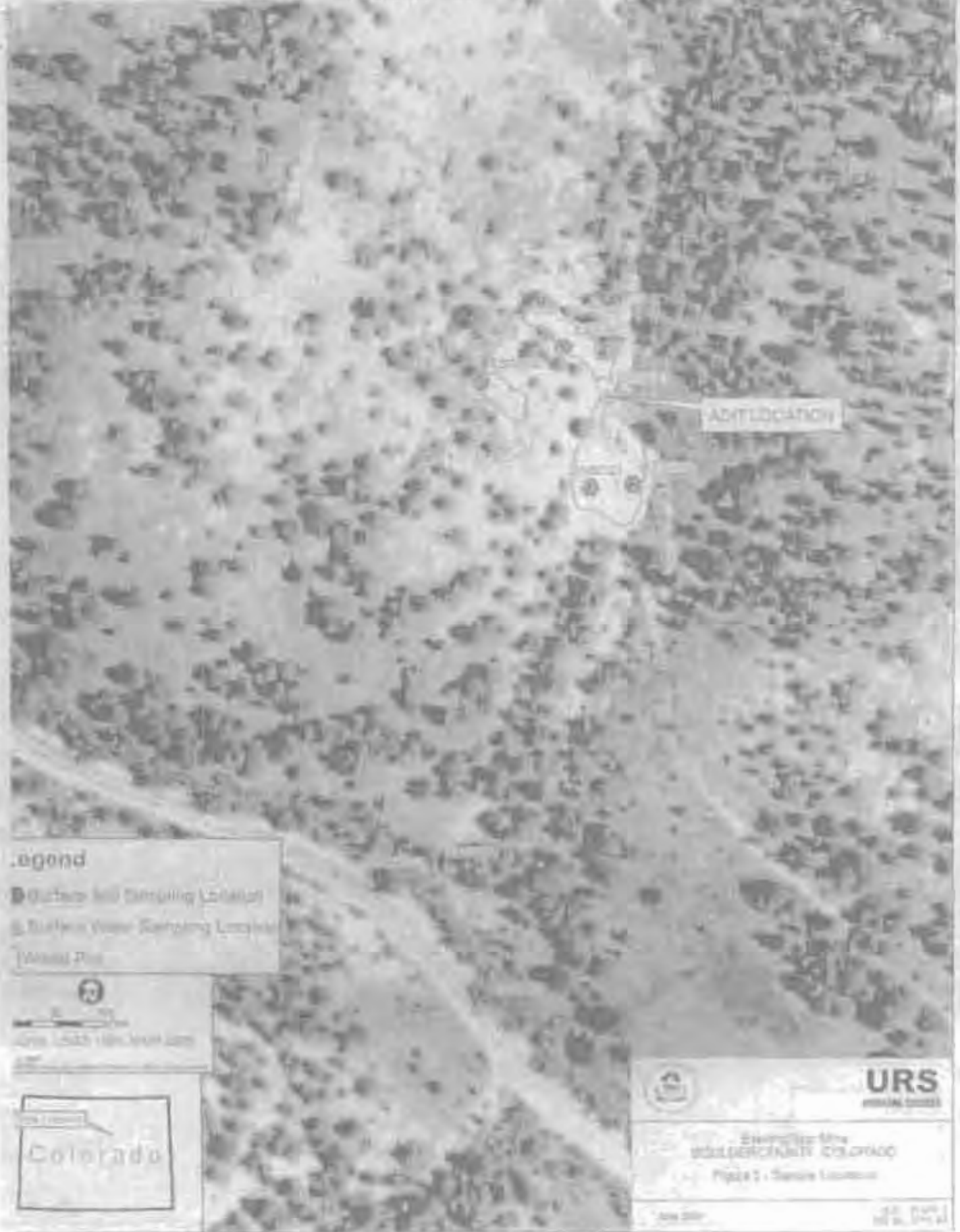



 0 0.25 0.50 Miles
 Source: USGS 1991, NAIP 2005
 Printed January 18, 2007 9:11 AM
 ES10725-0000, 0000, 0000, 0000, 0000, 0000



