

RECEIVED MAY 31 2005

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

UNITED STATES OF AMERICA, and
THE STATE OF COLORADO,

Plaintiffs,

v.

THE B&B MINES, INC.,
FRENCH GULCH MINES, INC.,
DIAMOND DICK CO.,
ECKART PATCH CO.,
LITTLE LIZZIE LIMITED LIABILITY COMPANY, and
WIRE PATCH LIMITED LIABILITY COMPANY,

Defendants.

Civil Action No.

05-CV-992-EWN-
OES

**SETTLEMENT AGREEMENT, COVENANTS NOT TO SUE
AND CONSENT DECREE**

I. BACKGROUND

The United States of America and the State of Colorado have filed a joint complaint in this matter. The United States of America filed its claim pursuant to Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9606 and 9607, seeking reimbursement of costs incurred and to be incurred for response actions and natural resource damages in connection with the release or threatened release of hazardous substances at the Wellington Oro/French Creek Superfund Site in Summit County, Colorado. The State of Colorado filed its claim pursuant to Section 107 of CERCLA, 42 U.S.C. § 9607, seeking reimbursement of costs incurred and to be incurred for response actions and natural resource damages in connection with the release or threatened release of

hazardous substances at the Wellington Oro/French Creek Superfund Site, the IXL/Royal Tiger Site and the Jessie Mine and Mill Site, located in Summit County, Colorado.

This Settlement Agreement, Covenants Not to Sue, and Consent Decree ("Consent Decree" or "Agreement") is made and entered into by and among the United States on behalf of the United States Environmental Protection Agency ("EPA") and the United States Department of Interior ("DOI") and the State of Colorado ("State") on behalf of the Colorado Department of Public Health and Environment ("CDPHE") and the Colorado Trustees for Natural Resources ("State Trustees") (collectively the "Plaintiffs"); The B&B Mines, Inc., Diamond Dick Co., Eckart Patch Co., French Gulch Mines, Inc., Little Lizzie Limited Liability Company, and Wire Patch Limited Liability Company (collectively the "Defendants" or "Sellers"); and Summit County and the Town of Breckenridge (collectively the "Buyers").

This Consent Decree is entered into pursuant to CERCLA, 42 U.S.C. §§ 9601 *et seq.* and the authority of the Attorney General of the United States to compromise and settle claims of the United States. The State of Colorado enters into this Consent Decree pursuant to authority provided in Section 25-16-103 C.R.S.

This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9606, 9607, 9613(b), and 9622. This Court also has personal jurisdiction over the Settling Parties. The Settling Parties shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree.

II. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations, including any amendments thereto.

1. "Action Memorandum" shall mean the Action Memorandum issued by EPA on November 24, 2002, as amended by Addendum # 1 on November 30, 2004, selecting a non-time critical removal action to address water quality in connection with metals contamination emanating from the Wellington Oro Site, copies of which are attached hereto as Appendix 3 to this Consent Decree.

2. "Administrative Orders" shall mean the following four (4) administrative orders issued by EPA to Sellers: Administrative Order For Engineering Evaluation/Cost Analysis, Docket No. CERCLA-VIII-98-12, issued by EPA on April 27, 1998; Administrative Order for Non-Time Critical Removal Action, Docket No. CERCLA-VIII-98-21, issued by EPA on September 24, 1998; Unilateral Administrative Order for Engineering Evaluation/Cost Analysis, Docket No. CERCLA-VIII-99-13, issued by EPA on July 9, 1999; and Administrative Order for Access, Docket No. CERCLA-8-2000-17, issued by EPA on August 25, 2000.

3. "Agreement" or "Consent Decree" shall mean this Settlement Agreement, Covenants Not to Sue, and Consent Decree.

4. "Buyers" shall mean Summit County, a body corporate and politic of the State of Colorado ("Summit County"), and the Town of Breckenridge, a municipal corporation of the State of Colorado ("Town of Breckenridge"), their departments, agencies and instrumentalities, collectively.

5. "CDPHE" shall mean the Colorado Department of Public Health and Environment and any successor departments or agencies.
6. "Effective Date" shall mean the date upon which this Consent Decree is entered by the Court in accordance with Section XXIV of this Agreement.
7. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.
8. "Existing Contamination" shall mean:
 - a. any hazardous substances, pollutants or contaminants present or existing on or under the Property as of the Effective Date of this Agreement;
 - b. any hazardous substances, pollutants or contaminants that migrated from the Property prior to the Effective Date of this Agreement; and,
 - c. any hazardous substances, pollutants or contaminants presently at the Property that migrate onto, under, or from the Property after the Effective Date of this Agreement.
9. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States or the State incurs after the Effective Date of this Agreement in reviewing or developing plans, reports and other items pursuant to this Consent Decree relating to the Wellington Oro Work, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, and costs to secure access after the Effective Date of this Consent Decree.
10. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded

annually on October 1 of each year, in accordance with Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

11. "IXL/Royal Tiger Site" shall mean that portion of the Property that comprises the IXL/Royal Tiger Mine and Mill and other facilities at that location on the south side of the Swan River, approximately one fourth of a mile east of Muggins Gulch and five stream miles from the confluence with the Blue River, covering approximately ten acres of land, including two collapsed adits, associated underground workings, two waste rock dumps, a pile of fine-grained mill tailings located below the ruins of the mill, and releases and discharges from the IXL/Royal Tiger Mine and Mill, adits, workings, waste rock dumps and tailings, the surface location of which is generally depicted on the map attached hereto in Appendix 1 to this Consent Decree.

12. The "Jessie Mine and Mill Site" shall mean that portion of the Property that comprises the Jessie Mine and Mill and other facilities at that location on the east side of Gold Run Gulch, approximately 1.5 miles south of the Swan River and 2.7 stream miles from the confluence with the Blue River, containing an approximately 200-acre strip of land subject to 44 patented mining claims and associated underground workings and releases and discharges from the Jessie Mine and Mill, adits, workings, waste rock dumps and tailings, the surface location of which is generally depicted on the map attached hereto in Appendix 1 to this Consent Decree.

13. "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.

14. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral or letter.

15. "Parties" shall mean the United States, the State, the Sellers and the Buyers.

16. "Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States or the State paid at or in connection with the Property or the Existing Contamination, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs and costs to secure access, through the Effective Date of this Consent Decree.

17. "Property" shall mean the approximately 1,786 acres of land located just east of the Town of Breckenridge in unincorporated Summit County in the Upper Blue River Basin that the Sellers have agreed to sell to the Buyers, and all facilities located on such Property, depicted generally on the map attached hereto in Appendix 1 to this Consent Decree and specifically described in the legal description attached hereto in Appendix 2 to this Consent Decree. The northern border of the 1,786 acres of land is in the Swan River Valley, and the southern border extends up the south side of French Gulch. The Property includes, but is not limited to, the Wellington Oro Site, the Jessie Mine and Mill Site, and the IXL/Royal Tiger Site. Also contained within the boundaries of the Property is a 156 acre parcel that is to be protected by a conservation easement, such easement to be held by the Continental Divide Land Trust (referred to herein as the "Easement Property"). The Easement Property is generally depicted on the map attached hereto in Appendix 1 to this Agreement.

18. "Section" shall mean a portion of this Consent Decree identified by a Roman numeral.

19. "Sellers" shall mean the Defendants, The B&B Mines, Inc., French Gulch Mines, Inc., Diamond Dick Co., Eckart Patch Co., Little Lizzie Limited Liability Company, and Wire Patch Limited Liability Company.

20. "Settling Parties" shall mean the Buyers and the Sellers collectively.

21. "State" shall mean the State of Colorado, its departments, agencies and instrumentalities.

22. "Statement of Work" or "SOW" shall mean the statement of work for implementation of the Action Memorandum, set forth in Appendix 4 to this Consent Decree, and any modifications made thereto in accordance with this Consent Decree.

23. "United States" shall mean the United States of America, its departments, agencies, and instrumentalities.

24. "VCUPs" shall mean Voluntary Cleanup Applications and Plans for the Jessie Mine and Mill Site and the IXL/Royal Tiger Site as approved by CDPHE on November 24, 2004, and October 27, 2004, respectively, copies of which are attached hereto in Appendix 5 to this Consent Decree.

25. "Wellington Oro Site" shall mean that portion of the Property that comprises the Wellington Oro Mine, associated underground workings and other facilities thereon, and releases and discharges from the Wellington Oro Mine, adits, workings, waste rock dumps and tailings, approximately 2.2 miles upstream or east from the confluence of French Creek with the Blue River, and downstream areas of French Creek and the Blue River affected by zinc and cadmium contamination, the surface location of which is depicted generally on the map attached hereto in Appendix 1 to this Consent Decree.

26. The "Wellington Oro Work" shall mean all activities Buyers are required to perform to implement the Action Memorandum as set forth in the Statement of Work.

III. STATEMENT OF FACTS

27. This Consent Decree addresses approximately 168 patented mining claim parcels comprising approximately 1,786 acres of land located within an area known as the Golden Horseshoe, just east of the Town of Breckenridge in unincorporated Summit County, and includes, among other areas, the Wellington Oro Site, the Jessie Mine and Mill Site, and the IXL/Royal Tiger Site.

28. Extensive placer and underground lode mining occurred throughout the Golden Horseshoe beginning in the late 1850s and continuing at times until the 1960s. Floating dredge boats were used to placer mine the valley floor for gold. Lode mining was concentrated on the steep valley sides where lead, zinc, silver sulfide and gold ores were extracted through an extensive network of adits and tunnels.

29. The Wellington Oro Site was the largest mining operation in the valley. Its underground workings consist of over twelve miles of tunnels, adits, drifts, stopes and crosscuts, approximately half of which are below the elevation of the groundwater table.

30. EPA and CDPHE began evaluating the Wellington Oro Site in the late 1980s under Section 319 of the Clean Water Act and conducted investigations to determine the nature and extent of contamination. In 1995, EPA continued the Wellington Oro Site investigations under the CERCLA program. In 1998, the Sellers completed an Engineering Evaluation/Cost Analysis ("EE/CA") for the Wellington Oro Site that focused primarily upon surface wastes containing elevated levels of lead and arsenic. On September 23, 1998, EPA issued an action

memorandum that provided for the consolidation and capping of roaster fines, mill tailings and waste rock (the "Capping Action Memorandum"). The Sellers performed this work under an administrative order issued by EPA, which work was completed in 1999. In 2002, EPA and the Sellers completed a second EE/CA that focused primarily upon the impact of metals being released from the Wellington Oro Site on the water quality in French Creek and the Blue River. The second EE/CA concluded that the underground workings of the Wellington Oro mine constitute the largest source of metals loading to ground and surface water and that a natural seep, referred to as FG-6C, is the primary conduit of mine pool water into French Creek. Zinc and cadmium were identified as the primary contaminants of concern. In May 2002, EPA completed an Ecological Risk Assessment ("Assessment") for the Wellington Oro Site. EPA issued the Action Memorandum, a copy of which is attached hereto in Appendix 3, to address water quality issues at the Wellington Oro Site on November 24, 2002. The Action Memorandum was amended by Addendum #1 on November 30, 2004. The Action Memorandum and Addendum #1 are referred to collectively herein as the "Action Memorandum." The non-time critical response action set forth in the Action Memorandum is referred to herein as the "Water Quality Action." The Water Quality Action provides for the collection and treatment of water at seep FG-6C. The Water Quality Action has not yet been implemented.

31. CDPHE, in cooperation with EPA, conducted an investigation of the Jessie Mine and Mill Site. In March 2003, CDPHE issued a Targeted Brownfields Assessment and EE/CA ("Brownfields Analysis") for the Jessie Mine and Mill Site. CDPHE characterized the nature and extent of contamination and identified the following removal action objectives: stabilization

of waste rock piles and prevention of direct contact of such materials with Gold Run Gulch; isolation of contaminant sources through capping or institutional controls; decontamination, stabilization, and preservation of the mill structure; and re-routing and restoring Gold Run Gulch to prevent leaching and metals loading. CDPHE also identified a number of removal action alternatives for the Jessie Mine and Mill Site and evaluated them for effectiveness, implementability, and costs associated with each alternative. The Brownfields Analysis also included a Streamlined Ecological Risk Assessment for the Jessie Mine and Mill Site. On September 21, 2004, the Buyers submitted a Voluntary Cleanup Application to CDPHE, which was amended on November 17, 2004, and approved on November 24, 2004, and provides for mitigation of observed environmental impacts at the Jessie Mine and Mill Site under the Colorado Voluntary Clean-up and Redevelopment Act, C.R.S. §§ 25-16-301 *et seq.*, through the following general actions:

- a. Rerouting of Gold Run Gulch away from the base of the waste rock piles;
- b. On-site stabilization of contaminants at the mill structure;
- c. Shaft closure;
- d. Draining up-gradient ponds to reduce potential for saturation of waste rock; and
- e. Institutional controls to minimize contact with waste rock.

The VCUP Application for the Jessie Mine and Mill Site as approved by CDPHE is attached hereto in Appendix 5.

32. CDPHE, in cooperation with EPA, conducted an investigation of the IXL/Royal Tiger Site. In August 2002, CDPHE issued a Targeted Brownfields Assessment and EE/CA for

the IXL/Royal Tiger Site. CDPHE characterized the nature and extent of contamination and identified the following removal action objectives: stabilization of waste rock piles and prevention of direct contact of such materials with a side channel of the Swan River; isolation of tailings through capping; and prevention of further erosion of streamside tailings by erection of a barrier to prevent direct stream contact. CDPHE also identified a number of removal action alternatives for the IXL/ Royal Tiger Site and evaluated them for effectiveness, implementability, and costs associated with each alternative. The Brownfields Analysis also included a Streamlined Ecological Risk Assessment for the IXL/Royal Tiger Site. On September 9, 2004, the Buyers submitted a Voluntary Cleanup Application to CDPHE, which was amended on October 15, 2004, and approved on October 27, 2004, and provides for mitigation of observed environmental impacts at the IXL/Royal Tiger Site under the Colorado Voluntary Clean-up and Redevelopment Act, C.R.S. §§ 25-16-301 *et seq.*, through the following general actions:

- a. Improving and lining the diversion of adit flow around fine-grained tailings;
- b. Diverting Swan River surface flows to the main north channel;
- c. Improving the tailings cover below the former mill area;
- d. Covering streamside tailings in place; and
- e. Institutional controls to minimize contact with waste rock.

The VCUP Application for the IXL/Royal Tiger as approved by CDPHE is attached hereto in Appendix 5.

33. On or about November 20, 2001, Summit County and the Town of Breckenridge entered into a Purchase and Sale Agreement with the Sellers to purchase the Property as part of

Buyers' open space programs. The Purchase and Sale Agreement was approved by the Board of County Commissioners and the Town Council in December 2001. In 1993 and again in 1999, a property tax mill levy was approved by County voters to fund the acquisition of important open space within Summit County. In 1997, the Town of Breckenridge established a special fund, known as the "Town of Breckenridge Open Space Fund," to use solely for the purpose of funding the Town of Breckenridge's "Open Space Plan." The Town of Breckenridge's Open Space Fund is funded from one-half of one percent of the Town of Breckenridge's sales tax revenues. In 1998, the Summit County Open Space Advisory Council and the Town of Breckenridge Open Space Advisory Commission recommended that Summit County and the Town of Breckenridge work jointly to protect the Property as open space. The Property is the largest privately-owned, undeveloped property in the Upper Blue River Basin, rich in natural resources, recreation opportunities, and prized views and landscapes, and important to maintaining the back-country character of the area.

34. The B&B Mines, Inc., ("B&B Mines") is a Colorado corporation, formed in 1943 by creditors of two bankrupt companies, The Royal Tigers Mine Company and The Tiger Placers Company. Each creditor received one share of stock in B&B Mines for each dollar of debt which was owed for a total of 268,494 shares. In 1944, the assets of the bankrupt companies, including the Property, were transferred to B&B Mines in satisfaction of the debt. Shortly thereafter, B&B Mines began liquidating assets. From time to time, B&B Mines leased portions of the Property and over the years received royalty payments for mineral exploration and development.

35. There are currently more than 261,000 outstanding shares of stock of B&B Mines held by approximately 150 shareholders. The largest shareholder is the Estate of John B. Traylor.

36. In the 1970s, B&B Mines formed French Gulch Mines, Inc., ("French Gulch"), a Colorado corporation, giving one share of stock in the new company for each share of stock held in B&B Mines and transferring portions of the Property to French Gulch in a tax-free reorganization. In August 1993, in order to facilitate potential development, B&B Mines and French Gulch restructured their holdings. B&B Mines formed Diamond Dick Co. ("Diamond Dick"), a Colorado corporation, and Wire Patch Limited Liability Company ("Wire Patch"), a limited liability company under Colorado law. French Gulch formed Little Lizzie Limited Liability Company ("Little Lizzie"), a limited liability company under Colorado law, and Eckart Patch Co. ("Eckart Patch"), a Colorado corporation, and portions of the Property were conveyed by B&B Mines and French Gulch to these other entities.

37. Under the terms of the Purchase and Sale Agreement, the Sellers have agreed to sell the Property to Buyers. The Purchase and Sale Agreement addresses the rights and obligations as between the Buyers and Sellers for implementing the Action Memorandum and the VCUPs. Closing is conditioned in part upon the Sellers and Buyers reaching agreements with the United States and the State regarding the potential environmental liability that is addressed in this Agreement. Nothing in this Agreement is intended to alter or modify the respective rights or obligations of the Buyers and Sellers pursuant to the Purchase and Sale Agreement.

38. After the sale of the Property and performance of their obligations under this Agreement, Sellers intend to liquidate, distribute all remaining assets to shareholders and members, and dissolve pursuant to Colorado law.

39. The Buyers represent, and for the purposes of this Agreement EPA and CDPHE rely upon those representations, that Buyers' involvement with the Property has been limited to performing the following environmental studies and actions:

- a. Abandoned Mine Inventory of B&B Mines Property dated September 7, 2004, prepared for Summit County Open Space and Trails Department and Town of Breckenridge Open Space and Trails;
- b. Site assessment to submit Voluntary Cleanup Plan Application IXL/Royal Tiger Mine and Mill Site, Summit County, Colorado;
- c. Site assessment to submit Voluntary Cleanup Plan Application Jessie Mine and Mill Site, Summit County, Colorado;
- d. Intermittent monitoring of discharge from FG6C from March 22, 2002 through July 26, 2004;
- e. Environmental Assessment of the Star Placer MS#2846, Cecil Lode MS#2846, and Arthur Nall Lode MS#2846, Summit County, Colorado;
- f. Environmental Assessment of the Lincoln Lode MS#15356, Grant Lode MS #15356, Hayes Lode MS#15356, Garfield Lode MS #15356, Blaine Lode MS#15356, Arthur Lode MS#15356, Harrison Lode MS#15356, Cleveland Lode MS#15356, Morton Lode MS#15356, McKinley Lode MS#15356, and the Bryan Lode MS#15356, Summit County, Colorado;

- g. Studies, reports, analyses and/or data prepared in the exercise of Summit County's land use authority on the Property, including but not limited to providing written comments on reclamation permit applications;
- h. Studies, reports, analyses and/or data prepared by or for the French Gulch Remediation Opportunities Group;
- i. Written comments on Wellington Oro Site EE/CAs;
- j. Site visits and staff input into Targeted Brownfields Assessment: Engineering Evaluation and Cost Analysis, Jessie Mine and Mill Site, Summit County, Colorado;
- k. Site visits and staff input into Targeted Brownfields Assessment: Engineering Evaluation and Cost Analysis, IXL/Royal Tiger Mine and Mill Site, Summit County, Colorado;
- l. Review of the Capping Action Memorandum and the Action Memorandum;
- m. Review and analysis of response action alternatives;
- n. Review of the Wellington Oro Site Administrative Record and the documents contained therein; and
- o. Demolition of shacks and structures.

40. The Natural Resource Trustees for the Property on behalf of the State are the Executive Director of the Colorado Department of Public Health and Environment or his designee, the Executive Director of the Colorado Department of Natural Resources or his designee, and the Colorado Attorney General or his designee. The Natural Resource Trustees for

the Property on behalf of the United States are the appropriate representatives of the Secretary of the United States Department of the Interior (United States Fish and Wildlife Service).

41. The purpose of this Consent Decree is to settle and resolve the Sellers' civil liability under Sections 106, 107 and 113 of CERCLA, 42 U.S.C. §§ 9606, 9607, and 9613, the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 *et seq.* and the Colorado Water Quality Control Act, C.R.S. §§ 25-8-101 *et seq.* with regard to Existing Contamination discharging from the Wellington Oro Site, the Jessie Mine and Mill Site, and the IXL/Royal Tiger Site and the potential liability of the Buyers under Sections 106, 107 and 113 of CERCLA, 42 U.S.C. §§ 9606, 9607, and 9613, the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 *et seq.* and the Colorado Water Quality Control Act, C.R.S. §§ 25-8-101 *et seq.* with regard to Existing Contamination discharging at or from portions of the Property which might otherwise result from Buyers becoming owners of the Property, subject to the reservations and limitations set forth in Sections XIII and XVIII. The Parties agree to undertake all actions required by the terms and conditions of this Agreement.

42. Summit County and the Town of Breckenridge have entered into this Agreement voluntarily and in the public interest for the purpose of performing the work described herein and to provide the public and the environment with the substantial benefit of open space that will be provided pursuant to this Agreement and the laws, regulations, and ordinances of Summit County and the Town of Breckenridge.

43. The Parties recognize, and the Court by entering this Consent Decree finds, that this Agreement has been negotiated by the Parties in good faith, that implementation of this Agreement will expedite the cleanup of the Wellington Oro Site, the Jessie Mine and Mill Site

and the IXL/Royal Tiger Site, that its entry will avoid prolonged and complicated litigation, and that this Agreement is fair, reasonable, and in the public interest. The Parties agree that entry into this Agreement by the Settling Parties, and the actions undertaken in accordance with this Agreement, does not constitute an admission of any liability by any of the Settling Parties, and that the Settling Parties deny any alleged liability.