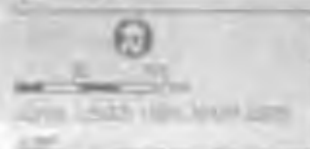
URS
OPERATING SERVICES

Evering Star Mine
 BOULDER COUNTY, COLORADO
 Figure 1: Site Location



Legend

- Existing Building Footprint
- Existing Structure Footprint
- Wood Pile



URS
UNIVERSITY RESOURCES

Prepared for the
WESTERN SLOPE COLORADO

Page 1 - Site Location

Scale: 1" = 100'

DATE: 08/14/14



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

Ref:8EPR-PS-62007

MEMORANDUM

SUBJECT: Evening Star Mine Screening Toxicological Review

FROM: Richard Graham, PhD
Environmental Toxicologist

TO: Craig Myers
OSC

1. The Evening Star Mine soil and surface samples collected March, 2007 contained concentrations of arsenic that exceeded EPA's human health cancer risk levels of $1E^{-04}$ (as explained below in paragraph #3). Similarly these same site samples contained concentrations of arsenic, aluminum, and copper that exceeded EPA's chronic AWQC (National Ambient Water Quality Criteria) water concentration levels (see Table 2, below) and EPA's ecological toxicity screening levels for terrestrial organisms (see Table 1 below, referring to "Eco-Soil Screening Levels"). Lastly, soil lead concentrations may potentially pose a health concern to female recreational users who visit the site (see paragraph #4, below).
2. Because of the large amount of dust stirred up by ATV (all-terrain vehicle) and OHV (off-highway vehicle) riders, the human inhalation pathway is the primary contributor to exposure and risk. Dermal exposures to metals in soil were also considered and determined to be of minimal risk.
3. Using risk assessment methodology from EPA's Risk Assessment Guidance (EPA, 1989) for Superfund, oral and inhalation exposures to ATV riders were evaluated using exposures of individuals visiting the site for 56 days/year, 1.5 hours per event. The amount of arsenic in soil which corresponds to a $1E^{-06}$ to $1E^{-04}$ cancer risk range is 12 - 1200 ppm from these exposure pathways. EPA generally recommends action be taken when cancer risks exceed $1E^{-04}$.
4. In scenarios where the adult is exposed the most sensitive receptors are the female of child bearing age and her fetus. If a female recreational user (who visits the site 56 days/year, 1.5 hours/event) is exposed to lead soil concentrations that are greater than soil lead concentrations ranging from 3,268-5,146 ppm, there may be greater than 5% probability that

the blood lead level in the fetus will exceed 10 microgram (ug) per deciliter (dl) of blood (10 ug/dl). Children (less than seven years old) are most at risk (Reagan and Silbergeld, 1989) to brain damage and/or mental retardation, anemia, liver and kidney damage, developmental delays, and in extreme cases, death.

5. Soil samples taken at the mine site (Sample Ids # 04031907 and 03031907) and analyzed for lead showed lead concentrations ranging from 4,400 – 9,800 ppm, respectively. These levels are clearly above the lead concentrations (3,268-5,146 ppm) that may potentially pose a human exposure risk as previously described, above.

6. Soil lead is also toxic to terrestrial organisms at concentrations ranging from 56-120 ppm (EPA Ecological Screening Levels, <http://www.epa.gov/ecotox/ecossl/>.) Lead causes plant necrosis and death while leading to neurological damage and death in small mammals. Soils containing lead that leach into surface waters may also impair aquatic organisms such as macroinvertebrates and trout. Lead similarly affects these organisms with decrease life-spans, development of spinal deformities in trout and salmon, and potentially death.

7. Both aluminum and copper are non-carcinogens. Risk for non-cancer forming metals is stated with a number known as the Hazard Index (HI). The HI relates risk to the likelihood of an adverse health effect. The HI compares the calculated risk to the level of exposure determined to show no adverse health affect (a threshold exposure value). If the HI is less than 1, then the exposure is not expected to pose an undue health affect. Conversely, if the HI is greater than 1 then EPA generally recommend action be taken when cumulative non-cancer risks exceeding HI of 1 (EPA, 1989). Samples collected from the mine site show a HI less than 1, indicating that both aluminum and copper concentrations are at levels that would be expected not to cause adverse health effects to recreational users of this site.