IV. DUE CARE/COOPERATION

44. The Buyers shall exercise due care at the Property with respect to the Existing Contamination and shall comply with all applicable local, State of Colorado, and federal laws and regulations. The Buyers agree to cooperate fully with EPA and CDPHE and to implement response actions at the Wellington Oro Site and voluntary cleanup actions at the Jessie Mine and Mill and IXL/Royal Tiger Sites as required by this Agreement. In the event the Buyers become aware of any action or occurrence which causes or threatens a release of a hazardous substance or a pollutant or contaminant at or from the Property that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Buyers shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release and shall, in addition to complying with any applicable notification requirements under Section 103 of CERCLA, 42 U.S.C. § 9603, or any other law, immediately notify EPA and CDPHE of such release or threatened release. Nothing in this Agreement is intended to constitute a waiver of the provisions of Sections 107(d), 121(e) or 123 of CERCLA, 42 U.S.C. §§ 9607(d), 9621(e) and 9623.

V. WORK TO BE PERFORMED AT THE WELLINGTON ORO SITE

45. To address Existing Contamination at the Wellington Oro Site, the Buyers shall perform the actions necessary to implement the Action Memorandum ("Wellington Oro Work") in accordance with the Statement of Work ("SOW"), a copy of which is attached hereto and incorporated herein as Appendix 4. The actions to be implemented shall comply with applicable or relevant and appropriate requirements ("ARARs") identified in the Action Memorandum, are described in greater detail in the SOW and generally include the following:

- a. Collection of water discharging at seep FG-6C, the primary source of acid mine drainage from the Wellington Oro Mine;
- b. Construction of a water treatment plant where water from seep FG-6C will be pumped and treated to neutralize the acidity of the water and remove zinc and cadmium;
- c. Discharge of treated water into infiltration galleries;
- d. Collection and disposal of metal sludges;
- e. If it is determined that the existing structure is inadequate to prevent upstream migration of non-native fish to reaches of French Creek inhabited by native aquatic species, including the Colorado River cutthroat trout population upstream of the Wellington Oro Site in French Creek, construction and long term maintenance of a drop structure or other appropriate physical barrier in French Creek that prevents such migration; and

- f. Operation of the water treatment system for twenty-four (24) hours a day, seven (7) days a week, until water discharging from seep FG-6C no longer presents or will present an unacceptable risk to the environment as determined by EPA and CDPHE.

46. Designation of Contractor, Project Coordinators, and On-Scene Coordinator.

- a. All work performed by Buyers under this Agreement shall be under the direction and supervision of qualified personnel. Buyers shall retain one or more contractors to perform the Wellington Oro Work and shall notify EPA and CDPHE of the name(s) and qualifications of such contractor(s) within twenty (20) days prior to commencement of the Wellington Oro Work. The Buyers shall also notify EPA and CDPHE of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Wellington Oro Work at least ten (10) days prior to commencement of such work. Any proposed contractor or subcontractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-5)" (EPA/240/B0-1/002), or equivalent documentation as required by EPA. EPA in consultation with CDPHE retains the right to

disapprove of any or all of the contractors and/or subcontractors retained by Buyers. If EPA disapproves of a selected contractor, Buyers shall retain a different contractor and shall notify EPA and CDPHE of that contractor's name and qualifications within thirty (30) days of EPA's disapproval.

- b. The Buyers designate Gary Roberts, Water Systems Manager, Town of Breckenridge, as the Project Coordinator who shall be responsible for administration of all actions by the Buyers required by this Agreement. To the greatest extent possible, the Project Coordinator shall be present on the Wellington Oro Site or readily available during the Wellington Oro Work.
- c. EPA has designated Victor Ketellapper of the Office of Ecosystems Protection and Remediation, Region 8, as its On-Scene Coordinator ("OSC") and CDPHE has designated Kevin Mackey of the Hazardous Materials and Waste Management Division, Remedial Program Section, as CDPHE's Project Officer. Except as otherwise provided in this Agreement or at the direction of the OSC, Buyers shall direct all submissions required by this Agreement with respect to the Wellington Oro Site to the OSC at 999-18th Street, Suite 300, Mail Code 8EPR SR, Denver, Colorado 80202 and to the CDPHE Project Officer, 4200 Cherry Creek Drive South, Denver, Colorado 80246-1530.

- d. EPA, CDPHE, and Buyers shall have the right, subject to Paragraph 46(a), to change their respective designated OSC or Project Officer. Buyers shall notify EPA and CDPHE ten (10) days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

47. Compliance with Other Laws. Buyers shall perform all actions at the Wellington Oro Site required pursuant to this Agreement in accordance with all applicable local, State of Colorado, 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 Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation and after providing CDPHE an opportunity for meaningful involvement, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws identified as of the date of the Action Memorandum in the Action Memorandum.

48. Authority of On-Scene Coordinator. The OSC shall be responsible for overseeing Buyers' implementation of the Action Memorandum. The OSC shall have the authority vested in an OSC by the NCP. Absence of the OSC from the Wellington Oro Site shall not be cause for stoppage of work unless specifically directed by the OSC.

49. Force Majeure.

- a. Buyers agree to perform the Wellington Oro Work within the time limits established under the Statement of Work unless the performance is

delayed by a *force majeure*. For purposes of this Agreement, a *force majeure* is defined as any event arising from causes beyond the control of Buyers, or of any entity controlled by Buyers, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Agreement despite Buyers' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Wellington Oro Work, or increased cost of performance.

- b. If any event occurs or has occurred that may delay the performance of any obligation under this Agreement, whether or not caused by a *force majeure* event, Buyers shall notify EPA and CDPHE orally within five (5) days of when Buyers first knew that the event might cause a delay. Within ten (10) days thereafter, Buyers shall provide to EPA and CDPHE 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; Buyers' 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 Buyers, such event may cause or contribute to an endangerment to public health or welfare or the environment. Failure to comply with the above requirements shall preclude Buyers 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.

- c. If EPA in consultation with CDPHE agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Agreement that are affected by the *force majeure* event will be extended 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 in consultation with CDPHE does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Buyers in writing of its decision. If EPA in consultation with CDPHE agrees that the delay is attributable to a *force majeure* event, EPA will notify the Buyers in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

50. Stipulated Penalties.

- a. Buyers shall be liable to EPA for stipulated penalties for failure to perform the Wellington Oro Work in accordance with this Agreement as specified in Paragraph 50(b), unless excused under Paragraph 49 (*Force Majeure*). "Compliance" by Buyers for purposes of this Paragraph shall include completion of the activities specified in Paragraph 50(b) below under the SOW, or any work plan or other plan approved under the SOW identified

below in accordance with all applicable requirements of law, the SOW, and any plans or other documents approved by EPA or CDPHE pursuant to this Agreement and within the specified time schedules established by and approved under this Agreement. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 50(b):

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$25	1st through 14th day
\$50	15th through 30th day
\$100	31st day and beyond

b. Compliance Milestones:

Submission of the draft work plan
 Submission of preliminary design
 Submission of final design
 Submission of operation and maintenance plan
 Submission of final report

c. Buyers shall also be liable to EPA for stipulated penalties for discharges from the water treatment plant to be constructed as part of the Wellington Oro Work in accordance with the SOW that fail to meet thirty-day average effluent limitations for cadmium and zinc as set forth in the SOW, unless excused under Paragraph 49 (*Force Majeure*). The following stipulated penalties shall accrue per violation per day for discharges that exceed the effluent limitations:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$100	1st through 14th day
\$ 200	15th through 30th day
\$ 500	31st day and beyond

- d. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity.
- e. All penalties accruing under Paragraph 50(a) or (c) shall be due and payable to EPA within 30 days of Buyers' receipt from EPA of a demand for payment of the penalties, unless Buyers invoke the dispute resolution procedures under Paragraph 58. All payments to EPA shall be paid 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 08-5F. Buyers shall send the check(s) to:

Regular Mail: Mellon Bank
EPA Region 8
Attn: Superfund Accounting
Lockbox 360859
Pittsburgh, Pennsylvania 15251-6859

Express Mail: Mellon Bank
EPA 360859
Mellon Client Service Center, Room 154-670
500 Ross Street
Pittsburgh, Pennsylvania 15262-0001

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

ABA=021030004
TREAS NYC/CTR/
BNF=/AC-68011008

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

- f. At the time of payment, Buyers shall send notice that the payment has been made to:

John Works
EPA Enforcement Specialist
U.S. EPA Region 8
Suite 300 (8ENF-T)
999-18th Street
Denver, CO 80202-2466

and

Kevin Mackey
State Project Officer
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Remedial Programs Section
4200 Cherry Creek Drive South
Denver, Colorado 80246-1530.

- g. The payment of penalties shall not alter in any way Buyers' obligation to complete performance of the work required under this Agreement.
- h. Penalties shall continue to accrue during any dispute resolution period but need not be paid until thirty (30) days after the dispute is resolved as provided in Paragraph 58 (Dispute Resolution).
- i. If Buyers fail to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Buyers shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 50(e).
- j. Nothing in this Consent Decree shall be construed as prohibiting, altering, or in any way limiting the ability of the United States or the State to seek any other remedies or sanctions available by virtue of Sellers' violation of

this Decree. Notwithstanding any other provision of this Paragraph, the United States may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Agreement.

51. Payment of Future Response Costs.

- a. Within thirty (30) days of the Effective Date, Buyers and Sellers shall each pay to EPA \$100,000 for a total of \$200,000 in payment and full satisfaction of Future Response Costs, to be deposited by EPA in the Wellington Oro Site Future Response Costs Special Account ("Special Account"), within the EPA Hazardous Substance Superfund. These funds will be retained and used by EPA to conduct or finance future response actions at or in connection with the Wellington Oro Site. Payment shall be made by a certified or cashier's check made payable to "EPA Hazardous Substance Superfund," referencing the Wellington Oro Site Future Response Costs Special Account, the name and address of the Party making payment and EPA Site/Spill ID number 08-5F, and sent to:

Regular Mail: Mellon Bank
EPA Region 8
Attn: Superfund Accounting
Lockbox 360859
Pittsburgh, Pennsylvania 15251-6859

Express Mail: Mellon Bank
EPA 360859
Mellon Client Service Center, Room 154-670
500 Ross Street
Pittsburgh, Pennsylvania 15262-0001

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

ABA=021030004
TREAS NYC/CTR/
BNF=/AC-68011008

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

- b. At the time of payment, Buyers and Sellers shall each send notice that their payment has been made to:

John Works
EPA Enforcement Specialist
U.S. EPA Region 8
Suite 300 (8ENF-T)
999-18th Street
Denver, CO 80202-2466

And

Kevin Mackey
State Project Officer
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Remedial Programs Section
4200 Cherry Creek Drive South
Denver, Colorado 80246-1530.

52. Indemnification.

- a. Except to the extent prohibited by the authority conferred by the State Constitution, Buyers shall indemnify, save and hold harmless the United States, the State, their elected 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 Buyers, their elected officials, directors, employees, agents,

contractors, or subcontractors, in carrying out actions pursuant to the Agreement. In addition, Buyers agree to pay the United States and the State all costs incurred by the United States or the State, 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 or the State based on negligent or other wrongful acts or omissions of Buyers, their officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Agreement. Neither the United States nor the State shall be held out as a party to any contract entered into by or on behalf of Buyers in carrying out activities pursuant to this Agreement. Neither Buyers nor any such contractor shall be considered an agent of the United States or the State. The United States and the State shall give Buyers notice of any claim for which the United States or the State plans to seek indemnification pursuant to this Paragraph and shall consult with Buyers prior to settling such claim.

- b. Buyers waive all claims against the United States and the State for damages or reimbursement or for set-off of any payments made or to be made to the United State or the State arising from or on account of any contract, agreement, or arrangement between any one or more of Buyers and any person for performance of the Wellington Oro Work on or relating to the Property, including, but not limited to, claims on account of

construction delays. In addition, except to the extent prohibited by the authority conferred by the State Constitution, Buyers shall indemnify and hold harmless the United States and the State 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 Buyers and any person for performance of the Wellington Oro Work on or relating to the Wellington Oro Site, including, but not limited to, claims on account of construction delays.

53. Insurance. At least seven (7) days prior to commencing any work on the Wellington Oro Site under this Agreement, Buyers shall secure, and shall maintain for the duration of the Wellington Oro Work, comprehensive general liability insurance and automobile insurance with limits of one (1) million dollars, combined single limit or provide adequate assurances of comparable self-insurance. Within the same time period, Buyers shall provide EPA and CDPHE with certificates of such insurance and a copy of each insurance policy or documentation of self-insurance. In addition, for the duration of the performance of the Wellington Oro Work, Buyers shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Wellington Oro Work on behalf of Buyers in furtherance of this Agreement. If Buyers demonstrate by evidence satisfactory to EPA after consultation with CDPHE 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 Buyers need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

54. Notice of Completion of Wellington Oro Work. When EPA, in consultation with CDPHE, determines, after review of the Final Report as set forth in the Statement of Work, that the Wellington Oro Work has been fully performed in accordance with this Agreement with the exception of any continuing obligations required by this Agreement, including post-removal site controls, operation and maintenance, sampling and monitoring, record retention, etc., EPA will provide written notice to Buyers. If EPA, in consultation with CDPHE, determines that any such work has not been completed in accordance with this Agreement, EPA will notify Buyers and provide a list of the deficiencies. Buyers shall correct the deficiencies and submit a modified Final Report in accordance with the EPA notice.

VI. WORK TO BE PERFORMED AT THE JESSIE MINE AND MILL SITE AND THE IXL/ROYAL TIGER SITE

55. To address contamination at the Jessie Mine and Mill Site, the Buyers shall perform all actions necessary to implement the approved Voluntary Cleanup Plan attached hereto in Appendix 5 for this site.

56. To address contamination at the IXL/Royal Tiger Site, the Buyers shall perform all actions necessary to implement the approved Voluntary Cleanup Plan attached hereto in Appendix 5 for this site.

57. Before Buyers commence a continuous program of physical on-site work pursuant to the approved VCUPs, they shall provide public notice of the approved VCUPs in a local news publication, a copy of which notice shall be provided to EPA. Buyers shall timely provide EPA with a copy of all substantive correspondence with CDPHE related to the VCUPs, including

without limitation, any Certificate of Completion and any Application for No Further Action after completion of the VCUPs. Before submitting any Certificate of Completion to CDPHE, Buyers shall provide EPA with a draft of the Certificate and an opportunity to comment for a period of fifteen (15) days from receipt.

VII. DISPUTE RESOLUTION

58. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Agreement. The Parties to any dispute shall attempt to resolve any disagreements concerning this Consent Decree expeditiously and informally. If a Settling Party objects to any EPA or CDPHE action taken pursuant to this Consent Decree, the objecting Settling Party shall notify as appropriate EPA or CDPHE in writing of its objection within ten (10) days of such action, unless the objection has been resolved informally. EPA or CDPHE, as appropriate, and the objecting Settling Party shall have thirty (30) days from receipt of the 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 or CDPHE, as appropriate. Subject to the provisions of Section XXVIII (Modification), any agreement reached pursuant to this Section shall be in writing and shall, upon signature of the appropriate Parties, be incorporated into and become an enforceable part of this Agreement. If EPA and an objecting Settling Party are unable to reach an agreement within the Negotiation Period, the Regional Administrator for EPA Region 8 will issue a written decision on the dispute. EPA's decision shall be incorporated into and become an enforceable part of this Agreement unless within ten (10) days of receipt of the decision, the objecting Settling Party files with the Court and

serves on the appropriate Parties a motion for judicial review of the decision. If CDPHE and an objecting Settling Party are unable to reach an agreement within the Negotiation Period, the Division Director for the CDPHE Hazardous Materials and Waste Management Division will issue a written decision on the dispute. CDPHE's decision shall be incorporated into and become an enforceable part of this Agreement unless within ten (10) days of receipt of the decision, the objecting Settling Party files with the Court and serves on the appropriate Parties a motion for judicial review of the decision. The obligations of the objecting Settling Party under this 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, the objecting Settling Party shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached, or with EPA or the State's decision, or with the Court's decision, whichever occurs.

VIII. ACCESS/NOTICE TO SUCCESSORS IN INTEREST

59. Commencing upon the date that they acquire title to any portion of the Property, Buyers agree to provide to EPA and CDPHE, their authorized officers, employees, and representatives, an irrevocable right of access at all reasonable times to the Property and to any other property to which access is required for the implementation of response actions at the Property, to the extent access to such other property is controlled by the Buyers, for the purposes of overseeing response actions at the Property under federal and state law. EPA and CDPHE agree to provide reasonable notice to the Buyers of the timing of any visits to the Property. Notwithstanding any provision of this Agreement, EPA and CDPHE retain all of their access authorities and rights, including enforcement authorities related thereto, under CERCLA, the

Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901 *et seq.*, and any other applicable statute or regulation, including any amendments thereto.

IX. FINANCIAL ASSURANCE

60. Not more than thirty (30) days after the date that Buyers enter into a contract or contracts for the performance of all or a portion of the Wellington Oro Work, Buyers and/or their contractors shall establish and maintain financial security in the amount of \$2,146,000 in the form of a surety or performance bond guaranteeing performance of all or a portion of the Wellington Oro Work covered by such contract and required to be performed by Buyers under this Agreement.

61. Not more than thirty (30) days after the Effective Date, Buyers shall deposit \$100,000 in an interest-bearing escrow account to be established at a Colorado bank or title company that will be directed under a separate escrow agreement acceptable to EPA. The escrow agreement shall provide that in the event that water quality standards in Segment 2a of the Blue River are not achieved on a sustainable basis within five (5) years after the water treatment plant at the Wellington Oro Site is constructed and becomes operational, EPA, in consultation with the State, may withdraw all funds in the escrow account including interest and deposit such funds in the Wellington Oro Site Special Account to conduct or finance additional response actions at the Wellington Oro Site. The Escrow Agreement shall further provide that in the event that water quality standards in Segment 2a of the Blue River are achieved on a sustainable basis, the funds in the escrow account, including interest, shall be disbursed to the Buyers.

62. Buyers may change the form of financial assurance provided under this Section at any time, upon notice to and approval by EPA, provided that the new form of assurance meets the requirements of this Section.

X. OPEN SPACE AND LAND USE PLANNING

63. Participation in Development of Open Space Management Plan.

- a. The Property possesses natural resources and certain environmentally sensitive areas, wildlife habitat, and scenic and recreational lands ("Conservation Values"). Future planning for the Property by the Buyers relating to open space management, natural resource restoration and Conservation Values shall include participants from DOI and the Colorado Department of Natural Resources in accordance with the Memorandum of Understanding (MOU) attached hereto as Appendix 6.
- b. Not more than thirty (30) days after the Effective Date of this Agreement, Buyers shall pay to DOI \$50,000 and Sellers shall pay \$150,000 to DOI to fund its activities under the MOU. Payments shall be made by FedWire Electronic Transfer (EFT) to the DOI Restoration Fund ALC at the Federal Reserve Bank, New York, NY, referencing ABA No. _____, DOJ Case No. _____, and the Wellington Oro/French Gulch Site, Breckenridge, Colorado. Payment shall be made in accordance with additional specific instructions provided to the Settling Parties by the NRDAR Fund Accountant, DOI, telephone number (303) 969-7170

following lodging of this Consent Decree. Any payments received by DOI after 4:00 p.m. Eastern time will be credited on the next business day.

- c. At the time of payment to DOI, Settling Parties shall send notice that such payment has been made to DOI and DOJ in accordance with

Section XXIII (Notices and Submissions) and to:

Department of Interior
Natural Resource Damage Assessment
and Restoration Program
Attn: Restoration Manager
1849 C Street, NW
Mailstop 4449
Washington, D.C. 20240

And:

Kevin Mackey
State Project Officer
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Remedial Programs Section
4200 Cherry Creek Drive South
Denver, Colorado 80246-1530.

The notice shall reference DOJ Case No. _____, the Wellington Oro/French Gulch Site and the name of the Party making the payment.

64. Buyers agree that they shall maintain, use, or otherwise hold the Property (except for the Easement Property, which is addressed below) in "Public Open Space" in perpetuity. For the purposes of this Agreement, "Public Open Space" shall mean land that is left in predominantly an undeveloped state and which provides for one or more of the following community benefits as determined by Buyers: (i) extensions to existing undeveloped open space lands; (ii) buffers to developed areas; (iii) view corridors; (iv) access to trails, trailheads, water

bodies or National Forest area; (v) passive recreation uses; (vi) active recreation uses, including but not limited to, recreational trails, consistent with the open space character of the Property under the Town of Breckenridge's and Summit County's Open Space Plans and determined in accordance with the Town of Breckenridge's and Summit County's public processes; (vii) unique ecological habitats; and (viii) historical sites. The term "Public Open Space" shall include those uses provided from time to time: (i) in the "Town of Breckenridge Open Space Plan" as adopted and amended from time to time by the Town Council of the Town of Breckenridge pursuant to Section 3-5-2 of the Breckenridge Town Code or any successor ordinance; and (ii) in the "Summit County Open Space Protection Plan," or its equivalent, as adopted and amended from time to time by the Board of County Commissioners of Summit County. The term "Public Open Space" shall exclude the following: golf course (this exclusion does not apply to Frisbee golf), swimming pool, or a substantial recreation center building (*i.e.*, over 10,000 square feet). No recreation center building may be constructed or maintained on the Easement Property. Buyers agree that they shall maintain and manage the Easement Property consistent with the terms of the conservation easement to be held by the Continental Divide Land Trust. Such conservation easement shall be in form and substance substantially similar to that attached hereto as Appendix 9.