8. Table 1 below shows arsenic soil concentrations sampled and analyzed from the mine site compared to a recreational user scenario previously described in paragraph #3 above. Table 1 also shows the copper and aluminum soil samples collected and analyzed from the mine site and compares these concentrations to a general recreational user scenario, non-cancer risk-based guidelines, used by EPA nationwide. Lastly, Table 1 compares arsenic, copper, and aluminum soil concentration to EPA's Ecological Screening levels for terrestrial organisms.

Table 1. Evening Star Mine Soil Screening Levels.

Metals	Sample ID	Soil Concentration Found At Site (mg/kg)	Cancer and Non-Cancer Levels of Concern for Recreational Users (mg/kg)	EPA Eco-Soil Screening Levels ¹ (mg/kg)
As	04031907/ 03031907	450 / 340	12 – 1200 ²	46 – mammals 18– plants
Cu	04031907/ 03031907	600 / 290	60,230 ³	49– mammals 70– plants
Al	04031907/ 03031907	2200 / 4300	63,100 ³	107– mammals 50– plants

1 - Ecological Screening Levels (ECO-SSL), USEPA, last updated August 27, 2007
(<http://www.epa.gov/ecotox/ecoss/>)

2 - This range of arsenic in the soil corresponds to a cancer risk of $1E^{-06}$ to $1E^{-04}$. See #3, above.

3 - Preliminary Remediation Goals, EPA Region 9, 2004.
(<http://www.epa.gov/region09/waste/sfund/prg/index.html>)

9. Review of surface water samples taken downgradient of the adit showed results that exceeded both Ambient Water Quality Criteria (AWQC) acute and chronic maximum concentrations for both priority and non-priority pollutants. This is shown in the table below:

Table 2. Evening Star Surface Water Comparison to AWQC Values.

Metals	Sample ID	Water Concentration (mg/L) – ppm	AWQC Value (Chronic- μ g/L) – ppb
Cu	W0103 /	0.77 (770 μ g/L)	9 ¹
	W0104	0.76 (760 μ g/L)	
Pb	W0103 /	0.55 (550 μ g/L)	2.5 ¹
	W0104	0.50 (500 μ g/L)	
Zn	W0103 /	3.2 (3200 μ g/L)	120 ¹
	W0104	3.2 (3200 μ g/L)	
Al	W0103 /	4.1 (4100 μ g/L)	87 ²
	W0104	3.2 (3200 μ g/L)	

1- Current National Recommended Water Quality Criteria, <http://www.epa.gov/waterscience/criteria/wqcriteria.html>, last updated July 18, 2007. See also 65 FR 31682 and 65 FR 66643.

2- Current National Recommended Water Quality Criteria, "Gold Book" <http://www.epa.gov/waterscience/criteria/wqcriteria.html>. See also 53 FR 33177.

10. Metal toxicity in aquatic communities varies for each of the corresponding contaminants. Copper has been widely used as an algacide and herbicide for aquatic plants for decades, while chronic copper toxicity in trout has caused death, increased susceptibility to variety of diseases, growth impairment, negatively affected reproduction rates and trout and salmon larvae survivability. Zinc toxicity like the other metals includes death from starvation and enhanced stress loading on the fish, decrease in both number and size of offspring, and destruction of gill tissues. Aluminum toxicity affects trout gills (impairs breathing), adversely affected fish larvae swimming and eating responses, and lower fertility in various aquatic species.

11. Soil samples collected from the Evening Star mine site exceed both arsenic and lead human health risk levels. These same soil samples also exceed EPA guidelines for ecological screening levels for aluminum and copper. Surface water samples collected from downstream of the mine adit exceed Ambient Water Quality Criteria for copper, lead, zinc, and aluminum which indicate potential aquatic toxicity downstream leading to ecological impairment of downstream aquatic environments. It is recommended that further field efforts be taken to minimize potential exposure and risk to both people visiting and recreating on the site and minimize impact to aquatic communities by water leaching from the waste rock pile and

draining from the mine adit.

REFERENCES:

EPA, 1989. Risk Assessment Guidance for Superfund (RAGS): Volume 1, Human Health Evaluation Manual, Part A. (<http://www.epa.gov/oswer/riskassessment/ragsa/index.htm>)

EPA, 2007. Ecological Screening Levels (ECO-SSL), USEPA, last updated August 27, 2007
<http://www.epa.gov/ecotox/ecossl/>

National Recommended Water Quality Criteria, 65FR31682, last updated April 25, 2007,
<http://www.epa.gov/waterscience/criteria/wqcriteria.html>.

National Recommended Water Quality Criteria, "Gold Book", 53FR33178,
<http://www.epa.gov/waterscience/criteria/wqcriteria.html>.

Preliminary Remediation Goals, EPA Region 9, 2004
(<http://www.epa.gov/region09/waste/sfund/prg/index.html>)





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

Ref: EPR-ER

AMENDMENT TO ACTION MEMORANDUM

SUBJECT: Fund-Lead Time Critical Removal Action at the Evening Star Mine Site near the town of Jamestown, Boulder County, Colorado

FROM: Craig Myers, On Scene Coordinator
Emergency Response Team

THROUGH: Steve Way, Acting Supervisor
Emergency Response Unit

TO: David Ostrander, Director
Preparedness, Assessment, and Emergency Response Programs
Office of Ecosystems Protection and Remediation

Site ID: 08MU

Category of Removal: Time-Critical, Fund-Lead

This amendment to the October 15, 2007 Action Memorandum substitutes the attached copy of Attachment 4 (dated October 25, 2007) for the version in existence as of October 15, 2007.

Approve: _____

David Ostrander, Director

Preparedness, Assessment, and Emergency Response Programs
Office of Ecosystems Protection and Remediation

Date: 12/5/07

Disapprove: _____

David Ostrander, Director

Preparedness, Assessment, and Emergency Response Programs
Office of Ecosystems Protection and Remediation

Date: _____

Attachment:

Attachment 4 - Toxicological Evaluation Letter

9. Review of surface water samples taken downgradient of the adit showed results that exceeded both Ambient Water Quality Criteria (AWQC) acute and chronic maximum concentrations for both priority and non-priority pollutants. This is shown in the table below:

Table 2. Evening Star Surface Water Comparison to AWQC Values

Metals	Sample ID	Water Concentration (mg/L) – ppm	AWQC Value (Chronic- $\mu\text{g/L}$) – ppb
Cu	W0103 /	0.77 (770 $\mu\text{g/L}$)	9 ¹
	W0104	0.76 (760 $\mu\text{g/L}$)	
Pb	W0103 /	0.55 (550 $\mu\text{g/L}$)	2.5 ¹
	W0104	0.50 (500 $\mu\text{g/L}$)	
Zn	W0103 /	3.2 (3200 $\mu\text{g/L}$)	120 ¹
	W0104	3.2 (3200 $\mu\text{g/L}$)	
Al	W0103 /	4.1 (4100 $\mu\text{g/L}$)	87 ²
	W0104	3.2 (3200 $\mu\text{g/L}$)	

1- Current National Recommended Water Quality Criteria, <http://www.epa.gov/waterscience/criteria/wqcriteria.html>, last updated July 18, 2007. See also 65 FR 31682 and 65 FR 66643.

2- Current National Recommended Water Quality Criteria, "Gold Book" <http://www.epa.gov/waterscience/criteria/wqcriteria.html>. See also 53 FR 33177.

10. Metal toxicity in aquatic communities varies for each of the corresponding contaminants. Copper has been widely used as an algacide and herbicide for aquatic plants for decades, while chronic copper toxicity in trout has caused death, increased susceptibility to variety of diseases, growth impairment, negatively affected reproduction rates and trout and salmon larvae survivability. Zinc toxicity like the other metals includes death from starvation and enhanced stress loading on the fish, decrease in both number and size of offspring, and destruction of gill tissues. Aluminum toxicity affects trout gills (impairs breathing), adversely affected fish larvae swimming and eating responses, and lower fertility in various aquatic species.

11. Soil samples collected from the Evening Star mine site exceed both arsenic and lead human health risk levels. These same soil samples also exceed EPA guidelines for ecological screening levels for aluminum and copper. Surface water samples collected from downstream of the mine adit exceed Ambient Water Quality Criteria for copper, lead, zinc, and aluminum which indicate potential aquatic toxicity downstream leading to ecological impairment of downstream aquatic environments. It is recommended that further field efforts be taken to minimize potential exposure and risk to both people visiting and recreating on the site and minimize impact to aquatic communities by water leaching from the waste rock pile and draining from the mine adit.