65. In order to assure that the Property (except for the Easement Property, which is addressed below) will be maintained, used, or otherwise held as Public Open Space in perpetuity, the Buyers shall execute and, within thirty (30) days of the Effective Date, record in the real property records of the Clerk and Recorder of Summit County, Colorado, the Restrictive Covenant, a copy of which is attached hereto as Appendix 7. Buyers shall also, within sixty (60)

days of the Effective Date, execute and grant to CDPHE, environmental covenants as provided in Sections 25-15-317 to 327 C.R.S. for the Wellington Oro, IXL/Royal Tiger and Jessie Mine and Mill Sites, in form and substance substantially identical to those attached hereto in Appendix 8. Buyers shall also within 90 days of the Effective Date, execute and record a conservation easement, in form and substance substantially similar to that attached hereto as Appendix 9, on the Easement Property. Buyers shall also provide to DOI, EPA and the State a copy of the conservation easement granted to the Continental Divide Land Trust for the Cobb and Ebert MS #340 within thirty (30) days after such conservation easement has been executed and recorded.

XI. BUYERS' CERTIFICATION

66. By entering into this Agreement, each Buyer certifies that to the best of its knowledge and belief it has fully and accurately disclosed to EPA and CDPHE all information known to such Buyer which relates in any way to any Existing Contamination or any past or potential future release of hazardous substances or pollutants or contaminants at or from the Property and to its qualification for this Agreement. Each Buyer also certifies that to the best of its knowledge and belief it has not caused or contributed to a release or threat of release of hazardous substances or pollutants or contaminants at the Property. Subject to the dispute resolution provisions of Paragraph 58, if the United States or the State determines that information provided by Buyers is not materially accurate and complete, the Agreement, within the sole discretion of the United States or the State, shall be null and void as to Buyers and the United States and the State reserve all rights they may have.

XII. COVENANTS NOT TO SUE TO BUYERS

67. Covenants Not to Sue to Buyers.

- a. Subject to the Reservation of Rights in Section XIII of this Agreement, and upon completion of the work specified in Section V (Work to be Performed at Wellington Oro Site), Section VI (Work to be Performed at the Jessie Mine and Mill Site and IXL/Royal Tiger Site), and Section X (Open Space and Land Use Planning), the United States and the State covenant not to sue or take any other civil, judicial or administrative action against Buyers, and their elected officials, representatives or employees to the extent such officials, representatives, or employees' liability arises solely from their status as officials, representatives, or employees, for any and all civil liability for injunctive relief, reimbursement of response costs, and/or contribution pursuant to Sections 106, 107, and/or 113 of CERCLA, 42 U.S.C. §§ 9606, 9607 and/or 9613, with respect to the Existing Contamination associated with the Property. Subject to the Reservation of Rights in Section XIII of this Agreement, and upon completion of the work specified in Section V (Work to be Performed at Wellington Oro Site), Section VI (Work to be Performed at the Jessie Mine and Mill Site and IXL/ Royal Tiger Site), and Section X (Open Space and Land Use Planning), the United States further covenants not to sue or take any other civil, judicial or administrative action against Buyers, their elected officials,

representatives, or employees, for any and all civil liability for injunctive relief and/or civil penalties pursuant to Sections 309(a), (b), (d), and/or (g), and/or 311 of the Federal Water Pollution Control Act, 33 U.S.C. §§ 1319 (a), (b), (d), and/or (g), and/or 1321, with respect to Existing Contamination discharging at or from the Wellington Oro Site, the IXL/Royal Tiger Site and the Jessie Mine and Mill Site. Subject to the Reservation of Rights in Section XIII of this Agreement, and upon completion of the work specified in Section V (Work to be Performed at Wellington Oro Site), Section VI (Work to be Performed at the Jessie Mine and Mill Site and IXL/Royal Tiger Site), and Section X (Open Space and Land Use Planning), the State further covenants not to sue or take any other civil, judicial or administrative action against Buyers, their elected officials, representatives, or employees, for any and all civil liability for injunctive relief and/or penalties pursuant to the Colorado Water Quality Control Act, C.R.S. §§ 25-8-101 *et seq.*, with respect to Existing Contamination discharging at or from the Property.

- b. Covenants Not to Sue for Natural Resource Damages to Buyers. Except as specifically provided in Section XIII (Reservations of Rights as to Buyers), the United States and the State each covenant not to sue or to take any other civil, judicial, or administrative action against Buyers, their elected officials, representatives or employees to the extent such officials, representatives, or employees' liability arises solely from their status as

officials, representatives, or employees for recovery of natural resource damages under Section 107 of CERCLA, 42 U.S.C. § 9607, relating to releases of hazardous substances with respect to the Existing Contamination associated with the Property. This covenant not to sue shall be effective upon completion of the work specified in Section V (Work to be Performed at the Wellington Oro Site), Section VI (Work to be Performed at the Jessie Mine and Mill Site and IXL/Royal Tiger Site) and Section X (Open Space and Land Use Planning).

XIII. RESERVATION OF RIGHTS AS TO BUYERS

68. The United States' and the State's covenant not to sue set forth in Section XII above do not pertain to any matters other than those expressly specified in Section XII. The United States and the State each reserve and this Agreement is without prejudice to all rights against Buyers with respect to all other matters, including but not limited to, the following:

- a. Claims based on a failure by Buyers to meet a requirement of this Agreement, including but not limited to Section IV (Due Care/Cooperation), Section V (Work to be Performed at the Wellington Oro Site), Section VI (Work to be Performed at the Jessie Mine and Mill Site and IXL/Royal Tiger Site), Section VIII (Access/Notice to Successors in Interest), and Section X (Open Space and Land Use Planning).
- b. Any liability resulting from past or future releases of hazardous substances or pollutants or contaminants, at or from the Property caused or contributed to by Buyers, their successors, assignees, lessees or

sublessees, except as a result of Buyers performance of response actions in accordance with this Agreement, the SOW and/or the VCUPs;

- c. Any liability resulting from exacerbation by Buyers, their successors, assignees, lessees or sublessees, of Existing Contamination except as a result of Buyers performance of response actions in accordance with this Agreement, the SOW and/or the VCUPs;
- d. Any liability resulting from the release or threat of release of hazardous substances or pollutants or contaminants at the Property after the effective date of this Agreement, not within the definition of Existing Contamination;
- e. Criminal liability;
- f. Liability for violations of storm water requirements under the Colorado Water Quality Control Act or the Federal Water Pollution Control Act to the extent any such violations arise from activities conducted by Buyers after the effective date of this Consent Decree resulting in discharges to which storm water requirements would be applicable. Nothing in this subparagraph 68(f) shall be construed as a waiver of Section 121(e) of CERCLA, 42 U.S.C. § 9621(e); and
- g. Liability for violations of local, State or federal law or regulations.

69. With respect to any claim or cause of action asserted by the United States or the State, the Buyers shall bear the burden of proving that the claim or cause of action, or any part thereof, is attributable solely to Existing Contamination.

70. Nothing in this Agreement is intended as a release or covenant not to sue for any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which the United States or the State may have against any person, firm, corporation or other entity not a party to this Agreement.

71. Nothing in this Agreement is intended to limit the right of EPA or CDPHE to undertake future response or cleanup actions at the Property or to seek to compel parties other than the Settling Parties to perform or pay for response or cleanup actions at the Property. Nothing in this Agreement shall in any way restrict or limit the nature or scope of response actions which may be taken or be required by EPA or CDPHE in exercising their authority under state or federal law. Buyers acknowledge that they are acquiring Property where response actions may be required.

XIV. BUYERS' TRANSFER OF COVENANT

72. Subject to the provisions in Section VIII (Access/Notice to Successors in Interest) and Section X (Open Space and Land Use Planning), all of the rights, benefits and obligations conferred upon Buyers under this Agreement may be assigned or transferred to any person with the prior written consent of EPA and CDPHE in their sole discretion, provided, however, that in the event that Buyers assign or transfer an interest in all or any portion of the Property to a quasi-governmental entity established to accomplish the objectives of this Consent Decree, Buyers shall promptly notify EPA and CDPHE of such transfer but need not obtain prior written approval.

73. Buyers agree to pay the reasonable costs incurred by EPA and CDPHE to review any subsequent requests for consent to assign or transfer the benefits and obligations conferred by this Agreement.

74. In the event of an assignment or transfer of any portion of the Property or an assignment or transfer of an interest in a portion of the Property, the assignor or transferor shall continue to be bound by all the terms and conditions, and subject to all the benefits, of this Agreement except as EPA and CDPHE and the assignor or transferor agree otherwise and modify this Agreement, in writing, accordingly. Moreover, prior to any assignment or transfer of any portion of the Property, the assignee or transferee must consent in writing to be bound by the terms of this Agreement including but not limited to the certification requirement in Section XI of this Agreement and the land use provisions set forth in Section X of this Agreement in order for the Covenant Not to Sue in Section XII to be available to that party. The Covenant Not To Sue in Section XII shall not be effective with respect to any assignees or transferees who fail to provide such written consent to EPA and CDPHE. Further, if Buyers make any assignments or transfers without complying with the terms and conditions of this Section, Buyers shall pay into the State's natural resource damage fund an amount equal to the sales price received by Buyers on account of such transfer or assignment. The State in its discretion may waive all or a portion of any such payment required to be made by Buyers. The provisions of this Paragraph 74 do not apply to an assignment or transfer to a Settling Party.

XV. BUYERS' COVENANTS NOT TO SUE

75. In consideration of the Covenant Not To Sue in Section XII of this Agreement, the Buyers hereby covenant not to sue and not to assert any claims or causes of action against the

United States, the State, their authorized officers, employees, or representatives, and the Sellers and their directors, officers and employees with respect to the Property or this Agreement, including but not limited to:

- a. any direct or indirect claims for reimbursement from the Hazardous Substance Superfund established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507, through CERCLA Sections 106(b)(2), 111, 112, or 113, 42 U.S.C. §§ 9606(b)(2), 9611, 9612, or 9613, or any other provision of law;
- b. any claim against the United States, the State, or the Sellers, including any department, agency or instrumentality of the United States or the State or Sellers under CERCLA Sections 107 or 113, 42 U.S.C. §§ 9607 or 9613, related to the Property; or
- c. any claims arising out of response activities at or in connection with the Property, including claims based on EPA's or CDPHE's oversight of such activities or approval of plans for such activities, or claims 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,

unless the United States or the State first asserts a claim against the Buyers relating to the Property and the claim arises out of the same transaction or occurrence.

Nothing in this Agreement shall preclude Buyers from requesting state or federal grant funding to undertake any work required under this Agreement or any work on or related to the

Property. Nothing in this Agreement is intended to waive or otherwise limit any defenses or counterclaims that Buyers may have in the event the United States or the State brings an action against Buyers pursuant to Section XIII.

76. The Buyers reserve, and this Agreement is without prejudice to, actions against the United States or the State based on negligent actions taken directly by the United States or the State, not including oversight or approval of the Buyers' plans or activities, that are brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA. Nothing herein shall be deemed to constitute 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), nor a waiver of the State's governmental immunity provided in C.R.S. §§ 24-10-101 to 120.

XVI. PAYMENT OF PAST RESPONSE COSTS BY SELLERS

77. Not more than thirty (30) days after the Effective Date of this Consent Decree, Sellers shall pay to EPA from the proceeds from the sale of the Property \$718,432 for reimbursement and full satisfaction of Past Response Costs. Upon payment of this amount and any other amounts required of Sellers pursuant to this Agreement, Sellers shall liquidate and distribute all remaining assets to shareholders and members. EPA acknowledges that Sellers' obligations under the Administrative Orders have been satisfied and the Administrative Orders have been completed. All payments to EPA shall be made 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 08-5F or by FedWire Electronic Funds Transfer. Sellers shall send the check(s) to:

Regular Mail: Mellon Bank
EPA Region 8
Attn: Superfund Accounting
Lockbox 360859
Pittsburgh, Pennsylvania 15251-6859

Express Mail: Mellon Bank
EPA 360859
Mellon Client Service Center, Room 154-670
500 Ross Street
Pittsburgh, Pennsylvania 15262-0001

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

ABA=021030004
TREAS NYC/CTR/
BNF=/AC-68011008

Wire transfers must be sent to the Federal Reserve Bank in New York. Any payments received after 4:00 p.m. Eastern Time will be credited on the next business day.

78. At the time of payment, Sellers shall send notice that the payment has been made to:

John Works
EPA Enforcement Specialist
U.S. EPA Region 8
Suite 300 (8ENF-T)
999-18th Street
Denver, CO 80202-2466

And:

Kevin Mackey
State Project Officer
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Remedial Programs Section
4200 Cherry Creek Drive South
Denver, Colorado 80246-1530

79. If Sellers fail to make any payment required by Paragraph 77 by the required due date, Interest shall accrue on the unpaid balance through the date of payment.

80. If any amounts due to EPA under Paragraph 77 are not paid by the required date, Sellers shall be in violation of this Agreement and shall pay to EPA, as a stipulated penalty, in addition to the Interest required by Paragraph 78, \$100 per day that such payment is late. Stipulated penalties are due and payable not more than thirty (30) days after the date of demand for payment of the penalties by EPA. All payments to EPA under this Paragraph shall be identified as "stipulated penalties" and shall be made in the manner set forth in Paragraphs 77 and 78.

81. Penalties shall accrue as provided above regardless of whether EPA has notified Sellers of the violation or made a demand for payment, but need only be paid upon demand. All penalties shall begin to accrue on the day after payment is due and shall continue to accrue through the date of payment. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Agreement.

82. In addition to the Interest and Stipulated Penalty payments required by this Section and any other remedies or sanctions available to the United States by virtue of Sellers' failure to comply with the requirements of this Agreement, any Seller who fails or refuses to comply with any term or condition of this Agreement shall be subject to enforcement action pursuant to Section 122(h)(3) of CERCLA, 42 U.S.C. § 9622(h)(3). If the United States brings an action to enforce the Past Response Costs payment provisions of this Agreement, Sellers shall reimburse the United States for all costs of such action, including but not limited to costs of attorney time.

83. The obligations of Sellers to pay amounts owed to EPA under this Agreement are joint and several. In the event of the failure of any one or more Seller to make the payments required under this Agreement, the remaining Sellers shall be responsible for such payments.

84. Notwithstanding any other provision of this Section, the United States may, in its unreviewable discretion, waive payment of any portion of the stipulated penalties that have accrued pursuant to this Agreement. Sellers' payment of stipulated penalties shall not excuse Sellers from performance of any other requirements of this Agreement.

XVII. COVENANTS NOT TO SUE TO SELLERS

85. **Covenants Not to Sue to Sellers.**

- a. Except as specifically provided in Section XVIII (Reservations of Rights as to Sellers), the United States and the State covenant not to sue or to take any other civil, judicial, or administrative action against Sellers and/or their directors, officers or employees to the extent such directors, officers or employees' liability arises solely from their status as directors, officers, or employees pursuant to Sections 106, 107(a), and 113 of CERCLA, 42 U.S.C. §§ 9606, 9607(a) and 9613 with regard to the Property and the Existing Contamination. With respect to present and future liability, this covenant shall take effect upon receipt by EPA of all amounts required to be paid by Sellers by Section XVI (Payment of Past Response Costs By Sellers) and Paragraph 51 (Payment of Future Response Costs) and receipt by DOI of all amounts required to be paid by Sellers by Section X (Open Space and Land Use Planning). Except as specifically provided in

Section XVIII (Reservations of Rights as to Sellers), the United States and the State further covenant not to sue or take any other civil, judicial or administrative action against Sellers and/or their directors, officers or employees to the extent such directors, officers, or employees' liability arises solely from their status as officers, directors, or employees, for any and all civil liability for injunctive relief and/or civil penalties pursuant to Sections 309(a), (b), (d), and/or (g), and/or 311 of the Federal Water Pollution Control Act, 33 U.S.C. §§ 1319 (a), (b), (d), and/or (g), and/or 1321, and/or the Colorado Water Quality Control Act, C.R.S. §§ 25-8-101 *et seq.*, with respect to Existing Contamination discharging at or from the Wellington Oro Site, the IXL/ Royal Tiger Site and the Jessie Mine and Mill Site. This covenant not to sue is conditioned upon the satisfactory performance by Sellers of their obligations under this Agreement. This covenant not to sue extends only to Sellers and their directors, officers and employees and does not extend to any other person.

b. Covenants Not to Sue for Natural Resource Damages to Sellers.

Except as specifically provided in Section XVIII (Reservations of Rights as to Sellers), the United States and the State each covenant not to sue or to take any other civil, judicial, or administrative action against Sellers and/or their directors, officers or employees to the extent such officers' directors', and employees' liability arises solely from their status as officers, directors, or employees for recovery of natural resource damages

under Section 107 of CERCLA, 42 U.S.C. § 9607 relating to releases of hazardous substances with respect to the Existing Contamination associated with the Property. This covenant not to sue shall be effective upon receipt by EPA of all amounts required to be paid by Sellers by Section XVI (Payment of Past Response Costs By Sellers) and Paragraph 51 (Payment of Future Response Costs) and receipt by DOI of all amounts required to be paid by Sellers by Section X (Open Space and Land Use Planning) and the recordation of the conservation easement on the Easement Property pursuant to Paragraph 65.

XVIII. RESERVATIONS OF RIGHTS AS TO SELLERS

86. **Reservations of Rights.**

- a. The United States and the State each reserve, and this Agreement is without prejudice to, all rights against Sellers with respect to all matters not expressly included within the Covenant Not to Sue in Section XVII. Notwithstanding any other provision of this Agreement, the United States and the State each reserve all rights against Sellers with respect to:
 - (i) liability for failure of Sellers to meet a requirement of this Agreement;
 - (ii) criminal liability;
 - (iii) liability, based upon Sellers' ownership or operation of the Property, or upon Sellers' transportation, treatment, storage, or disposal, or the arrangement for the transportation, treatment,

storage, or disposal, of a hazardous substance or a solid waste at or in connection with the Property, after the Effective Date of this Agreement; and

- (iv) liability arising from the past, present, or future disposal, release or threat of release of a hazardous substance or pollutant, or contaminant outside of the Property and outside of Existing Contamination.

b. Natural Resource Damages Reservations as to Sellers.

Notwithstanding any other provision of this Agreement, the United States and the State each reserve the right to institute proceedings against the Sellers seeking recovery of natural resource damages arising from:

- (i) injury to, destruction of, or loss of natural resources and the cost of assessing such injury, destruction, or loss that results from a release of any kind of hazardous substance not identified in any site record or administrative record maintained by the United States Fish and Wildlife Service with respect to the Existing Contamination associated with the Property as of the date of lodging of the Consent Decree; or
- (ii) injury to, destruction of, or loss of natural resources and the cost of assessing such injury, destruction or loss that results from unanticipated, extraordinary events, which result in the release of

substantial additional quantities of hazardous substances,

excluding any such event caused by Buyers; or

- (iii) injury to, destruction of, or loss of natural resources and the cost of assessing such injury, destruction or loss of trust resources within a taxonomic family not addressed in the Jessie Mine and Mill Site, Wellington Oro Site, or the IXL/Royal Tiger Site files of the Fish and Wildlife Service of DOI and that is of a type of injury not identified in the Fish and Wildlife files for these Sites.

87. Nothing in this Agreement is intended to be nor shall it be construed as a release, covenant not to sue, or compromise of any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which the United States or the State may have against any person, firm, corporation or other entity not a signatory to this Agreement.

XIX. COVENANTS NOT TO SUE BY SELLERS

88. Sellers covenant not to sue and agree not to assert any claims or causes of action against the United States, the State, or their contractors or employees, and Buyers and their elected officials, representatives, and employees with respect to the Property or this Agreement, including but not limited to:

- a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

- b. any claims arising out of response or cleanup actions at or in connection with the Property, 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; and
- c. any claim against the United States, the State and/or the Buyers pursuant to Sections 107 and/or 113 of CERCLA, 42 U.S.C. §§ 9607 and/or 9613, relating to the Property, unless the United States or the State first asserts a claim against the Sellers relating to the Property and the claim arises out of the same transaction or occurrence.

89. 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), or a waiver of the State's or Buyers' governmental immunity provided in C.R.S. §§ 24-10-101 to 120.

90. Sellers agree not to assert any CERCLA claims or causes of action that they may have for all matters relating to the Property, including for contribution, against any other person. This waiver shall not apply with respect to any defense, claim, or cause of action that a Seller may have against any person if such person asserts a claim or cause of action relating to the Property against such Seller.

XX. PARTIES BOUND/TRANSFER OF COVENANT

91. This Agreement shall apply to and be binding upon the United States and the State, and shall apply to and be binding upon the Settling Parties, their officers, directors, elected officials and employees. Each signatory of a Party to this Agreement represents that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party.

XXI. DISCLAIMER

92. This Agreement in no way constitutes a finding by EPA or CDPHE as to the risks to human health and the environment which may be posed by contamination at the Property nor constitutes any representation by EPA or CDPHE that the Property is fit for any particular purpose.

XXII. DOCUMENT RETENTION

93. The Settling Parties agree to retain and make available to EPA and CDPHE all business and operating records and contracts relating to the Property, Property studies and investigations, and documents relating to operations at the Property, for at least ten (10) years following the Effective Date of this Agreement unless otherwise agreed to in writing by the Parties. At the end of ten (10) years, the Settling Parties shall notify both EPA and CDPHE of the location of such documents and shall provide EPA and CDPHE with an opportunity to copy any documents at the expense of the Party requesting such copies. The Settling Parties may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal or State law. If the Settling Parties assert such a privilege, they shall provide to EPA and CDPHE 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 the Settling Party. However, no documents, reports or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on the grounds that they are privileged.

XXIII. NOTICES AND SUBMISSIONS

94. Whenever, under the terms of this Agreement, notice is required to be given or a document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other parties in writing. Written notice as specified herein shall constitute complete satisfaction of any written requirement of this Agreement with respect to the United States, the State, and the Settling Parties.