REFERENCES:

EPA, 1989. Risk Assessment Guidance for Superfund (RAGS): Volume 1, Human Health Evaluation Manual, Part A. (<http://www.epa.gov/oswer/riskassessment/ragsa/index.htm>)

EPA, 2007. Ecological Screening Levels (ECO-SSL), USEPA, last updated August 27, 2007
<http://www.epa.gov/ecotox/ecossl/>

EPA, 2007. EPA link: Preliminary Remediation Goals (PRG), USEPA last updated August 17, 2007 http://rais.ornl.gov/prg/equations/rec_sol_nrad_ing.shtml

National Recommended Water Quality Criteria, 65FR31682, last updated April 25, 2007,
<http://www.epa.gov/waterscience/criteria/wqcriteria.html>.

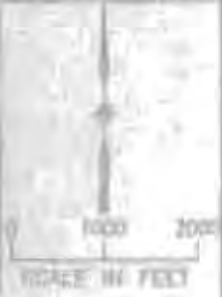
National Recommended Water Quality Criteria, "Gold Book", 53FR33178,
<http://www.epa.gov/waterscience/criteria/wqcriteria.html>.

Reagan, P.L. & E.K. Silbergeld. 1989. Establishing a health based standard for lead in residential soils. In: Hemphill and Cothern, eds. Trace substances in environmental health, supplement to Volume 12, (1990) of Environmental Geochemistry and Health.



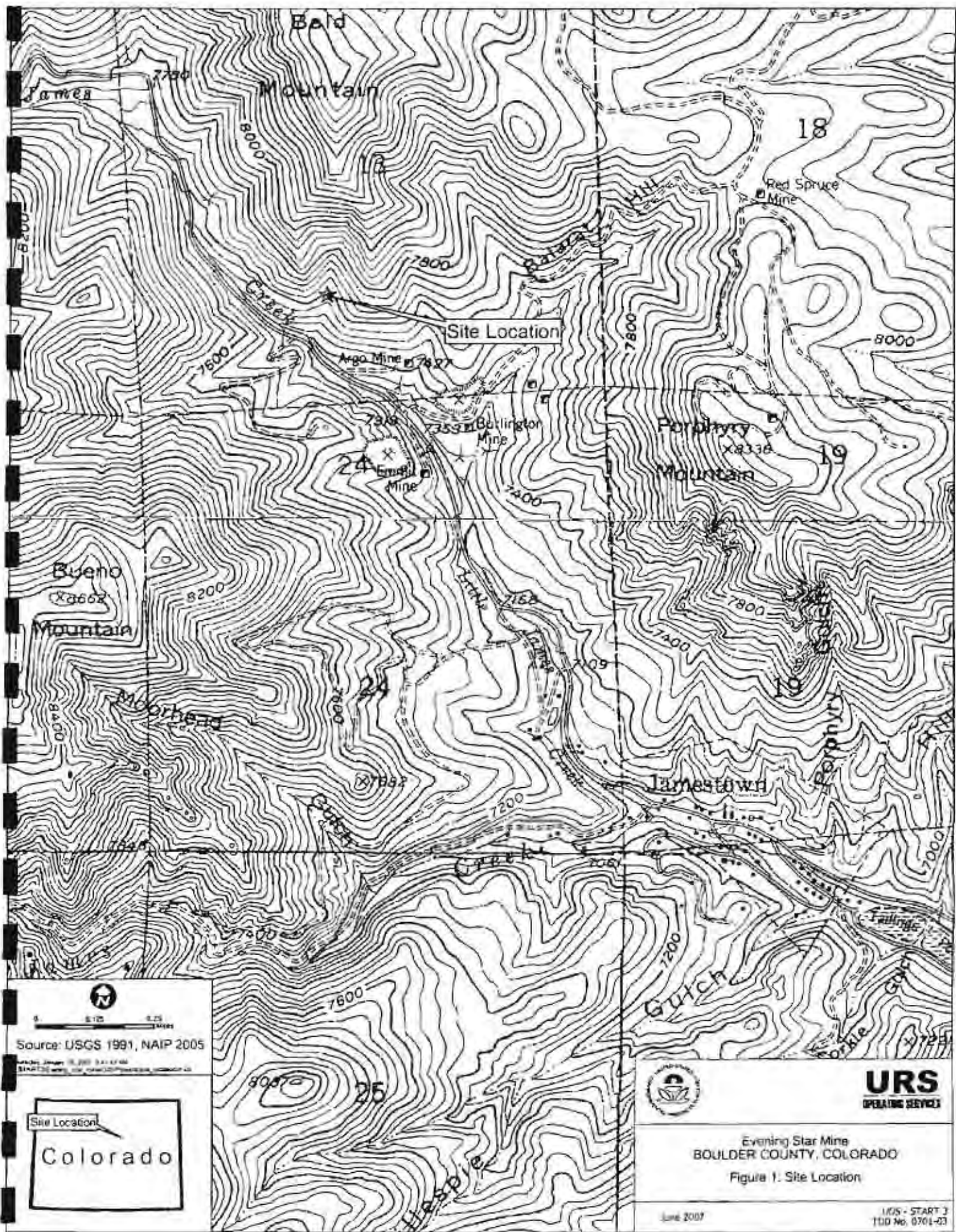



BOULDER COUNTY

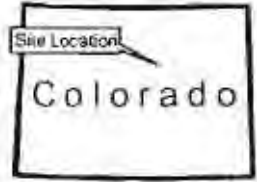


LITTLE JAMES CREEK MINE SITE FEASIBILITY ASSESSMENT	 RMC ENGINEERS
VICINET MAP	1

10/10/00 11:00 AM 10/10/00 11:00 AM 10/10/00 11:00 AM




 0 0.25 0.5 Miles
 Source: USGS 1991, NAIP 2005
Scale: 1 inch = 0.25 miles
 1:62,500
 1:25,000




URS
 OPERATING SERVICES

Evening Star Mine
 BOULDER COUNTY, COLORADO
 Figure 1. Site Location

June 2007

1/05 - START 3
 T10 No. 0701-03



URS
UNIVERSITY
CONSULTANTS
INCORPORATED
10000
10000
10000

URS
UNIVERSITY
CONSULTANTS
INCORPORATED
10000
10000
10000

Statement of Work for the Evening Star Mine Site

Introduction:

The Evening Star Mine (Mans Open Space) is located approximately 2 miles northwest of the town of Jamestown, Colorado, in the Lefthand Watershed. The property is held by Boulder County as a publicly owned open space and managed by the Parks and Open Space Department (BCPOS). The property is not currently open to the public. The site comprises approximately 20 acres of land. The Man's property was mined for precious metals and fluor spar.

EPA staff informed Boulder County in early fall 2004 of the water quality issues the Mans open space was creating for Little James Creek. In fall 2007, EPA's Emergency Response Team conducted a Time Critical Removal Action due to public health and environmental concerns from lead and arsenic.

Purpose:

This statement of work defines the tasks required to complete the response action that EPA started in 2007, and identifies work required of Boulder County to be in compliance with its 2009 Administrative Settlement Agreement and Order on Consent with EPA. The work will include reclaiming the staging area and access road. The tasks will also include reworking the lower portion of the main drainage that runs through the site. Remaining tasks will be completed by Boulder County and are listed in the following section.

Task Description:

Task 1: Rework the lower portion of the drainage

- Remove tree and limb debris
- Remove a portion of the existing rip-rap
- Reshape the drainage
- Replace the rip-rap in reshaped drainage area and provide additional rip-rap as needed

Task 2: Reclaim access road on US Forest Service (USFS) property. Reclaim staging area and access road on County open space property

- Obtain access for all activities to take place on USFS property
- Reshape staging area contours to blend in with surrounding terrain
- Place topsoil on re-contoured staging area as needed
- Reshape access road to blend in with the surrounding terrain
- Place topsoil on re-contoured access road as needed

Task 3: Re-vegetate staging area and access road

- Re-seed disturbed areas with a seed mix specified by the BCPOS plant ecologists (USFS approval required on USFS land)
- Mulch disturbed areas per BCPOS staff recommendations (USFS approval required on USFS land)