As to the United States:

Chief, Environmental Enforcement Section,
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611 Re: DJ # _____

As to EPA:

Andrea Madigan
Enforcement Attorney
US EPA Region 8
999-18th Street, Suite 300 (ENF-L)
Denver, Colorado 80202

And:

Victor Ketellapper
EPA Project Coordinator
US EPA Region 8
999-18th Street, Suite 300 (EPR-SR)
Denver, Colorado 80202

As to DOI:

Dana Jacobson
US Department of Interior
Office of Regional Solicitor
755 Parfet Street, Suite 151
Lakewood, Colorado 80215

As to the State:

Robert J. Eber
Assistant Attorney General
Colorado Department of Law
Natural Resources and Environment Section
Hazardous and Solid Waste Unit
1525 Sherman Street, 5th Floor
Denver, Colorado 80203

And:

Kevin Mackey
State Project Officer
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Remedial Programs Section
4200 Cherry Creek Drive South
Denver, Colorado 80246-1530.

As to the Buyers:

Jeffrey L. Huntley
Summit County Attorney
P.O. Box 68
Breckenridge, Colorado 80424

Todd Robertson
Summit County Open Space and Trails Director
P.O. Box 5660
Frisco, Colorado 80443

Timothy H. Berry
Berry & Murphy, P.C.
P.O. Box 2
Leadville, Colorado 80461

Timothy J. Gagen
Town Manager
Town of Breckenridge
P.O. Box 168
Breckenridge, Colorado 80424

Robert W. Lawrence
Davis Graham & Stubbs LLP
1550 17th Street, Suite 500
Denver, Colorado 80202

As to the Sellers:

The B&B Mines, Inc.
600 Seventeenth Street, Suite 2700 South
Denver, Colorado 80202-5427

With a copy to:

Denis B. Clanahan
Krys Boyle
600 Seventeenth Street, Suite 2700 South
Denver, Colorado 80202-5427

XXIV. EFFECTIVE DATE

95. The Effective Date of this Consent Decree shall be the date upon which it is entered as an Order of the Court.

XXV. TERMINATION

96. If any Party believes that any or all of the obligations under Section VIII (Access/Notice to Successors in Interest) are no longer necessary to ensure compliance with the requirements of the Agreement, that Party may request in writing that the other Parties agree to terminate the provision(s) establishing such obligations; provided, however, that the provision(s)

in question shall continue in force unless and until the Party requesting such termination receives written agreement from the other Parties to terminate such provision(s).

XXVI. CONTRIBUTION PROTECTION

97. With regard to claims for contribution against Settling Parties, the Parties hereto agree that the Settling Parties are entitled to protection from contribution actions or claims as provided by CERCLA Section 113(f)(2), 42 U.S.C. § 9613(f)(2) for matters addressed in this Agreement. The matters addressed in this Agreement are all response actions taken or to be taken, response costs incurred or to be incurred, and natural resource damages suffered or to be suffered by the United States and the State, by the Settling Parties or by any other person with respect to Existing Contamination at the Property.

98. The Settling Parties agree that with respect to any suit or claim for contribution brought by either or both of them for matters related to this Agreement, the appropriate Settling Party will notify the United States and the State in writing no later than sixty (60) days prior to the initiation of such suit or claim.

99. The Settling Parties also agree that with respect to any suit or claim for contribution brought against either or both of them for matters related to this Agreement the appropriate Settling Party will notify in writing the United States and the State within ten (10) days of service of the complaint on them.

XXVII. ANNUAL APPROPRIATION BY TOWN AND COUNTY

100. Notwithstanding anything herein contained to the contrary, the obligations of the Town and the County under the Consent Decree and SOW are expressly subject to an annual appropriation being made by the governing bodies of the Town and the County in amounts

sufficient to allow the Town and the County to perform their respective obligations hereunder. The obligations of the Town and the County hereunder shall not constitute a general obligation indebtedness or multiple year direct or indirect debt or other financial obligation whatsoever within the meaning of the Constitution or laws of the State of Colorado.

XXVIII. ATTACHMENTS

101. The following appendices are attached to and incorporated into this Consent Decree:

- Appendix 1 – Property Map
- Appendix 2 – Legal Description of the Property
- Appendix 3 – Action Memorandum and Amendment
- Appendix 4 – Statement of Work
- Appendix 5 – Voluntary Cleanup Plans for the Jessie Mine and Mill Site and the IXL/Royal Tiger Site
- Appendix 6 – Memorandum of Understanding between DOI, State and Buyers
- Appendix 7 – Restrictive Covenant (Public Open Space)
- Appendix 8 – Environmental Covenant
- Appendix 9 – Form of Conservation Easement for Easement Property

XXIX. MODIFICATION

102. Time schedules specified in the Statement of Work may be modified by agreement of the Buyers and EPA. Time schedules specified in the VCUPs maybe modified by agreement of the Buyers and the State. All such modifications shall be made in writing.

103. Except as otherwise provided in the SOW and VCUPs, no material modifications shall be made without written notification to and written approval of the United States, the State, the Buyers, and the Court. Modifications to the SOW that do not materially alter that document may be made by written agreement between EPA, after providing the State with a reasonable opportunity to review and comment on the proposed modification, and the Buyers.

Modifications to the VCUPs that do not materially alter those documents may be made by written agreement between the State and the Buyers.

104. Nothing in this Consent Decree shall be deemed to alter the Court's power to enforce, supervise or approve modifications to this Consent Decree.

XXX. LODGING AND OPPORTUNITY FOR PUBLIC COMMENT

105. This Consent Decree shall be lodged with the Court before entry for a period of not less than thirty (30) days for public notice and comment. The United States and the State each reserve the right to withdraw or withhold its consent to the Consent Decree if comments disclose facts or considerations which indicate that this Agreement is inappropriate, improper or inadequate.

SO ORDERED THIS ____ DAY OF _____, 2005. .

UNITED STATES DISTRICT JUDGE

IT IS SO AGREED:

FOR THE PLAINTIFF UNITED STATES OF AMERICA:

Assistant Attorney General

Environment and Natural Resources Division, U.S. Department of Justice

IT IS SO AGREED:

FOR THE PLAINTIFF UNITED STATES OF AMERICA:

Assistant Attorney General

Environment and Natural Resources Division, U.S. Department of Justice

By: Kelley A. Johnson Date: 5/16/05
Kelley A. Johnson
Acting Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice

By: W. Benjamin Fisherow Date: _____
W. Benjamin Fisherow
Deputy Section Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 8

By: Carol Rushin Date: 5/12/2005

Carol Rushin
Assistant Regional Administrator
Office of Enforcement, Compliance
and Environmental Justice
U.S. EPA Region 8
999 18th Street, Suite 300
Denver, CO 80202

By: Andrea Madigan Date: 5/10/05

Andrea Madigan
Enforcement Attorney
U.S. EPA Region 8
999 18th Street, Suite 300
Denver, Colorado 80202

FOR THE PLAINTIFF THE STATE OF COLORADO:
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

By: 

Date: 5/18/05

Douglas H. Benevento

Executive Director

Colorado Department of Public Health and Environment

4300 Cherry Creek Drive South

Denver, CO 80246-1530

COLORADO DEPARTMENT OF LAW FOR THE ATTORNEY GENERAL

By: 

Date: 5/20/05

Robert J. Eber

Assistant Attorney General

Colorado Department of Law

Natural Resources and Environment Section

Hazardous and Solid Waste Unit

1525 Sherman Street, 5th Floor

Denver, Colorado 80203

IT IS SO AGREED:

FOR THE DEFENDANTS:

B&B MINES, INC.

By: [Signature] Date: 5-20-2005
Name: Richard Downing Jr
Address: 600 17th St #2700
Denver CO 80202

FRENCH GULCH MINES, INC.

By: [Signature] Date: 5-20-2005
Name: Richard Downing Jr
Address: 600 17th St #2700
Denver CO 80202

DIAMOND DICK CO.

By: [Signature] Date: 5-20-2005
Name: Richard Downing Jr
Address: 600 17th St #2700
Denver CO 80202

ECKART PATCH CO.

By: [Signature] Date: 5-20-2005
Name: Richard Downing Jr
Address: 600 17th St #2700
Denver CO 80202

LITTLE LIZZIE LIMITED LIABILITY COMPANY

By: [Signature] Date: 5-20-2005
Name: Richard Downing Jr
Address: 600 17th St #2700
Denver CO 80202

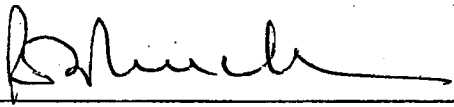
WIRE PATCH LIMITED LIABILITY COMPANY

By: [Signature] Date: 5-20-2005
Name: Richard Downing Jr
Address: 600 17th St #2700
Denver CO 80202

IT IS SO AGREED:

FOR THE BUYERS:

SUMMIT COUNTY

By:  Date: May 19, 2005

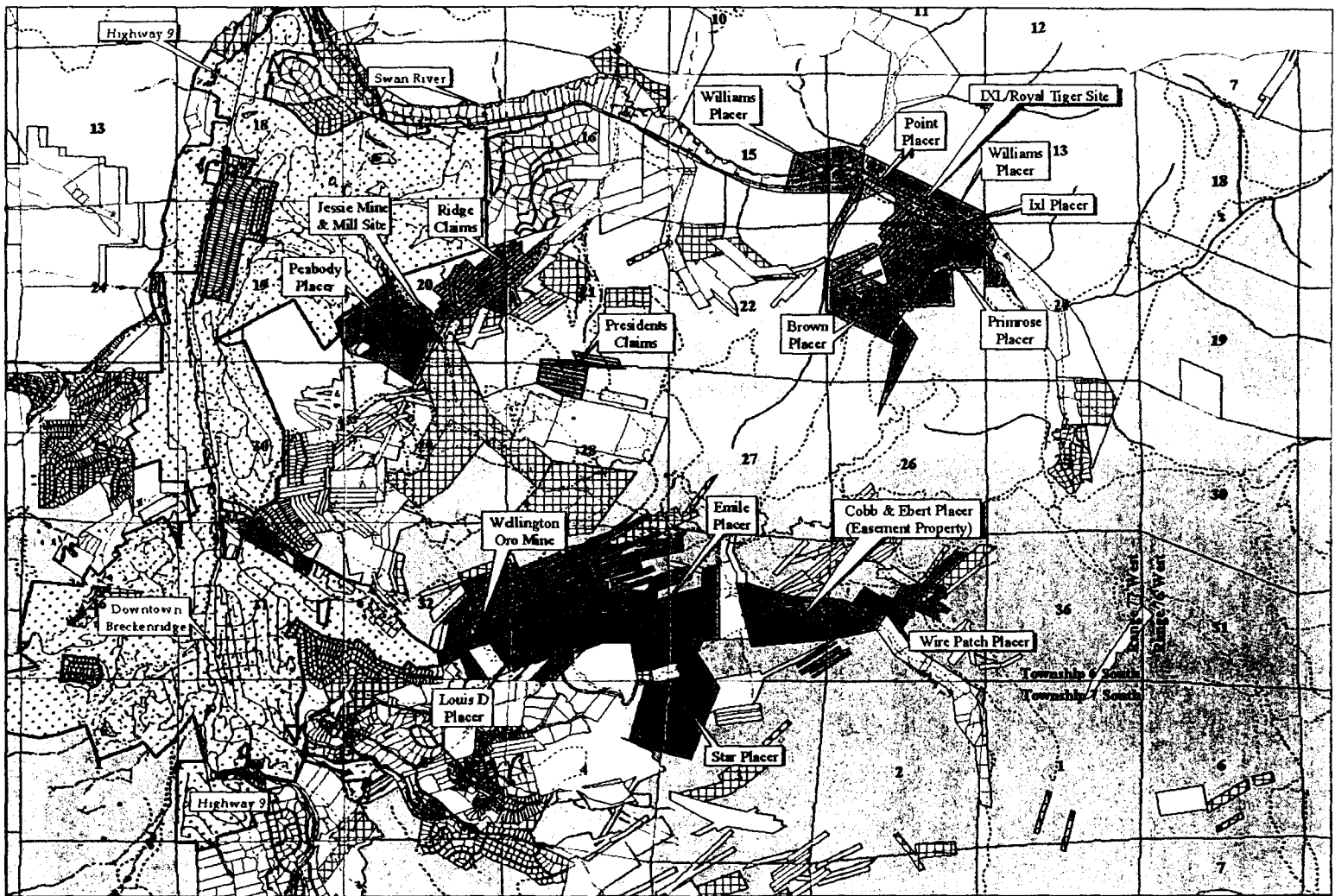
Robert H.S. French
Vice Chairman, Board of County Commissioners
Summit County, Colorado
PO Box 68
Breckenridge, CO 80424

TOWN OF BRECKENRIDGE

By:  Date: MAY 19, 2005

Ernie Blake
Mayor, Town of Breckenridge, Colorado
PO Box 168
Breckenridge, CO 80424

Appendix I



B&B Mines Property, Golden Horseshoe

Upper Blue Basin, Summit County, Colorado

B&B Mines - Dark Gray; Private - White; USFS - light gray

Summit County/Breckenridge Open Space - cross hatch; Breckenridge Town limits - dotted

Map printed 4/11/2005

Copyright Summit County Government

2083 0 2083 4166 Feet



1:50000



This map is for display purposes only.
Do not use for legal conveyance.
Not necessarily accurate by surveying
standards, and does not comply with
National Mapping Accuracy Standards.

APPENDIX 2

LEGAL DESCRIPTION OF THE PROPERTY

The following mining claims and other real property situate in the County of Summit and State of Colorado, to wit:

PARCEL "A"

POINT PLACER MS# 19719, IXL MILL SITE MS# 3178B, EUREKA MS# 3202, GOLDEN BANK NO. 3 MS# 19796, ROYAL TIGER MS# 3200, CORA E MS# 8378, DISCOVERY EXT NE MS# 4225, GLENWOOD MS# 7748, JESSIE MS# 7144, MOSCOW #1 MS# 7144, VALLEY MS# 6873, BRITISH BOY MS# 3071, MINERAL CHIEF MS# 3051, OJ LEWIS MS# 3047, SILVER EEL MS# 3232, SWALLOW MS# 3177, CASHIER MS# 5926, SMUGGLER MS# 5926, DIAMOND DICK MS# 5798, LITTLE LIZZIE MS# 3125, ORTHODOX 3 MS# 7615A, SILVER HEAD MS# 3126, BROWNIE BIRDIE MS# 7671, BUNKHOUSE MS# 20128, CAPTAIN MS# 19165, CZAR MS# 15108, DEADWOOD MS# 4435, GREENWOOD MS# 3395-A, HOPEFUL MS# 3194, PEORIA MS# 2655, ROBLEY LODGE MS# 242, TOM PRICE MS# 11876, COBB & EBERT PLACER MS# 340, BOSS MS# 3799, EMPEROR MS# 5704, FREDERICK THE GREAT MS# 5704, PEARL MS# 7624, REVEILLE MS# 4651, QUEEN OF THE FOREST MS# 5704, HELEN NO O MS# 3252, FRANK P. DAVIS MS# 4581, HATTIE A MS# 4581, H B D MS# 6873, CB & Q EXTENSION MS# 6873, DISCOVERY MS# 4224, MAY B MS# 5989, FRACTION MS# 6873, LOTTIE B MS# 8246, BELLE MS# 8288, CHICAGO MS# 8288, FLORENCE MS# 8288, TOLEDO MS# 8288, EEG MS# 8378, JANE S MS# 8905, MARY G MS# 8905, MOLLIE B MS# 8905 AND EMILE PLACER MS# 1353, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "B"

BERLIN MS# 6873, BULLION MS# 8076, COLUMBIA MS# 8378, MINNIE L MS# 8378, GOLDEN BANK #2 MS# 19796, MAMMOTH MS# 5926, MORNING STAR MS# 5926, CHIEF MS# 5798, DIRIGO MS# 11781A AND B, MONO MS# 12069, ORO MS# 5798, PRIZE BOX MS# 13499, RISING MOON MS# 11781A & B, BROWN MILL SITE MS# 18650B, CARRIE LASALLE MS# 18650A, CINCINNATI MILL SITE MS# 3395B, HELEN NO. 1 MS# 3193, KATHLEEN MS# 20128, MATTIE MS# 2771-A, MINNIE MS# 3602, NUTMEG MS# 7671, PADUCAH MS# 2294, SAM CLARK MS# 8026A & B, SILVER STAR MS# 3190, TRUAX MS# 11876, WELLINGTON MS# 7343, ONTARIO MS# 3972, THAT PORTION OF THE FRENCH GULCH PLACER MS# 2589-A LYING IMMEDIATELY ADJACENT THERETO AND IN A EASTERLY DIRECTION FROM A TRACT OF LAND AS DESCRIBED IN DEED RECORDED OCTOBER 18, 1999 UNDER RECEPTION NO. 608038, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "C"

CLARA L MS# 8378, EMMA K MS# 8378, BROWN PLACER MS# 2166, IXL PLACER MS# 1479, 16 TO 1 MILL SITE MS# 11781B, SINCOE MS# 11781A & B, X-10-U-8 MS# 186, X-

10-U-8 #2 MS# 7615A, ANDROMEDA MS# 3189, CASSIOPEA MS# 3187, ELLA MS# 5503, FRACTION MS# 20128, GREAT NORTHERN MS# 2545, HELENS BABY MS# 3191, KENTUCKY MS# 2772, LINCOLN MS# 18603, MAVOUREEN MS# 20128, MERRY GOLD MS# 15108, ORTHODOX MILL SITE MS# 7615B, AND PEABODY PLACER MS# 4252, EXCEPT THOSE TRACTS AS CONVEYED IN BOOK 76 AT PAGE 153 AND IN BOOK 1 AT PAGE 459, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "D"

HIGHLAND MARY MS# 3201, ANNIE C MS# 8378, ARLING MS# 7144, BERTHA D MS# 8378, CECIL C MS# 8378, GOLD RUN #1 MS# 6873, IXCD MS# 6873, GOLDEN BANK MS# 19716, IXL MS# 3178A, LONGFELLOW MS# 3088, PRIMROSE LODGE MS# 19720, TEDDY MS# 19717, COLORADO MS# 2995, HAVANA MS# 12069, SIAM MS# 5798, CROSS MS# 7829, CUB MS# 18650-A, DAVIS MILL SITE MS# 8026-B, DIE VERNON MS# 3188, JACKSON MILL SITE MS# 2771-B, LIBERTY MS# 11696, LUCKY MS# 2325, OLD TENNESSEE MS# 7872, ROSE OF BRECKENRIDGE MS# 3128, WHITE PINE MS# 3167, WELLINGTON #3 MS# 18650-A, ELEPHANT MS# 5704, LITTLE MORGAN MS# 5704, TRIANGLE MS# 5704, VIRGINIA MS# 4651, WYOMING MS# 19166, GREY HORSE MS# 2284, WIRE PATCH PLACER MS# 5704 (LOTS 1, 2, 3, 4, 5, 6, 7, 8 AND 9), IRON MASK MS# 1717, LAURA H MS# 8378 AND LOUIS D PLACER MS# 1285, EXCEPT FOR THAT PORTION AS CONVEYED UNDER RECEPTION NO. 463096, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "E"

CUBA MS# 12069, MCKINLEY MS# 17559, ROSE OF BRECKENRIDGE MILL SITE MS# 3128-B, TECUMSEH MS# 11876, WILLIAMS PLACER MS# 1118, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "F"

BADEN BADEN MS# 3794, PRIMROSE PLACER MS# 19720, ORTHODOX 2 MS# 7615A, OUTLET MS# 11876, WELLINGTON EXTENSION MS# 18650-A, AND THAT PORTION OF THE PEABODY PLACER MS# 4252, COMMONLY REFERRED TO AS THE JESSIE MILLSITE AND FURTHER DESCRIBED IN ITS ENTIRETY IN DEED RECORDED JUNE 27, 1892 IN BOOK 76 AT PAGE 153, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "G"

STAR PLACER MS# 2846, CECIL LODGE MS# 2846 AND ARTHUR NALL LODGE MS# 2846, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "H"

BLAINE LODE MS# 15356, HAYES LODE MS# 15356, LINCOLN LODE MS# 15356, HARRISON LODE MS# 15356, BRYAN LODE MS# 15356 AND MORTON LODE MS# 15356, COUNTY OF SUMMIT, STATE OF COLORADO.

PARCEL "I"

GARFIELD LODE MS# 15356, GRANT LODE MS# 15356, ARTHUR LODE MS# 15356, CLEVELAND LODE MS# 15356 AND MCKINLEY LODE MS# 15356, COUNTY OF SUMMIT, STATE OF COLORADO.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED PARCELS:

EXCEPTION PARCEL "1"

**PROPOSED DEVELOPMENT PARCEL
A PORTION OF THE PEABODY PLACER**

A PARCEL OF LAND BEING A PORTION OF THE PEABODY PLACER U.S.M.S. No. 4252 LOCATED IN SECTION 20, TOWNSHIP 6 SOUTH RANGE 77 WEST, OF THE 6th PRINCIPAL MERIDIAN, SUMMIT COUNTY, COLORADO, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE 2-3 LINE OF SAID PEABODY PLACER FROM WHICH CORNER No. 3 BEARS N 54°00'00" E, 212.90 FEET DISTANT.
THENCE: S 37°23'46" E, AND PARALLEL WITH THE 3-4 LINE OF SAID PEABODY PLACER A DISTANCE OF 681.00 FEET.
THENCE: S 53°21'02" W, A DISTANCE OF 370.00 FEET.
THENCE: N 71°11'14" W, A DISTANCE OF 715.00 FEET.
THENCE: N 03°00'00" W, A DISTANCE OF 120.00 FEET TO A POINT ON SAID 2-3 LINE.
THENCE: N 54°00'00" E, ALONG SAID 2-3 LINE, A DISTANCE OF 700.05 FEET TO THE POINT OF BEGINNING.

DESCRIBED PARCEL CONTAINING 9.3105 ACRES MORE OR LESS.

BEARINGS ARE BASED UPON THE 4-5 LINE OF THE PEABODY PLACER HAVING A BEARING OF S 47°00'00" E.

EXCEPTION PARCEL "2"

**PROPOSED DEVELOPMENT PARCEL
A PORTION OF THE WILLIAMS PLACER**

A PORTION OF THE WILLIAMS PLACER U.S.M.S. 1118, LOCATED IN SECTIONS 14 AND 15, TOWNSHIP 6 SOUTH, RANGE 77 WEST, OF THE 6TH PRINCIPAL MERIDIAN, SUMMIT COUNTY, COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT CORNER 1 OF THE SAID WILLIAMS PLACER.

THENCE; N 12°13'00" E, ALONG THE 1-2 LINE OF SAID WILLIAMS PLACER, FOR A DISTANCE OF 728.96 FEET TO CORNER No. 2.

THENCE; N 81°31'44" E, ALONG THE 2-3 LINE OF SAID WILLIAMS PLACER, FOR A DISTANCE OF 1969.24 FEET TO CORNER No. 3.

THENCE; S 63°45'35" E, ALONG THE 3-4 LINE OF SAID WILLIAMS PLACER, A DISTANCE OF 198.64 FEET TO A POINT ON THE PROPOSED WESTERLY RIGHT OF WAY LINE FOR MUGGINS GULCH ROAD.

THENCE; CONTINUING ALONG SAID WESTERLY RIGHT OF WAY FOR THE FOLLOWING 3 COURSES:

1. THENCE; S 42°32'14" W, A DISTANCE OF 81.12 FEET.
2. THENCE; ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 305.33 FEET, AN ARC LENGTH OF 270.01 FEET AND A CHORD WHICH BEARS S17°12'13" W.
3. THENCE; S 08°07'49"E, A DISTANCE OF 62.08' TO THE PROPOSED NORTHERLY RIGHT OF WAY FOR TIGER ROAD (COUNTY ROAD 6);

THENCE; CONTINUING ALONG SAID NORTHERLY RIGHT OF WAY FOR THE FOLLOWING 4 COURSES:

1. THENCE; ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 499.18 FEET, AN ARC LENGTH OF 81.66 FEET AND A CHORD, WHICH BEARS S 54°15'38" W.
2. THENCE; S 46°46'56" W, A DISTANCE OF 67.18 FEET.
3. THENCE; ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 230.92 FEET, AN ARC LENGTH OF 191.49 FEET AND A CHORD, WHICH BEARS S 70°27'43" W.
4. THENCE; S 88°35'49" W, A DISTANCE OF 202.70 FEET.

THENCE; S 03°33'20" W, DEPARTING SAID NORTHERLY RIGHT OF WAY A DISTANCE OF 682.20 FEET TO A POINT ON THE 13-1 LINE OF SAID WILLIAMS PLACER.

THENCE; N 76°09'24" W, ALONG THE SAID 13-1 LINE A DISTANCE OF 1663.48 FEET, TO THE POINT OF BEGINNING. DESCRIBED PARCEL CONTAINING 43.7514 ACRES MORE OR LESS.

BEARINGS ARE BASED ON THE 1-2 LINE OF WILLIAMS PLACER ACCORDING TO A B.L.M. DEPENDENT RESURVEY BEING N 12°13'00" E.

Legal Description of Proposed Development Parcels Prepared By:

Baseline Surveys Inc.
13541 Colorado Hwy. 9
Breckenridge, CO
80424

NOTE: The legal descriptions of the two proposed development parcels (Exception Parcel 1 and Exception Parcel 2, above) are each subject to minor modification by the Town of Breckenridge and Summit County.

Appendix 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

999 18TH STREET - SUITE 300

DENVER, CO 80202-2466

Phone 800-227-8917

<http://www.epa.gov/region08>ADMINISTRATIVE
RECORD

Ref: 8EPR-SR

NOV 24 2002

ACTION MEMORANDUM

SUBJECT: Request for Removal Action for the French Gulch/Wellington Oro Site, Summit County, Colorado: Action Memorandum for a Non-Time Critical Removal Action

FROM: Victor Ketellapper, RPM

THROUGH: Barry Levene, Unit Leader

Dale Vodehnal, Program Director

To: Max Dodson, Assistant Regional Administrator
Office of Ecosystems Protection and Remediation

CERCLIS ID # COD0001093392

SSID# 08-5F

Category of Removal: Non-Time Critical

I. PURPOSE

This Action Memorandum documents the Agency's selection of a removal (response) action described herein for the French Gulch/Wellington Oro Site (the Site), Summit County, Colorado. For the purposes of this Action Memorandum, the Site is defined as the specific areas occupied by the Wellington Oro Mine and the downstream areas of French Creek and the Blue River affected by zinc and cadmium contamination. This mine is located approximately 2.2 miles upstream or east of the confluence of French Creek with the Blue River near Breckenridge, Colorado. This area is part of the 1,800 acre proposed open space acquisition by the Town of Breckenridge and Summit County. This land purchase is scheduled to be completed by June, 2004.



The purpose of this removal action is to address water quality impacts to the French Creek and the Blue River from metals and acidity that is being released from the Wellington Oro Mine.

The selected Non-Time Critical Removal Action is based on information contained in the *Wellington Oro Mine Pool, Draft Engineering Evaluation/Cost Analysis, French Gulch Site*, dated May 29, 2002, public comment, and the Administrative Record for the Site.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

The Site first came to the attention of the State of Colorado in the late 1980s due to concerns over poor water quality in the Blue River. EPA provided funding to the State of Colorado, Department of Public Health and the Environment (CDPHE), under Section 319 of the Clean Water Act for a non-point source project. CDPHE then provided funding to the State of Colorado, Department of Natural Resources, Division of Minerals and Geology to lead the Site Investigations. Between 1989 and 1995, the State conducted significant investigations at the Site to determine the nature and extent of contamination. In 1995, the State of Colorado notified EPA that they had determined that the scope and the complexity of the problems at the Site exceeded the capacity and resources of the non-point source program. Concurrently, a Preliminary Assessment/Site Investigation (PA/SI) and other investigations under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) were completed by EPA. The conclusion of these investigations was that this Site was appropriate for continued investigation and remediation under CERCLA authorities.

In 1996 and 1997, under an interagency agreement with EPA, the Bureau of Reclamation (BOR) conducted sampling of the surface wastes at the Site. As a result of these investigations, EPA determined that surface wastes at the Site presented a sufficient risk such that a non-time critical Removal Action was warranted. On September 23, 1998, an action memorandum was signed that selected the actions to be taken to address the surface wastes. The proposed action selected in the action memorandum was the consolidation and capping of the mine waste located at the Wellington Oro Mine, the Minnie Tailings, and the X-10-U-8 Dump. This work was completed on June 18, 1999.

Beginning in 1989, EPA conducted numerous investigations into the surface and groundwater near and downgradient of the mine. These investigations included sampling to determine the sources and magnitude of metal contamination and migration pathways to French Creek and the Blue River. Much of this investigation was conducted by a group consisting of the current land owners, B & B Mines, Inc., Diamond Dick Co., Eckart Patch Co., French Gulch Mines, Inc., Little Lizzie Limited Liability Co., and Wire Patch Limited Liability Co. (collectively referred to as B&B Mines), under Unilateral Administrative Order, Docket No. CERCLA-VIII-99-13, issued by EPA on July 12, 1999. Based on the data collected from 15 sample locations, the Wellington Oro Mine was found to be the primary contributor of zinc and cadmium contamination found in French Creek and the Blue River.

Consistent with EPA's Community Based Environmental Protection efforts, the French Gulch Remediation Opportunities Group (FROG) was organized to serve as a forum for convening representatives of federal, state, and local agencies, area residents, property owners, environmental groups and others interested in cleanup of the Site. The FROG has met frequently to discuss Site issues and has given support for this action.

2. Site Location

The Site includes the Wellington Oro Mine and the downstream areas of French Creek and the Blue River affected by zinc and cadmium contamination. The Wellington Oro Mine is located approximately 2.2 miles upstream or east of the confluence of French Creek with the Blue River. A map that presents the location of the Site is presented in Attachment No. 1 to this Action Memorandum.

3. Background, History and Land Use.

Mining began in the Breckenridge area in French Gulch in the 1880s. The Wellington Oro Mine complex was the largest mining operation in the valley. Most of the lead-zinc-copper-silver sulfide ores and gold ores extracted from the Wellington Oro Mine occurred between the 1880s and the 1930s. During this period, the underground mine workings consisted of more than 12 miles of tunnels, adits, drifts, stopes and crosscuts. Significant portions of these workings are below the elevation of the ground water table and French Creek.

In the 1940s, a predecessor of the present owners acquired the Wellington Oro mine properties. Sporadic mining and mill operations occurred at the Wellington Oro Mine in the late 1940s and the early 1970s. Mining ceased in 1972.

Various land uses exist in the Site area. Near the mouth of French Creek, the area is zoned industrial and commercial. Further upstream is an area of existing residential development. Just downstream of the site, residential development is occurring which includes affordable housing. The entire French Gulch is used for recreational biking, horseback riding, hiking and jogging. Currently, the Town of Breckenridge and Summit County have a purchase agreement with B&B Mines to acquire over 1800 acres of land including the Wellington Oro Mine. If the purchase is completed, the land will be managed as town and county open space.

4. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant

There are two primary public health and environmental issues at the Site. The first is the potential risk to human health exposure to elevated levels of lead and arsenic in the surface wastes. These risks were addressed in 1998 through a separate Non-Time Critical Removal Action. The second is water quality impacts from the metals being released from the mine to the ground and surface waters. This risk is being addressed under this Action Memorandum.

a. Surface Wastes

The mine wastes of concern at the Site are roaster fines, mill tailings and waste rock. The placer dredged tailings do not appear to present a hazardous substance concern.

Sampling at the Site indicates that the surface wastes contain elevated levels of lead and arsenic. Concentrations of lead range from 204 to 126,000 parts per million (ppm), while concentrations of arsenic range from 15 to 1,840 ppm. The 1998 Non-Time Critical Removal Action addressed these human health and environmental risks through consolidation and capping of the wastes within the mine site.

b. Water Quality

Site investigations have revealed that the underground mine workings of the Wellington Oro Mine constitute the largest source of metals loading to the ground and surface water. The abandoned underground workings of the Wellington Oro mine complex flooded with water when mining ceased. As water and oxygen come in contact with the sulfide minerals contained within the abandoned mine workings, an acidic condition which dissolves metals is created. This acidic, metal-laden water continues to flow and is known as acid mine drainage. This

contaminated water flows through fractures in the bedrock into the gravel creek bed and then into French Creek. The primary contaminants of concern are zinc and cadmium.

A natural seep identified as FG-6C is the primary conduit of mine pool water into French Creek. Additional unidentified seeps may also be present. This seep flows year round at a rate of approximately 100 gallons per minute except during spring runoff when flows have been measured at more than 500 gallons per minute for short durations.

Water quality above the Site is very good. This section of French Creek supports a native Colorado Cutthroat trout population. Water quality below the Site, however, is poor. Metals contamination discharging from the mine has caused concentrations of zinc and cadmium in waters downgradient of the mine at levels that are acutely toxic to aquatic life.

5. NPL Status

The Site is not currently listed or proposed for inclusion on the National Priorities List (NPL)

B. Other Actions to Date

A Non-Time Critical Removal Action was completed in June, 1999 at this site to address the exposure of heavy metals contained in the surface wastes at this Site, as more fully described above.

C. State and Local Authorities Roles

1. Cultural Resources

Several FROG members have identified the preservation of the appearance of the key features of the Site as an historic mining area to be an important goal. The State Historical Preservation Office (SHPO), in a letter dated December 31, 1996 has stated that the properties are not eligible for inclusion in the National register of Historic Places. EPA, in its selection of the response action considered the impact of potential response actions on historic Site features. To maintain the historic mining landscape, placer dredge tailings will be used to hide the facilities constructed to implement this removal action. The facilities proposed are described in *Section V. A. Proposed Action Description* of this action memorandum.

2. State/County/Local Governments

State, regional, county and local governments have participated in the selection process by involvement with the FROG and/or by participation in the June 13, 2002 public meeting, and/or submission of written comments during the May 31 to June 29, 2002 public comment period.

If the Town of Breckenridge and Summit County are successful in purchasing this property, they will fund the construction and operation of this removal action. The responsibilities of these parties in implementing this Removal Action will be agreed to in a Prospective Purchaser's Agreement or Bona Fide Purchaser's agreement among the Town of Breckenridge, Summit County, CDPHE and EPA.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

As described above, the Site meets one or more of the criteria established in the National Contingency Plan (NCP) at 40 CFR Section 300.415(b)(2) for the conduct of a removal action. These are: (1) an actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants; (2) actual or potential contamination of sensitive ecosystems; (3) high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate; and (4) weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from the Wellington Oro Mine, if not addressed by implementing the removal action alternative selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS

An EE/CA describing several alternatives to address the discharge of acid mine drainage from the Wellington Oro Mine Pool was completed on May 29, 2002. The document is titled: *Wellington Oro Mine Pool, Draft Engineering Evaluation/Cost Analysis*. This document, along with the administrative record, was available at the Summit County Library in Breckenridge, Colorado during the public comment period. A Fact Sheet that summarized the EE/CA was also made available to the public during this time. EPA's preferred alternative was identified as Semi-Passive Water Treatment with

Settling Ponds.

A. Proposed Action Description

1. The activities included in the selected alternative, Semi-Passive Water Treatment with Settling Ponds are outlined below:
 - a. Water discharging from the Wellington Oro Mine at Seep FG-6C will be collected. This seep is the primary source of acid mine drainage discharging from the Mine.
 - b. The collected water will be pumped to a treatment building. There, lime and a flocculent will be added and mixed with the water. By addition of these materials, the acidity of the water will be neutralized and the metals will leave the solution, forming a solid. The need for pretreatment will be evaluated during the design phase of this action.
 - c. The treated water will be discharged to one of two ponds to allow the solids to settle out of the water.
 - d. The clean water will then overflow out of the ponds and into the French Creek alluvium.
 - e. The metal sludge collected in the ponds will be either disposed of into the abandoned mine workings or an offsite landfill.
 - f. A physical barrier in French Creek that will prevent non native trout from migrating from the Blue River into upper French Creek will be constructed.
 - g. This water treatment system will be operated 24 hours per day, 7 days per week until water discharges from FG-6C no longer pose a risk to the environment.

2. Contribution to Remedial Performance

The response actions described in this Action Memorandum are consistent with and will contribute to the performance of long-term response actions at the Site. No remedial actions are anticipated at this Site.

3. Description of Alternative Technologies

At the request of B&B Mines, the current landowner of the Wellington Oro Mine, an alternative technology, the Semi-Passive Water Treatment Without Settling Ponds, was evaluated in the EE/CA. This alternative was also referred to as the pump back alternative. In this alternative, water discharged from the mine at seep FG-6C would be treated with lime. The treated water then would be discharged to the mine. In the technical evaluation of this alternative, it was found that the pump back alternative would not achieve water quality goals in the long term for the following reasons:

- a) Neither B&B mines nor EPA were able to identify any mines where this technology has been successfully implemented.
- b) In the pump back system, water discharged from the mine pool at FG-6C is returned to the mine pool. This adds significant flow to the mine pool. This additional flow must cause increased discharges at FG-6C or other unidentified locations. Increased discharge from FG-6C would increase the volume of water that must be treated. Increases in discharges from unknown locations would cause increases in metals concentrations in French Creek and the Blue River. Releases from new discharge locations may not be detected immediately, possibly not until the water quality at BR-2 is impacted. Depending on the location of new discharge locations, it may be difficult to then find a treatment method as simple and cost effective as the currently proposed semi-passive treatment with settling ponds.

Ultimately, water must somehow leave the mine pool and discharge to French Creek. In the pump back system, any water discharged to French Creek would not be treated. Since, the lime injection study found that the mine pool chemistry could not be significantly improved by adding a base, the water discharged to French Creek would be contaminated. While in the short term, water quality could improve under the pump back system, in the long term, conditions in French Creek and the Blue River would likely return to current conditions, rendering this alternative ineffective.

- c) In the preferred alternative, discharge of treated water to French Creek or to the groundwater system provides additional benefits to the watershed. This treated water enhances flow in French Creek and the Blue River and will provide additional neutralization capacity to reduce the impact of uncaptured sources of acidity from the Wellington Oro Mine. It will also provide alkalinity to the watershed, resulting in reduced aquatic toxicity.

4. Engineering Evaluation/Cost Analysis

An EE/CA titled, *Wellington Oro Mine Pool, Draft Engineering*

Evaluation/Cost Analysis was completed on May 29, 2002 by URS Operating Services, Inc. This EE/CA considered 4 alternatives for addressing the discharge of acid mine drainage from the Wellington Oro Mine.

5. Applicable and Relevant and Appropriate Requirements "ARARs"

The State of Colorado and the EPA have reviewed the ARARs for this Site. The ARARs determined to be practicable for the Site are:

- a. Federal Clean Water Act
- b. Colorado Water Quality Standards
- c. Safe Drinking Water Act, Underground Injection Control Program
- d. Colorado Solid Waste Disposal Regulation
- e. Colorado Mine Land Reclamation Act
- f. Endangered Species Act
- g. Colorado Environmental Covenant Requirements – CRS 25-15-317-327

6. Performance Standards

The performance standards for this action are to limit the concentrations of dissolved cadmium and zinc in the Blue River at compliance point/sampling location BR-2 to 4.0 micrograms per liter and 225 micrograms per liter, respectively. Sampling location BR-2 is located in the Blue River, just downstream of the confluence with French Creek. These performance standards meet the current Temporary Modification of the Colorado Water Quality Standards for this segment of the Blue River and are protective of a brown trout fishery.

Water quality goals may change after the next Water Quality Control Commission rulemaking hearing scheduled for July 2003. A Use Attainability Analysis (UAA) of the sections of French Creek and the Blue River impacted by mining activities in French Gulch is being conducted. The primary goal of the UAA is to provide recommendations for site-specific classifications and standards for the upcoming water-quality rulemaking hearings. The recommendations made in the UAA are based on a physical and biological assessment, a chemical assessment, and economic considerations. The Water Quality Control

Commission will determine the changes, if any, to the Colorado Water Quality Standards after this hearing. This could result in a revision of the numeric stream standards and/or resegmentation of this portion of the Blue River and French Creek. EPA plans to revise the EE/CA performance standards to these new standards and/or point of compliance based on the new resegmentation if technically possible.

7. Project Schedule

The design of the selected action is planned to begin during the Fall of 2002. Construction of the facilities is scheduled to begin during the summer of 2004. The water treatment system is scheduled to be operational in 2005. This schedule is dependent on obtaining agreements in a timely manner with B & B Mines as well as the Town of Breckenridge and Summit County if they are successful in purchasing this property.

8. Estimated Costs

The estimated capital costs for this action using on-site sludge disposal are \$2,146,000. Annual operations and maintenance costs are estimated as \$192,000. The 30 year present value cost is estimated as \$5,070,000. If off-site disposal of the sludge is required, the 30 year present value costs increase to \$6,813,000.

9. Public Comment

A public comment period was held on EPA's proposed plans for this Removal Action from May 31 through June 29, 2002. A public meeting was held on June 13, 2002 in Breckenridge. A transcript of the public meeting is included in the administrative record for the site. EPA's responses to the comments received during the public meeting and written comments received during the public comment period are found in Attachment 2 of this Action Memo. EPA carefully considered all comments received during the public comment period. These comments did not alter EPA's preference for the preferred alternative, Semi Passive Treatment with Settling Ponds.

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

If this Removal Action is delayed or not taken, exposure of the aquatic environment to heavy metals released from the mine to French Creek and the Blue River will continue.

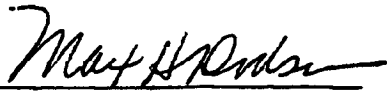
VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

See Confidential Enforcement Addendum.

Approval:

A handwritten signature in black ink, appearing to read "Max H. Dodson", is written over a horizontal line.