Task 4: Monitoring & Maintenance

- Monitor reclaimed areas for seed germination and soil erosion
- Reseed areas that have not successfully reclaimed to a minimum 70% pre-construction state
- Maintain erosion control best management practices (BMP) as needed

GENERAL WARRANTY DEED

(Statutory Form, C.R.S., §38-30-113)


Grantor, JOHN R. MANS, whose legal address is c/o David R. Mans, P.O. Box 107 Ward, Colorado 80481, of the County of Boulder and State of Colorado, for the consideration of FORTY-FIVE THOUSAND DOLLARS (\$45,000.00), in hand paid, hereby sells and conveys to Grantee, the County of Boulder, a body corporate and politic, whose legal address is P.O. Box 471, Boulder, Colorado 80306, of the County of Boulder, State of Colorado, the following real property in the County of Boulder and State of Colorado, to wit:

SEE EXHIBIT A ATTACHED HERETO AND MADE A PART HEREOF BY THIS REFERENCE FOR LEGAL DESCRIPTION OF THE PROPERTY, with all its appurtenances and warrants the title to the same, subject only to those matters set forth on Exhibit B attached hereto and made a part hereof by this reference.

Signed this 6 day of September, 2000,

State Document # 13

Date: Exempt

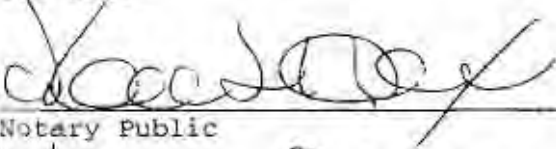

John R. Mans

STATE OF COLORADO)
) ss
COUNTY OF BOULDER)

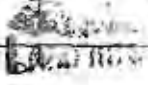
The foregoing instrument was acknowledged before me this 6 day of September, 2000 by John R. Mans.

Witness my hand and official seal.

ROXANNE L. HENNINGSEN
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 08/02/2001


Notary Public

My Commission Expires: 8/2/01

 15344319

BC 14 ...

Exhibit A
LEGAL DESCRIPTION

The Mt. Pleasant Lode Mining Claim (United States Mineral Survey No. 73) located in the Central Mining District and embracing a portion of Section 13, Township 2 North, Range 72 West of the Sixth Principal Meridian, as set forth and patented in United States Patent recorded June 24, 1887, in Book 59 at Page 350, County of Boulder, State of Colorado.

together with:

The Evening Star, Evening Star No. 2, Maud S. and Maud S. No. 2 Lode Mining Claims (United States Mineral Survey No. 6268), located in the Central Mining District and embracing a portion of Section 13, Township 2 North, Range 72 West of the Sixth Principal Meridian, as set forth and patented in United States Patent recorded March 19, 1902, in Book 237 at Page 58, County of Boulder State of Colorado.



2077623

Page 3 of 3
05/11/2008 03:51P

Boulder County Clerk, CO 80

R 0.00 D 2.00

Exhibit B
Permitted Exceptions

7. Taxes for 2000, a lien not yet due and payable and taxes or special assessments not certified to the Boulder County Treasurer's Office.
8. Right of Proprietor of a Vein or Lode to extract and remove his ore therefrom should the same be found to penetrate or intersect the premises as reserved in United States Patent recorded June 23, 1887 in Book 59 at Page 360, recorded March 19, 1902 in Book 237 at Page 58, and recorded January 21, 1908 in Book 228 at Page 115.
9. Right of Way for ditches or canals constructed by the authority of the United States as reserved in United States Patent recorded June 23, 1887 in Book 59 at Page 360, recorded March 19, 1902 in Book 237 at Page 58, and recorded January 21, 1908 in Book 228 at Page 115.
10. Easement and Right of Way for utility purposes as granted to Public Service Company by instrument recorded August 06, 1975 under Reception No. 146894.
11. Easement and Right of Way for utility purposes as granted to Public Service Company by instrument recorded August 06, 1975 under Reception No. 146895, as to Parcel B.
12. Any rights, interests or easements in favor of the public which exist or are claimed to exist over any part of the said land covered by the waters of Little James Creek, as to Parcel B.
13. Lack of access to and from public road, highway or street.