Max H. Dodson
Assistant Regional Administrator
Office of Ecosystems Protection
And Remediation

Disapproval

Max H. Dodson
Assistant Regional Administrator
Office of Ecosystems Protection
And Remediation

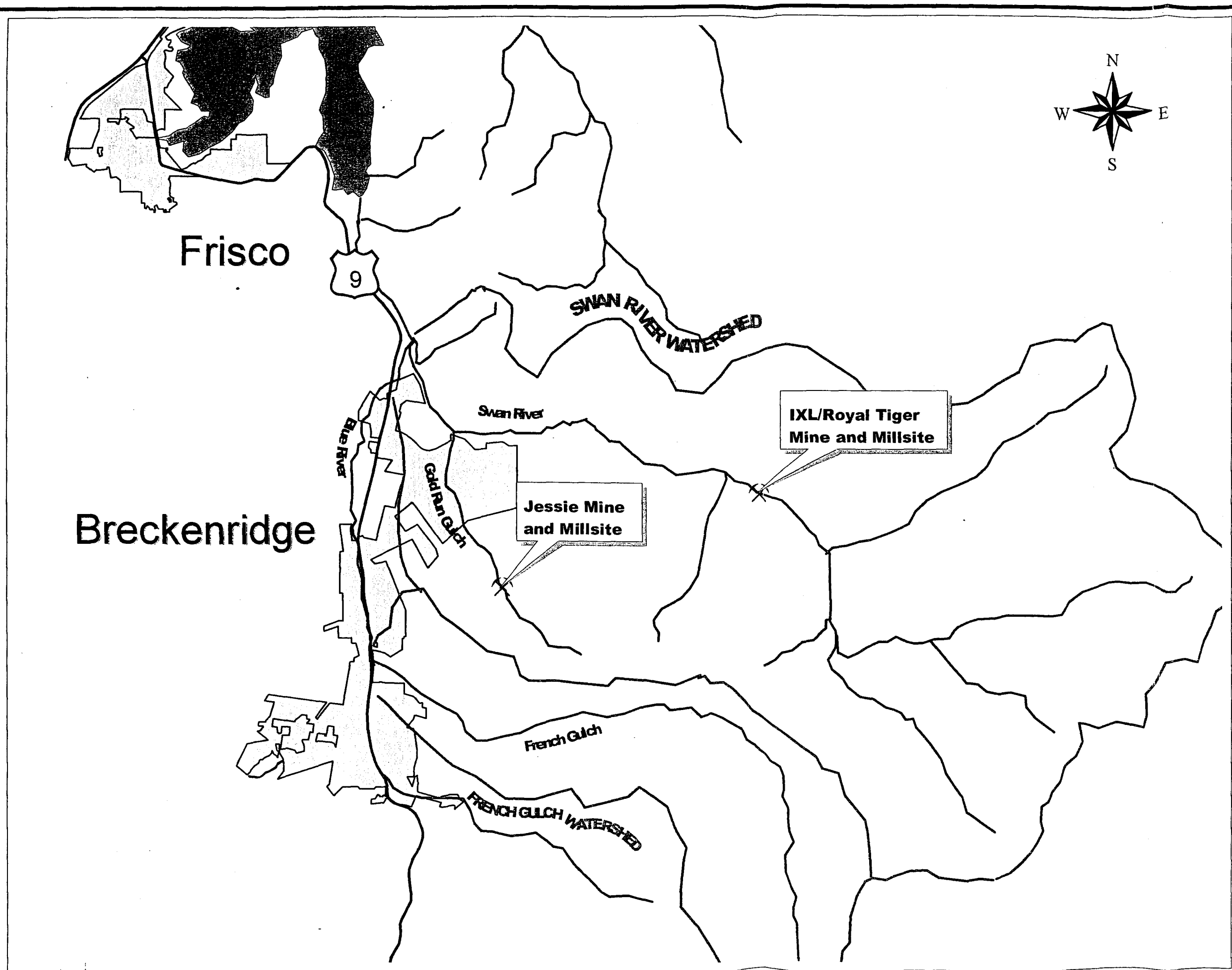


FIGURE 1

Site Location Map

**Jessie Mine
and Millsite**

0.6 0 0.6 1.2 Miles



Colorado Department
of Public Health
and Environment



FIGURE 2
DETAILED SAMPLE LOCATION MAP

- ▲ -Adit Sample
- △ -Surface Water/Sediment Sample
- ◻ - Waste Source Sample

Jessie Mine and Mill Site
Summit, County Colorado



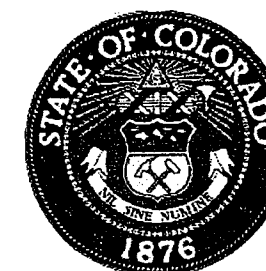
Colorado Department
of Public Health
and Environment

Hazardous Materials and
Waste Management Division

FIGURE 3

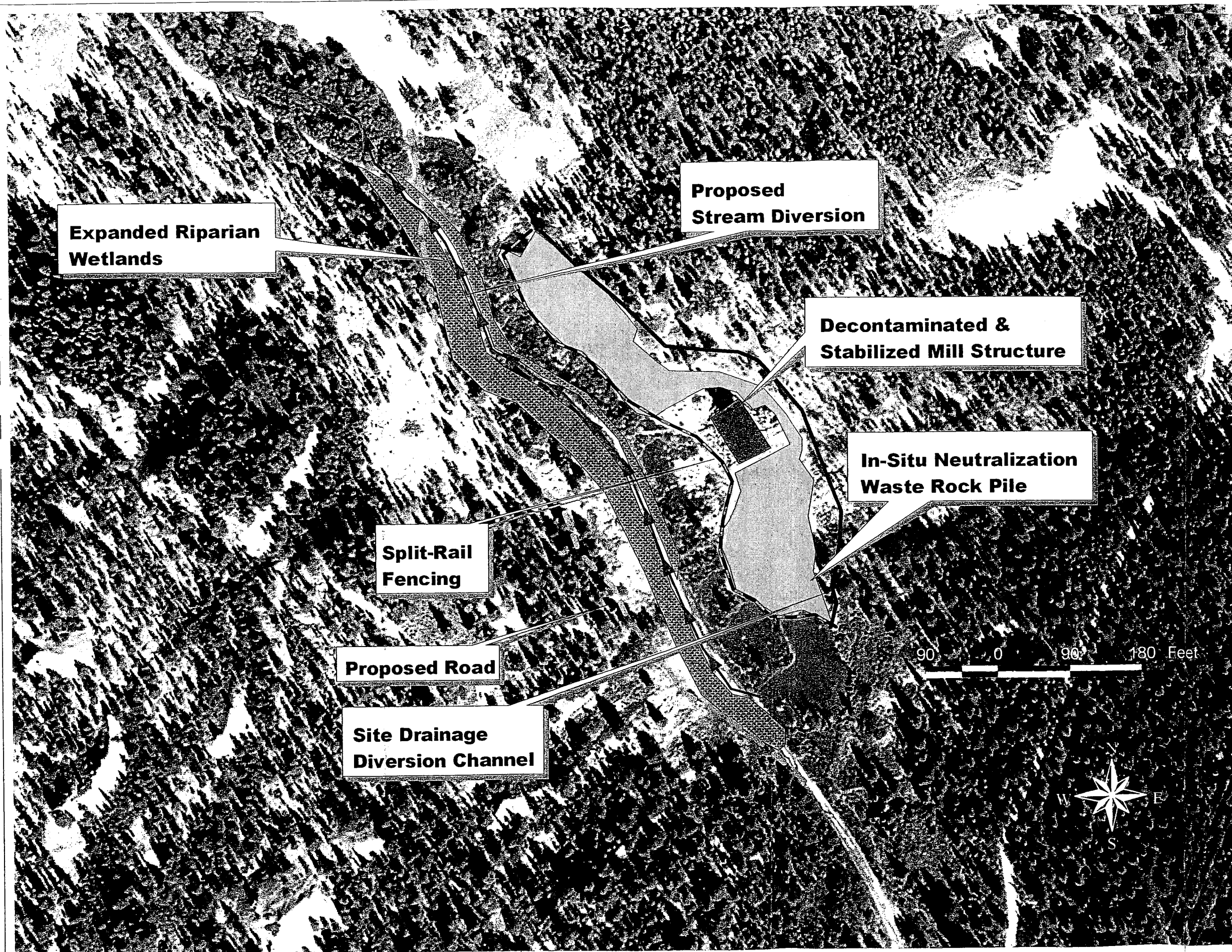
**Site Features -
Proposed
Alternative 3**

**Jessie
Mine and Mill**



Colorado Department
of Public Health
and Environment

Major Items:
Waste Rock Solidification
Mill Structure Decontamination
and Stabilization
Stream Diversion
Mine Shaft Closure
Institutional Controls



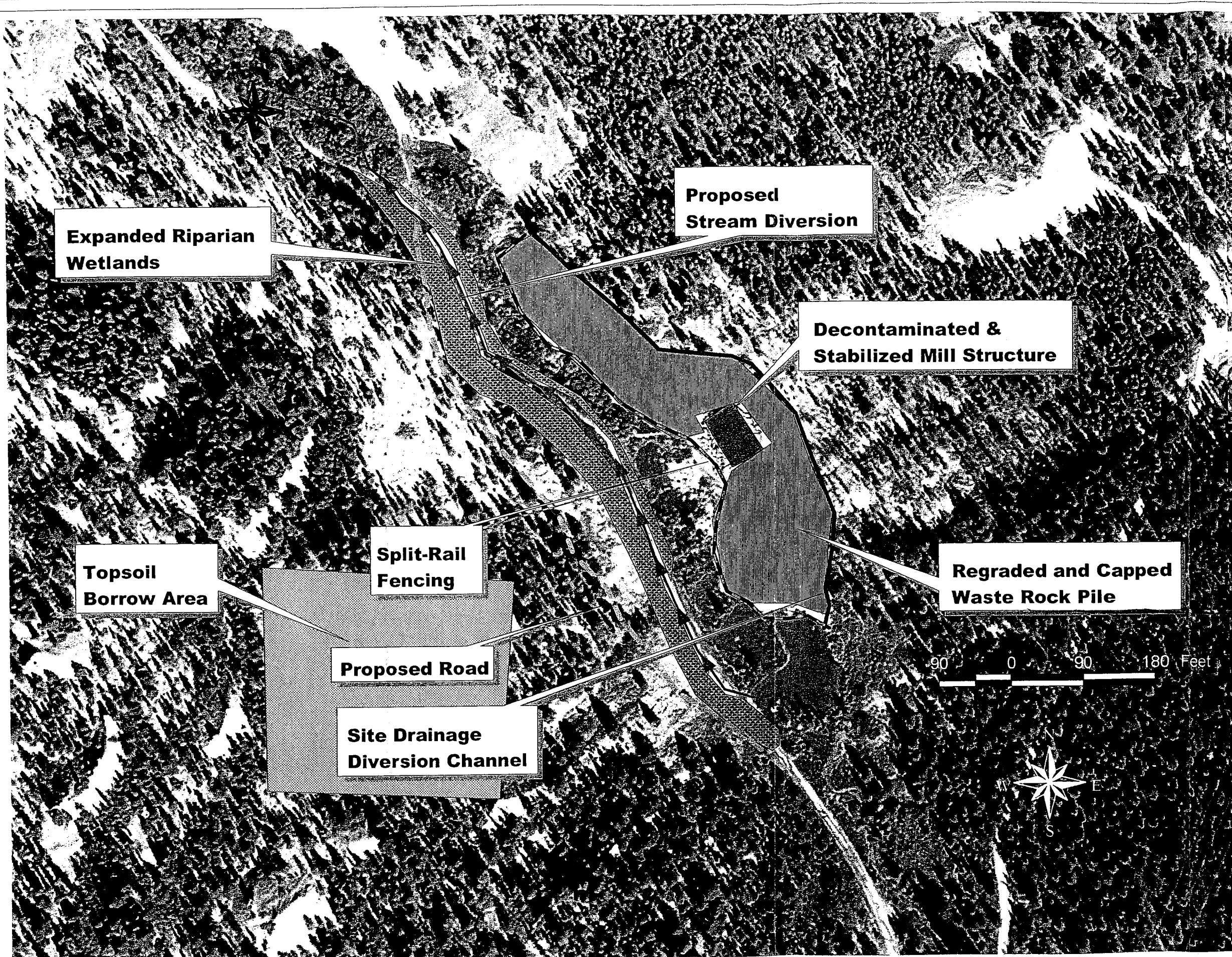
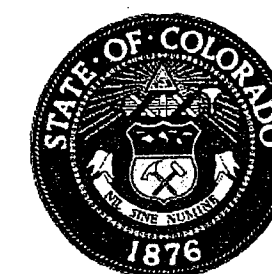


FIGURE 4

**Site Features -
Proposed
Alternative 4**

**Jessie
Mine and Mill**



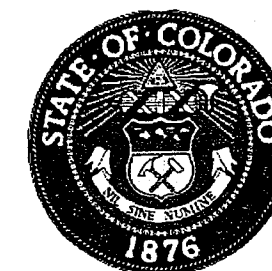
Colorado Department
of Public Health
and Environment

Major Items:
Waste Rock Pile Capping
Enlargement of Riparian Wetlands
Mill Structure Decontamination and Stabilization
Divert Gold Run Gulch
Institutional Controls
Mine Shaft Closure

FIGURE 5

**Site Features -
Proposed
Alternative 4A**

**Jessie
Mine and Mill**



Colorado Department
of Public Health
and Environment

Major Items:
Rip Rap Pile Perimeter (No Capping)
Enlargement of Riparian Wetlands
Mill Structure Decontamination and Stabilization
Divert Gold Run Gulch
Institutional Controls
Mine Shaft Closure

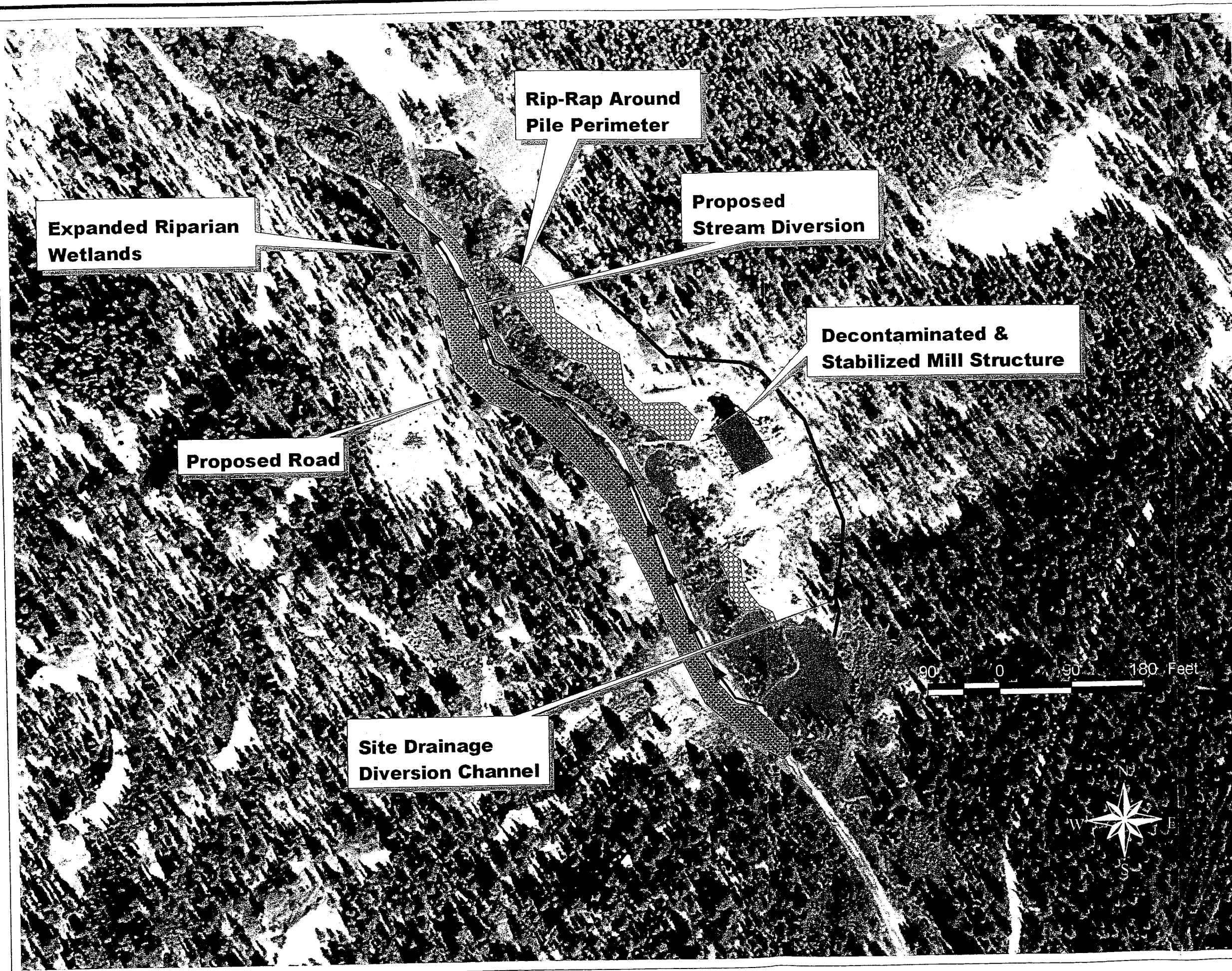


FIGURE 6

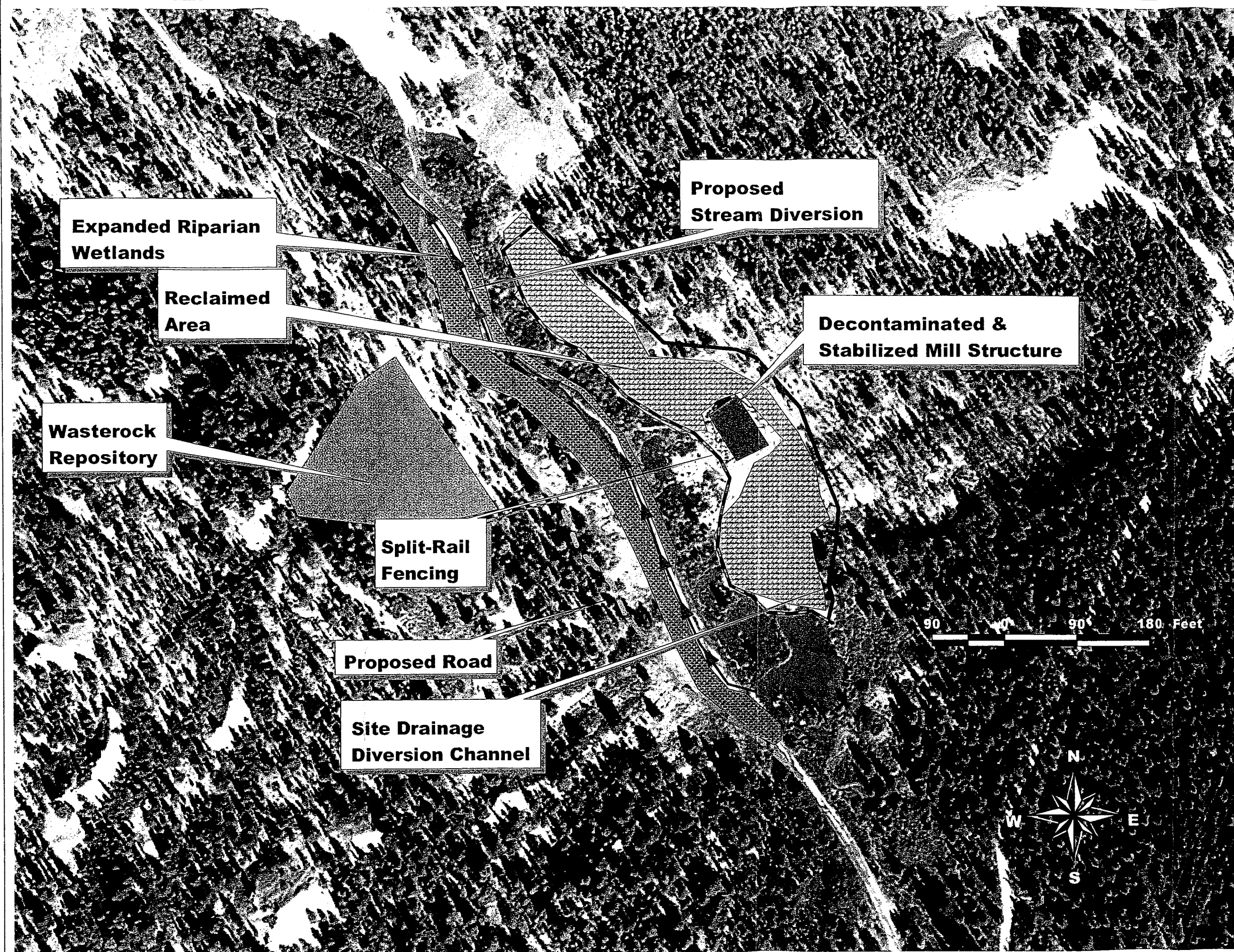
**Site Features -
Proposed
Alternative 5**

**Jessie
Mine and Mill**



Colorado Department
of Public Health
and Environment

Major Items:
Construct Repository
Expand Existing Wetlands
Decontamination and
Stabilization of Mill Structure
Divert Gold Run Gulch
Institutional Controls
Mine Shaft Closure



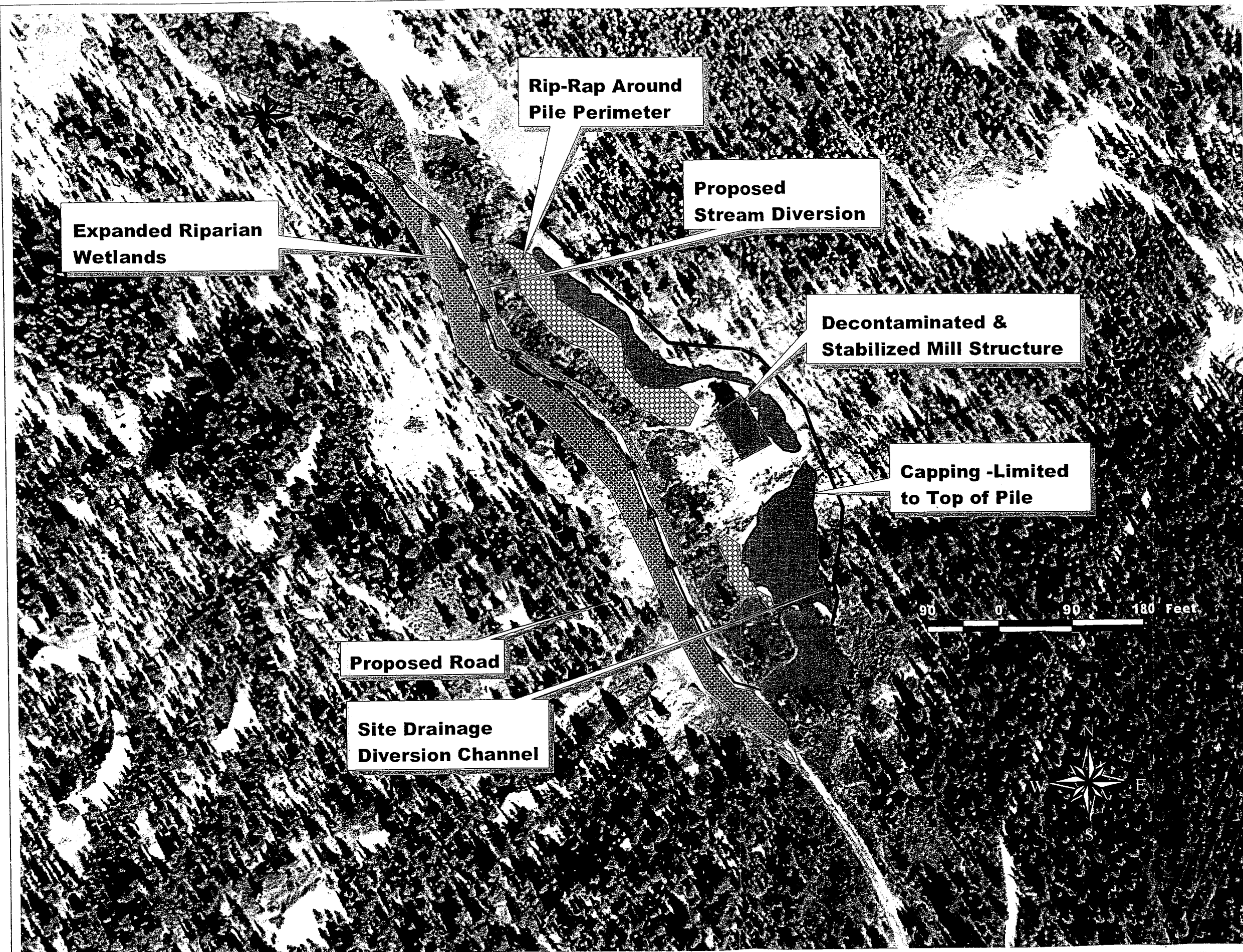


FIGURE 7

**Site Features -
Proposed
Alternative 6**

**Jessie
Mine and Mill**



Colorado Department
of Public Health
and Environment

- Major Items:**
- Waste Rock Capping
(Top Only)
 - Rip Rap Pile Perimeter
 - Institutional Controls
 - Mill Structure Decontamination
and Stabilization
 - Divert Gold Run Gulch
 - Mine Shaft Closure

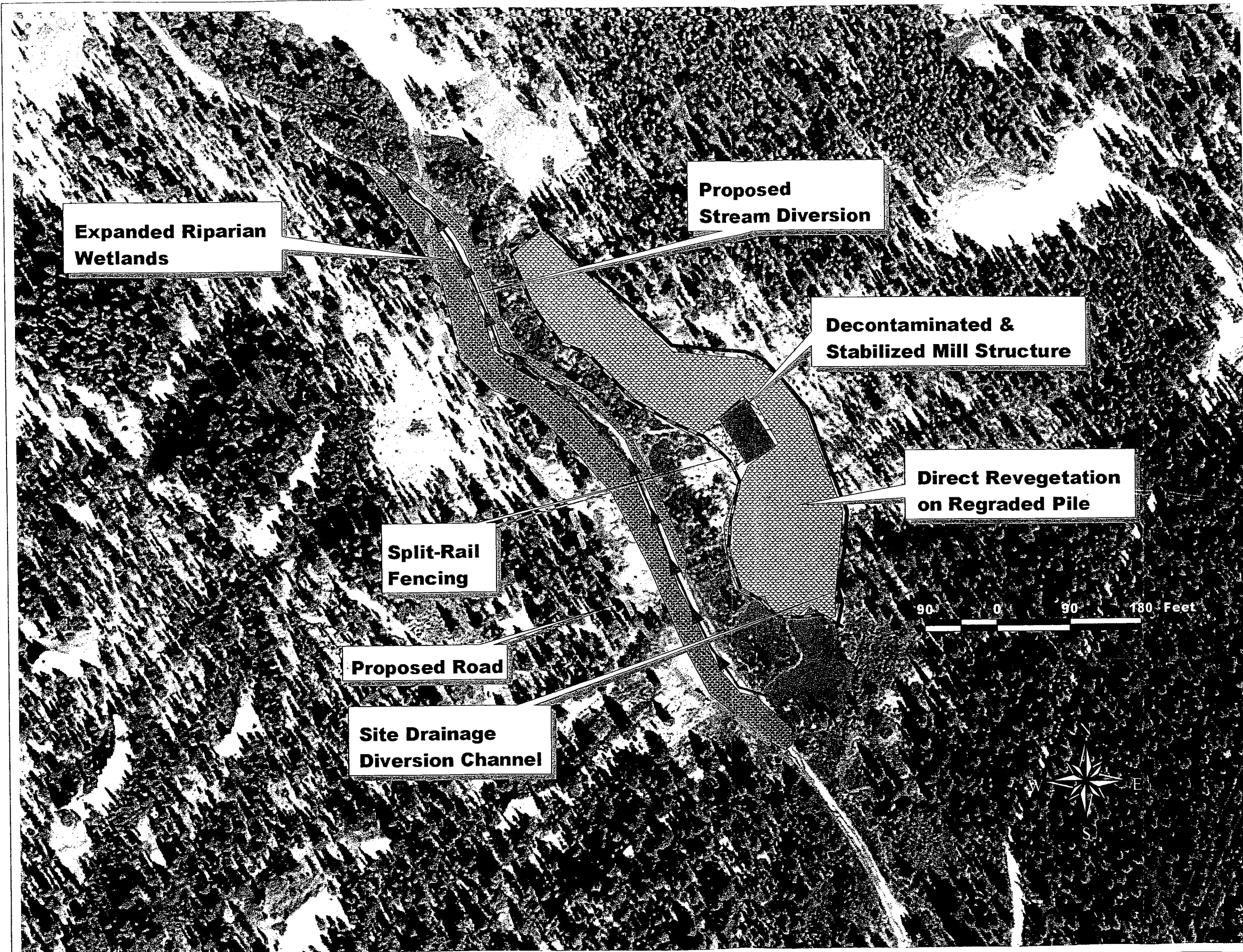


FIGURE 8

**Site Features -
Proposed
Alternative 7**

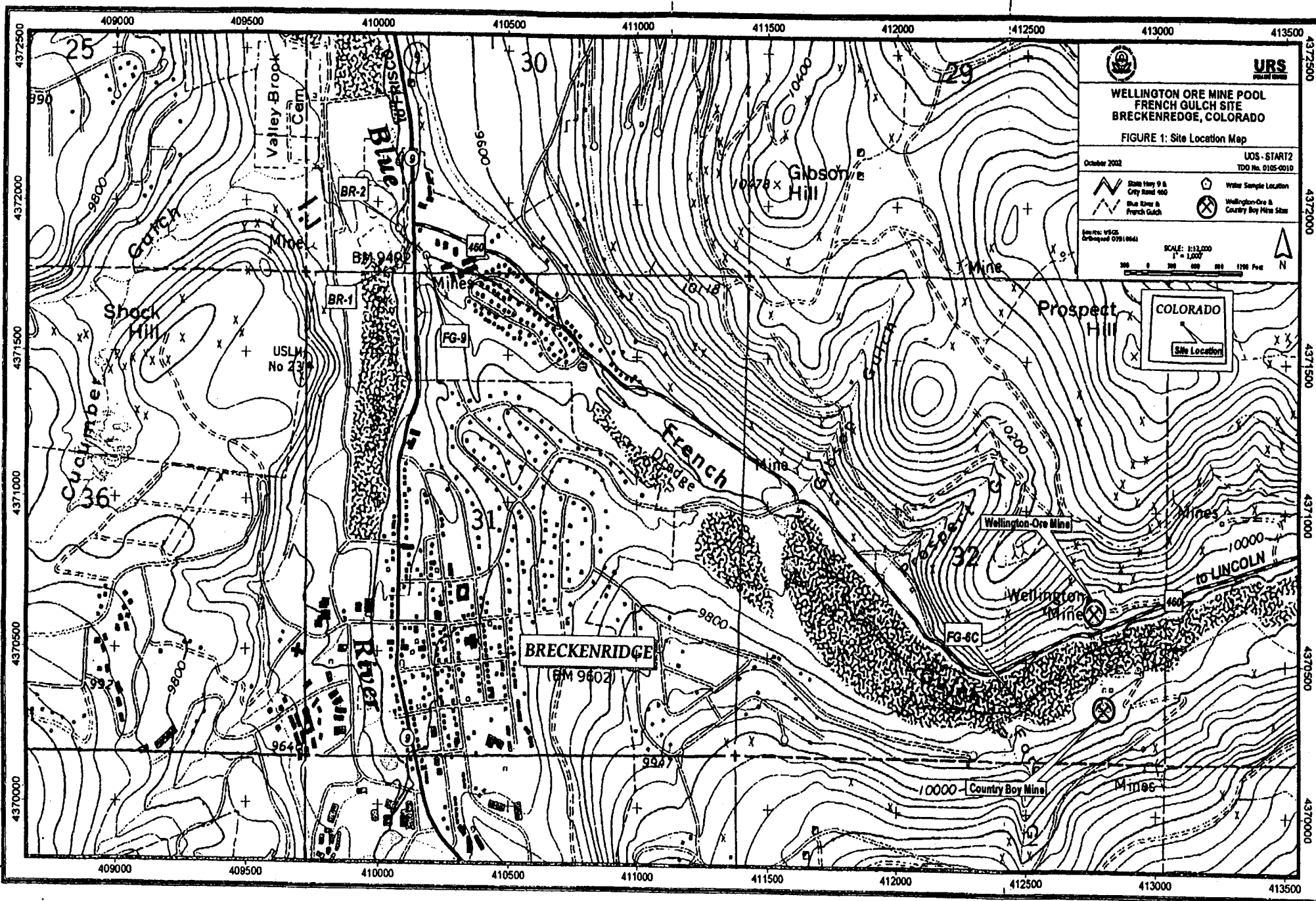
**Jessie
Mine and Mill**



Colorado Department
of Public Health
and Environment

- Major Items:**
Waste Rock
Direct Revegetation
Institutional Controls
Mill Structure
Decontamination
and Stabilization
Divert Gold Run Gulch
Mine Shaft Closure

Attachment No. 1
Site Location Map



Attachment No. 2
Response to Public Comments

RESPONSIVENESS SUMMARY

COMMENTS to the DRAFT ENGINEERING EVALUATION/COST ANALYSIS WELLINGTON ORO MINE POOL - FRENCH GULCH SITE Breckenridge, Colorado

This Responsiveness Summary presents a summary of the comments made by the public regarding the Engineering Evaluation/Cost Analysis (EE/CA) for the Wellington Oro Mine Pool - French Gulch Site. The comments were made by the public either at the June 13, 2002 public meeting or were submitted to EPA during the public comment period. This responsiveness summary presents responses to the comments and documents how public comments were integrated into the decision-making process. Multiple comments were received on some issues; for the sake of brevity, the comments are summarized and one answer provided.

The EE/CA was prepared to present the issues that impact the selection of a strategy to address contamination of French Creek and the Blue River by water emanating from the Wellington Oro Mine Pool, and included a listing and evaluation of alternatives that may be considered to meet project goals and objectives. A preferred strategy is presented based on evaluation of the alternatives.

The summarized comments are divided into five categories, including comments on: project goals and objectives, semi-passive treatment with no ponds, the preferred alternative, hydrology, and miscellaneous report items.

COMMENTS ABOUT PROJECT GOALS AND OBJECTIVES

Comment: The community is interested in improving water quality, as is included in the EE/CA, but is also interested in reducing ecological risk to non-aquatic species, protecting habitat, preserving historic artifacts, and creating public recreation opportunities. Can the project goals be expanded to address these interests?

Response: EPA and CDPHE are focused on improving water quality and reducing ecological risk to human and ecological receptors. Preserving historic artifacts is coordinated with the appropriate agencies when actions are taken to protect human health and the environment that may impact historic and cultural resources. Creating public recreation opportunities is not within the scope of authority of either agency. Therefore, the options presented here, while possibly creating recreational opportunities indirectly, focused on how to best protect human health and the environment. The agencies have worked within the framework of the FROG in order to coordinate these mandates with the broader community goals.

Comment: Do the project goals and objectives take into account the risks to humans and wildlife species other than brown trout?

Response: Risk Assessments for the site indicate that there is no risk to human health or to non-aquatic species from metals contamination in the stream. The risk assessment found that toxic levels of metals to aquatic life were present in French Creek and the Blue River downstream of the Wellington Oro Mine. Copies of the Risk Assessments and other site documents are available from EPA. Site documents are available at the Summit County Library and at the EPA Superfund Records Center, 999 18th Street, 3rd Floor South Tower, Denver, CO 80202, 1-800-227-8917 Extension 6473.

Comment: There were multiple comments regarding the selection of numerical standards. The comments were based on the limited physical trout habitat at the proposed point of compliance, studies that indicate

higher standards may be appropriate, and additional criteria that may be added after a total maximum daily load (TMDL) for the Blue River is conducted.

Some commenters stated that all state-and federal-mandated water quality issues should be addressed by the proposed action and the possible higher limits resulting from the toxicity tests can be incorporated into the applicable water quality standards. It is critical that this standard is quantifiable, technically feasible to reach and not subject to change after the remediation action is undertaken. It is important that the proposed action fits the State's mandate to complete a TMDL for the Blue River.

Other commenters stated that broader, more relaxed numerical standards should be used because the risk assessment and Colorado Division of Wildlife Aquatic Habitat Analysis indicate that the fishery is more habitat-limited than concentration-limited. It is likely that a much higher numerical standard would result in equal performance, because trout populations at BR-2 are limited by habitat and not only metals concentrations. The risk assessment performed by U.S. EPA appears to support a much higher numeric concentration objective than the 225 µg/L zinc selected in Section 4.

Response: The zinc concentration of 225 micrograms per liter was selected as water quality goal that is protective of a brown trout fishery. EPA believes that the removal action objectives for zinc and cadmium are protective of human health and the environment. This goal is supported by the Colorado Division of Wildlife. EPA recognizes that aquatic habitat in the Blue River is a factor that may limit the fishery. To address this concern, EPA has provided a grant to the Northwest Colorado Council of Governments to conduct a Use Attainability Analysis (UAA) of the impacted sections of French Creek and the Blue River. The results of the UAA will recommend appropriate water quality standards, including zinc and cadmium standards, based various criteria including aquatic habitat. This UAA will be presented to the State Water Quality Control Commission, the governing body responsible for establishing water quality standards in Colorado, at the hearing scheduled for Summer 2003. This board will determine the appropriate water quality standards for these sections of French Creek and Blue River. EPA plans, if technically possible, to revise the EE/CA goals to these new standards.

Comment: Based on temporary modifications of state water quality standards for lead and pH, the chosen alternative should be evaluated in terms of its capability to reduce lead concentrations and ameliorate pH in French Creek, in addition to treating zinc and cadmium.

Response: Lead has not been identified as a contaminant of concern at the Wellington Oro Mine, so it was not included in the evaluation of the effectiveness of the alternatives presented in the EE/CA. Lead precipitates easily in the processes proposed for the active and semi-passive treatment alternatives evaluated in EE/CA Section 6. The results of the Bureau of Reclamation and Colorado School of Mines jar tests indicate that the lead concentration was reduced to below the detection limit after lime treatment. Thus, the lead load generated from FG-6C will be removed by the treatment process.

Upon implementation of the lime treatment system with ponds, the surface water pH will increase because of two factors. First, the acidity discharged from FG-6C will be neutralized in the treatment process. Second, the pH of the water discharged from the treatment process will be alkaline, providing additional neutralization to other sources of acidity discharging to French Creek.

Comment: Multiple comments were received questioning the location of the point of compliance at BR-2. The comments were based on the limited physical habitat at BR-2, the recent restoration of the Blue River several hundred yards downstream of French Creek based on recreational, land use, and aesthetic goals, impacts from current and future uses of upstream water rights in the Blue River, impacts from unknowns in the hydrology of French Creek, and cost/benefit considerations.

One commenter suggested that, in order to minimize the influence of upstream water uses and potential impacts from unknowns in the French Gulch hydrology on compliance with numerical standards, the objective be stated in terms of a maximum concentration in the water discharged from the treatment facility. Alternatively, another commenter suggested that due to habitat limitations, the objective should be stated in terms of metal concentrations in the Blue River 3,000 feet downstream of the French Creek confluence.

Response: The identified point of compliance was determined to be the most appropriate location based on current water quality standards. It is the most appropriate location that reasonably represents the water quality in the Blue River after mixing with French Creek. EPA has provided a grant to Northwest Colorado Council of Governments to conduct a Use Attainability Analysis. This Use Attainability Analysis will evaluate if a realignment of the stream segments is appropriate. If it is recommended that the stream segments be realigned and the State Water Quality Control Commission approves of this change, EPA will revise the point of compliance for this action.

Comment: Because the property may change hands and local government may incur liability, community support for this action is dependant upon the preferred alternative being the only action necessary to mitigate water quality concerns from the Wellington/Oro complex.

Response: It is important for potential purchasers of contaminated properties to fully understand their risks and responsibilities regarding environmental liability as well as conduct independent evaluations of the proposed actions. A prospective purchaser's agreement between EPA and the parties interested in purchasing the property will identify the responsibilities of both EPA and the purchasing parties.

COMMENTS ON THE SEMI-PASSIVE TREATMENT WITH NO PONDS ALTERNATIVE

Comment: Some commenters requested that the semi-passive treatment system without ponds be reconsidered based on lower cost, equivalent effectiveness, pond aesthetics, and more efficient sludge disposal. Data collected during B&B Mines' pilot tests were cited as support for the effectiveness and implementability of the no-ponds alternative.

Some commenters suggested a phased treatment system, starting with the semi-passive treatment system without ponds. The system would be monitored carefully, and if not effective, it would be modified to the current preferred alternative (semi-passive treatment with settling ponds). The request was based on cost savings and the ability to convert the system if necessary. A reasonable time period and clear triggers to revert the treatment facility to the original "semi-passive" design should be provided.

Response: B&B Mines, the current landowner of the Wellington/Oro Mine, requested that EPA evaluate in the EE/CA the proposal to return treated water to the mine pool (also referred to as the pump back alternative). EPA honored this request. In the technical evaluation of this alternative, it was found that the pump back alternative would not achieve water quality goals for the following reasons:

- a) *Neither B&B mines nor EPA were able to identify any mines where this technology has been successfully implemented. This is an unproven technology.*
- b) *The pump back system would return mine pool water discharged at FG-6C back to the mine pool adding significant flow. This additional flow must cause increased discharges at FG-6C or other unidentified locations. Greater flow at FG-6C would require more treatment. Ultimately, water must somehow leave the mine pool and discharge to French Creek. Under the pump back system, the water discharging to French Creek would not be treated. Since the lime injection study found that the mine pool chemistry could not be significantly impacted by adding a base, the water*

discharged to French Creek would contain contaminants from the mine. While in the short term, water quality might improve under the pump back system, in the long term, conditions in French Creek and the Blue River would most likely remain unchanged.

- c) In the preferred alternative, discharge of treated water to French Creek or to the groundwater system provides additional benefits to the watershed. This treated water will provide additional neutralization capacity to reduce the impact of uncaptured sources of acidity from the Wellington Oro Mine. It will also provide alkalinity to the watershed, resulting in reduced aquatic toxicity.

While EPA is generally supportive of phased approaches to cleanups, it was found not to be appropriate at this site since the pump back alternative was found not to be feasible.

Materials handling should not be more problematic for the settling pond sludge than for the lime treated water. The pumping may be "easier" but there will be much more pumping required. Premature filling of the mine pool may be more likely without settling ponds because of the increased water volume and similar to slightly lower solids volume. The highest pumping rate into the mine pool will be when the FG-6C flow is highest, possibly requiring the addition of a holding pond.

Comment: The visual and wildlife impacts of the settling ponds within a area intended to be open space is of concern.

The visual impact of the ponds can be minimized by the use of native materials and will be considered in the design of the selected alternative. Appropriate steps will be taken to minimize impacts to wildlife.

Comment: Conclusions discounting the applicability of passive treatment are premature and additional relatively inexpensive testing may be warranted based on the potential benefits associated with this treatment technology.

Response: EPA's Office of Research and Development evaluated the applicability of passive water treatment technologies to the French Gulch site. This study found that passive water treatment would not be reliable in reducing metals loading to French Creek and the Blue River below the Remedial Action Goal. Large scale application of passive treatment for sites similar to French Gulch has not proven successful in practice. Given that the community is interested in a final remedy that will be effective in improving water quality without undue expense, a proven reliable technology was selected.

COMMENTS ON THE SELECTED ALTERNATIVE

Comment: Several commenters supported the selection of the preferred alternative, but requested that current and/or potential owners should be given the opportunity to review engineering designs and comment on future design work as much as practical to ensure that the final project is as efficient as possible in meeting all project goals, as provided by Superfund guidance.

Response: Public participation will be encouraged throughout the design and implementation phases of this project.

Comment: Clarify the difference between active treatment and the semi-passive treatment technology selected.

Response: Passive treatments are considered those that provide the circumstances for natural processes to occur to treat the water. Active water treatment generally requires a full-scale plant with full-time operators to house facilities to treat the water using a variety of processes. The "semi-passive" water

treatment described here was intended to allow the precipitation processes to occur on a reliable basis in conditions that do not normally allow passive treatments to be successful. Initially, it was intended that in-line lime addition and mixing be used to induce precipitation of metals, but the need to operate the facility year-round prevented that from being a viable alternative. The system described is as close an approximation to passive treatment as site conditions allow. The more "passive" alternatives of wetlands or Successive Alkalinity Producing Systems (SAPS) could be implemented for a polishing step if desired.

Comment: Provide additional information regarding sludge generation and the capacity of the ponds to hold at least three months of sludge generation, even during winter conditions. The pond design should include provisions to meet structural criteria as well as minimize the visual impact.

Response: *The sludge volume calculations are considered to be sufficiently detailed and conservative for the purposes of the EE/CA. The sludge volume was calculated using studies by Colorado School of Mines and the U.S. Bureau of Reclamation. For each step of the calculation, the more conservative value from the two studies was used. At the design flow rate of 250 gpm, the calculated sludge volume is 2,800 gallons per day, or 0.0078 gallons sludge/gallon untreated water. After treating water for 90 days, a sludge volume of 252,000 gallons, or approximately one-third of one settling pond volume is expected. During winter conditions, it would take approximately 225 days to reach the same quantity of sludge in each settling pond. If the influent flow rate is 100 gpm, as is more typically the case, the retention time near the end of a 90-day cycle will be approximately 3.25 days, significantly higher than the 2-day retention time assumed in the design. Additional laboratory testing will be completed to evaluate sludge volumes during the design phase of this project.*

The conceptual design of the ponds includes fixtures and sizing to accommodate treatment during winter and early spring. The selected design flow rate of 250 gpm was an attempt to find a balance between building too large a system that is at capacity only a few weeks per year and having a smaller system that would bypass untreated FG-6C water and cause standards to be exceeded during high flow periods. The combination of low winter flow rates and an extra pond available for use means there is enough capacity to treat water throughout the winter even if the top portion of each pond is frozen and the sludge volume is higher than in springtime due to higher metal concentrations.

The existing dredge material will be used for substrate under and around the ponds but the ponds will be constructed below the existing ground surface. The dredge material may be used around the ponds to leave the existing "mining history" ambiance, if requested by the community. After the initial pumping of water out of the seep, the system will operate by gravity flow. It was considered important to construct the ponds above the groundwater.

Comment: Pumping a sludge with higher solid content (12.5% as described in the EE/CA for the alternative using settling ponds) would likely plug the Oro Shaft because the higher-solid sludge will not disperse throughout the mine pool as suggested in this section. The text should be revised to evaluate how soon the Oro Shaft will fill assuming that the sludge does not disperse throughout the mine pool.

Response: *It is not expected that the pumping characteristics of the pond sludge will be significantly different than for the low-solids sludge/water. Based on available data, the mine pool volume is sufficient to contain 250 years of sludge resulting from lime precipitation of FG-6C seep water. The unknown effects of pumping sludge into the mine pool and limitations in distribution of the sludge throughout the various mine pool levels are listed as possible concerns in the EE/CA. Further evaluation of the method of delivery of sludge to the mine pool will be conducted during the remedial design phase of this project.*

Comment: The approximate size of the sludge-collection vault and pump sizing should be indicated.

Response: Pump and vault sizing was performed with the sludge characteristics assumptions listed above. More precise equipment sizing will be performed during a subsequent design phase.

Comment: Sludge disposal from a Bureau of Reclamation-operated facility in Leadville, Colorado, is used as an example of off-site disposal feasibility. The comparability of the BOR-operated facility to the semi-passive treatment system at Wellington-Oro should be discussed prior to using this as an example.

Response: The Water Treatment Plant in Leadville uses sodium hydroxide precipitation to treat acid mine drainage. The sludge is dewatered prior to transport and disposal, as would be expected at French Gulch if off-site disposal is required. The Leadville sludge does not fail TCLP and the French Gulch sludge did not fail TCLP in jar tests. The cost for disposal of the sludge at the French Gulch site was estimated using the calculated sludge volume at the French Gulch site, not on the volume produced at the Leadville Water Treatment Plant.

Comment: The suitability of treatment pond effluent for lime slaking should be verified. A production well for slaking water may be required, similar to the option without settling ponds.

Response: Many active water treatment plants find effluent water adequate for lime mixing. The need for clean process water will be considered during the design phase of the project.

Comment: The overall chemistry and characteristics of the discharge from the settling ponds should be described.

Response: The water will be discharged to the French Creek alluvium, allowing for excess alkalinity to assist in attenuation of contaminated groundwater prior to discharge to the stream. There should not be a high concentration of suspended solids except under upset conditions. If water with excess alkalinity is discharged in a manner that it "short-circuits" to French Creek, metals from water in French Creek may precipitate in the creek. This is not expected to be a large-scale problem. The dissolved solids concentrations, particularly calcium, should not pose a problem to the fishery.

Comment: The FG-6C seep is likely to be the most effective location for water collection, given that some type of collection and treatment system is necessary.

Response: Agreed.

Comment: Assumed lime addition rates should be provided.

The lime consumption rate was estimated to be approximately 2.83 pounds lime per 1,000 gallons influent water.

TECHNICAL COMMENTS - HYDROLOGY

Comment: Is the lack of complete characterization a concern in the design of the treatment system and predicting the overall effectiveness of reducing metals contamination at BR-2?

Response: It is understood that the primary source of metals loading to the stream from the Wellington/Oro mine discharges at seep FG-6C. By collecting and treating this seep, the metal loadings to French Creek and the Blue River will be significantly reduced and the water quality goals established in the EE/CA will be achieved. Collecting and treating additional mine pool effluent would be difficult and cost prohibitive. There is sufficient knowledge of the hydrology of the mine to conduct this action.

Comment: What is the basis for the design flow rate given the water flow and water quality data from 1998 to 2001. A statement on how the flow rates for FG-6C from 1998 to 2001 may compare with historical flow rates should be considered. This could be done, for example, by comparing historical snowpack as a surrogate.

Response: The stream flows of the Blue River, as measured at a U.S. Geological Survey (USGS) gauging station downstream of the site from 1998 through 2001, were compared with "normal" historical flow rates for the period of record. Those four years were normal to slightly above normal flow rates. A comparison of historical snowpack may also be of use, but would be expected to mimic the stream flow patterns. Either data set relates to flow rates at FG-6C but does not directly impact them because the seep flow is regulated by the hydraulic head and the mechanics of the faults through which the seep water flows. The design rate is relatively high related to these "average high" values indicated in the EE/CA. The selected treatment flow rate was chosen for several reasons: calculated sludge accumulation rate, one very high FG-6C flow rate and other slightly high flow rates despite "average to high" stream flow conditions (1,077 gpm in 1999, 314 gpm in 2000); the design flow rate allows for normal operation of the facility (no requirement to "empty" the ponds just prior to the spring runoff); and allowances for decreased pond capacity during winter operating conditions. These issues will be reevaluated in more detail during the design phase of this project.

Comment: A description of the relationship between French Gulch and the Blue River should be provided in Section 2.1 given that the removal action objectives are focused on the Blue River.

Response: French Gulch flows into the Blue River. The relative flow rates are provided in Table 2 of the EE/CA.

Comment: The text should be revised to more completely describe the hydraulic relationship between the mine pool and the alluvium/French Creek flow system.

Response: The hydraulic relationship between the mine pool and the alluvium/French Creek flow system is briefly described in the EE/CA and more thoroughly described in the Final Hydrogeologic Report (American Geological Services, Inc. (AGS) 1999).

Comment: Contrary to the description presented in Section 2.5, the chemical processes governing the formation of metal-bearing solutions in mines containing sulfide-rich ores are relatively well understood. The flow pathway of water within the mine and toward discharge areas is the primary area of uncertainty. The mine pool contains elevated concentrations of some metals, most notably zinc. However, no data indicate that the mine-pool chemistry is "very unstable." Chemical concentrations in the mine pool fluctuate over a relatively narrow range and appear to be in overall equilibrium. This paragraph should be modified to more accurately reflect the data and to remove the unjustifiably inflammatory and non-quantitative descriptions such as "very unstable" and "highly reactive."

Response: The statement that "The mine pool chemistry is very unstable, highly reactive, and chemical processes are poorly understood" is quoted from the AGS 1999 reference. The reference to the AGS report at the end of this section applies to the last three paragraphs of the section. There was no intent to imply that the chemical processes within sulfide bearing ore are not known, in fact the EE/CA describes some of the processes. It is the chemistry at different locations within the mine pool and the chemical conditions at which the processes are occurring that is uncertain. Reports indicate that the mine pool concentrations and redox conditions vary significantly within the mine pool and also vary seasonally.

Comment: Section 2.7 describes a major recharge component to the mine pool being spring runoff from the surrounding hillsides. In Section 2.5, page 6, regional groundwater is described as the major source of

inflow to the mine pool, and precipitation and snowmelt are dismissed as relatively minor components to mine-pool recharge. These sections should be reconciled to provide a single conceptual model of mine-pool recharge that integrates all available data.

Response: The spring runoff recharges the regional groundwater that recharges the mine pool and provides the driving force for transport of contaminated water from the mine pool to downgradient faults and seeps. Precipitation on the mine site that percolates into the mine pool is a minor component of recharge.

MISCELLANEOUS COMMENTS REGARDING REPORT CONTENTS

Comment: All available analytical data and field observations should be incorporated into the EE/CA, especially those data related to the bench-scale and full-scale pilot testing of remediation alternatives that was performed by B&B Mines.

Response: The flow rate and water quality data provided to EPA were included in the EE/CA with one exception. Data collected in disproportionate amounts, for example during a pilot study, were not all included in the statistical analysis of summer and winter flow and chemistry parameters, but representative values were used to indicate conditions during that period.

It is assumed that the previously published Draft EE/CA was sufficient publication of the bench-scale and full-scale pilot testing performed by B&B Mines. It was inappropriate to include those documents in the EE/CA except by reference. The data are referenced in the EE/CA.

Comment: An Executive Summary should be provided highlighting the data and conclusions presented in the body of the report. This would be especially helpful for lay reviewers of the document.

Response: A fact sheet describing the EE/CA was prepared and distributed to the public. The fact sheet serves as a summary of this report for the general public.

Comment: No information regarding vegetation, wildlife, aquatic life, or cultural and historic resources is provided in Section 2.

Response: These topics are addressed in the Site Characterization Report provided by B&B Mines and additional work was not deemed necessary for the purposes of the EE/CA. The natural and cultural setting of the site is discussed as appropriate in Section 3, Identification of Remedial Action Objectives and the references included therein.

Comment: Mine water discharge into the alluvium and French Creek may occur along the faults described in Section 2.5. A significant source of mine water to French Creek appears to be the seeps at FG-6C, which is the driving force behind the selected remedy. The location of should be included in the description of discharge areas.

Response: The location of seep FG-6C is indicated on Figure 1 of the EE/CA. It is located near French Gulch Road southwest of the Wellington Oro Mine. Flow rates from the seep and other site monitoring points are indicated in EE/CA Table 2. The seep appears to be regulated by the hydraulic head between the mine pool and the surface at the seep location and by the fault configuration. Information regarding the relative contribution of the FG-6C seeps and other discharge locations is taken from the American Geological Services, Inc. Final Hydrologic Report dated May 1999.

Comment: A reference should be provided in Section 2.5 for the conclusions related to the lithium-chloride tracer studies performed by the United States Geological Survey. This work was not performed by UOS.

Response: *Acknowledgment of the American Geological Services, Inc. and the USGS studies and the B&B Mines Draft EE/CA was made in the introduction (Section 1) and the AGS reference was repeated at the end of this section, but could have been included at the end of each applicable paragraph.*

Comment: The text should be revised to reflect the fact that BR-2 is not a USGS gauging station.

Response: *BR-2 is, indeed, not a USGS gauging station and should not have been listed as such.*

Comment: The final paragraph on page 47 describes estimated cadmium and zinc concentrations at BR-2 after the treatment system is implemented. The words "and zinc" should be added to the parenthetical clause of the fourth sentence to correctly indicate that zinc concentrations would have met the removal objective for zinc for all but three of 26 monitoring events.

Response: *The sentence should have read: "The calculations indicate that cadmium and zinc concentrations at BR-2 will meet the remedial objective most of the time (all but 2 occasions out of 17 for cadmium and all but 3 occasions of 26 for zinc)."*

Comment: Section 6.1.2 has the identical title of Section 6.1.1. The title should be revised to reflect the actual contents of the section.

Response: *The title is an error and should read "Conceptual Design for Semi-Passive Lime Treatment System Using Settling Ponds"*

Comment: Table 3 should be referenced in the design criterion in Section 6.2.1.

Response: *Table 3 should be referenced for both sections.*

Comment: Clarify the sentence in Section 6.1.1 that indicates "...treatment system discharge concentrations within the range evaluated did not have a significant impact on compliance with water quality standards in the Blue River." The range of discharge concentrations that would impact compliance in the Blue River should be described. These may have a direct impact on the feasibility and cost of the selected remediation alternative.

Response: *The discharge concentrations evaluated were between the cadmium and zinc effluent concentrations estimated from Colorado School of Mines and the U.S. Bureau of Reclamation jar tests (described as part of Summit County Water Quality Comments and in the EE/CA). The referenced calculations indicated that meeting the BR-2 removal action objective did not depend on whether the water was treated to the lower value (estimated for an active water treatment system) or the higher value (estimated for the semi-passive treatment system with settling ponds). The actual values are stated in the previous paragraph of the EE/CA.*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
<http://www.epa.gov/region08>

Ref: 8EPR-SR

ACTION MEMORANDUM ADDENDUM #1

SUBJECT: Request for Approval of Addendum #1 of the November 24, 2002 Action Memorandum for a Non-Time Critical Removal Action at the French Gulch/Wellington Oro Site, Summit County, Colorado

FROM: Victor Ketellapper, RPM

THROUGH: Russ LeClerc, Unit Leader

Dale Vodehnal, Program Director

To: Max Dodson, Assistant Regional Administrator
Office of Ecosystems Protection and Remediation

CERCLIS ID # COD0001093392
SSID# 08-5F

Category of Removal: Non-Time Critical

I. PURPOSE

This addendum documents the changes in the proposed action resulting from the adoption of the site specific water quality standards by the Colorado Water Quality Control Commission for French Creek and the Blue River and allows for alternative water treatment technologies to be considered for this action.

On November 24, 2002 EPA issued an Action Memorandum for the French Gulch/Wellington Oro Site (the Site), Summit County, Colorado. At that time, a proposal to revise the water quality standards in French Creek and the Blue River was being prepared by the Summit Water Quality Committee. The proposal was to evaluate current conditions in terms of aquatic life, physical habitat, stream hydrology, and water column chemistry. Based on this evaluation, a recommendation was developed for site specific water quality standards that would be protective of the aquatic life potential for stream



segments in French Creek below the Wellington Oro Mine and in the Blue River, below the confluence with French Creek. The Colorado Water Quality Control Commission considered and approved the proposal for these site specific standards. In the Action Memorandum, EPA stated that it would reconsider the proposed action in the event the water quality standards were changed so that goals of removal action and the Clean Water Act would be consistent. This addendum provides for the revisions to the proposed actions resulting from changes in the water quality standards.

After approval of the Action Memorandum, Summit County issued a request for proposal (RFP) to design and construct the water treatment portion of the remedy. This request for proposal allowed for vendors to propose alternative water treatment technologies. This addendum provides for the flexibility to choose an alternative water treatment technologies and criteria to evaluate these alternative technologies.

This addendum only affects the proposed action portion of the Action Memorandum. Section V of the Action Memorandum is amended as described below. All other sections of the Action Memorandum remain unchanged.

V. PROPOSED ACTIONS

An EE/CA describing several alternatives to address the discharge of acid mine drainage from the Wellington Oro Mine Pool was completed on May 29, 2002. The document is titled: *Wellington Oro Mine Pool, Draft Engineering Evaluation/Cost Analysis*. This document, along with the administrative record, was available at the Summit County Library in Breckenridge, Colorado during the public comment period. A Fact Sheet that summarized the EE/CA was also made available to the public during this time. EPA's preferred alternative was identified as Semi-Passive Water Treatment with Settling Ponds. The primary criterion for selecting the Semi-Passive Water Treatment technology over other treatment technologies was cost. After approval of the Action Memorandum, cost proposals from alternative water treatment technologies vendors provided data that other technologies could provide the same quality of treatment at an equal or lower cost. Thus, the proposed action is revised to allow for an alternative water treatment technology to be implemented that will attain the discharge water quality criteria.

The Use-Attainability Analysis, Lower French Gulch and the Blue River Downstream from French Gulch near Breckenridge, Summit County, Colorado prepared by Summit Water Quality Committee on May 5, 2003 proposes site specific water quality standards in French Creek and the Blue River. This study found that aquatic habitat in the Blue River was severely impacted by historic dredge mining, limiting the use to an adult brown trout fishery. This formed the basis for establishing site specific standards for zinc and cadmium, the two contaminants released from the Wellington Oro Mine. In

French Creek below the Wellington Oro Mine, ambient water quality conditions were adopted as the standard since water quality impacts from historic mining could not be reversed. A reevaluation of the water treatment requirements based on the newly adopted water quality standards resulted in changes in volume of water to be treated during spring runoff in the proposed action.

A. Proposed Action Description

1. The proposed action for water treatment includes the following components:
 - a. Water discharging from the Wellington Oro Mine at Seep FG-6C will be collected. This seep is the primary source of acid mine drainage discharging from the Mine.
 - b. The collected water will be pumped to the treatment facilities. The maximum pumping rate will be 150 gallons per minute. During spring runoff, flows are expected to exceed this pumping rate. During that time, flows exceeding 150 gallons per minute will bypass the treatment process.
 - c. A physical/chemical processes will be utilized to remove contaminants from the water. The treatment process will be selected based on cost, performance, reliability, sludge disposal, and operator preferences. The effluent water quality discharged is to have a cadmium concentration of less than 4 ug/l and a zinc concentration of less than 225 ug/l.
 - d. Solids generated from the treatment process will be separated from the water prior to discharge.
 - e. The treated water will be discharged into the French Creek alluvium.
 - f. The metal sludge generated will be either disposed of into the abandoned mine workings, sold as a metal concentrate, or disposed of into a solid waste landfill.
 - g. If necessary, a physical barrier in French Creek that will prevent non native trout from migrating from the Blue River into upper French Creek will be constructed and maintained. If a physical barrier exists, the barrier shall be maintained.

- h. This water treatment system will be operated 24 hours per day, 7 days per week until water discharges from FG-6C no longer pose a risk to the environment.

2. Contribution to Remedial Performance

The response actions described in this Action Memorandum are consistent with and will contribute to the performance of long-term response actions at the Site. No remedial actions are anticipated at this Site.

3. Description of Alternative Technologies

Two alternative treatment technology proposals were considered by EPA. The first proposal was considered during the EE/CA. This was named the Semi-Passive Water Treatment without Settling Ponds in the EE/CA. The second alternative treatment proposal considered was a result of a request for proposal for alternative treatment technologies issued by the Summit County. This resulted in four different technologies that could be considered for treatment of the discharge from the Wellington Oro Mine. Both of these proposals are discussed in this section.

Semi-Passive Water Treatment without Settling Ponds

At the request of B&B Mines, the current landowner of the Wellington Oro Mine, an alternative technology, the Semi-Passive Water Treatment without Settling Ponds, was evaluated in the EE/CA. This alternative was also referred to as the pump back alternative. In this alternative, water discharged from the mine at seep FG-6C would be treated with lime. The treated water then would be discharged to the mine. In the technical evaluation of this alternative, it was found that the pump back alternative would not achieve water quality goals in the long term for the following reasons:

- a) Neither B&B mines nor EPA were able to identify any mines where this technology has been successfully implemented.
- b) In the pump back system, water discharged from the mine pool at FG-6C is returned to the mine pool. This adds significant flow to the mine pool. This additional flow must cause increased discharges at FG-6C or other unidentified locations. Increased discharge from FG-6C would increase the volume of water that must be treated. Increases in discharges from unknown locations would cause increases in metals concentrations in French Creek and the Blue River. Releases from new discharge locations may not be detected immediately, possibly not until the water quality at BR-2 is impacted. Depending on the location of new

discharge locations, it may be difficult to then find a treatment method as simple and cost effective as the currently proposed semi-passive treatment with settling ponds.

Ultimately, water must somehow leave the mine pool and discharge to French Creek. In the pump back system, any water discharged to French Creek would not be treated. Since, the lime injection study found that the mine pool chemistry could not be significantly improved by adding a base, the water discharged to French Creek would be contaminated. While in the short term, water quality could improve under the pump back system, in the long term, conditions in French Creek and the Blue River would likely return to current conditions, rendering this alternative ineffective.

c) In the preferred alternative, discharge of treated water to French Creek or to the groundwater system provides additional benefits to the watershed. This treated water enhances flow in French Creek and the Blue River and will provide additional neutralization capacity to reduce the impact of uncaptured sources of acidity from the Wellington Oro Mine. It will also provide alkalinity to the watershed, resulting in reduced aquatic toxicity.

Alternative Water Treatment Technologies

Summit County issued a request for proposal for alternative treatment technologies to treat water discharging from the Wellington Oro Mine. The purpose of this request for proposal was to identify alternative water treatment technologies that could provide the same quality treatment at an equal or lower cost than the alternative selected in the November 24, 2002 Action Memorandum. Four proposals were received for alternative water treatment technologies. The technologies proposed included: 1) Passive/Wetlands Treatment; 2) Ceramic Filtration; 3) Sulfide Precipitation; and 4) Lime Treatment with a Settling Tank. These proposals are being reviewed to determine if any of these technologies would be as effective in implementing this action.

4. Engineering Evaluation/Cost Analysis

An EE/CA titled, *Wellington Oro Mine Pool, Draft Engineering Evaluation/Cost Analysis* was completed on May 29, 2002 by URS Operating Services, Inc. This EE/CA considered 4 alternatives for addressing the discharge of acid mine drainage from the Wellington Oro Mine.

5. Applicable and Relevant and Appropriate Requirements "ARARs"

The State of Colorado and the EPA have reviewed the ARARs for this

Site. The ARARs determined to be practicable for the Site are:

- a. Federal Clean Water Act
- b. Colorado Water Quality Standards
- c. Safe Drinking Water Act, Underground Injection Control Program
- d. Colorado Solid Waste Disposal Regulation
- e. Colorado Mine Land Reclamation Act
- f. Endangered Species Act
- g. Colorado Environmental Covenant Requirements – CRS 25-15-317-327

6. Performance Standards

Performance Standards for this action are to compliance with the water quality standards for zinc and cadmium in Segment 2a of the Blue River. This will be accomplished by monitoring water quality within Colorado Stream Segment 2a of the Blue River. This is the stream segment that is impacted by mining activities within French Gulch. Samples will be collected and evaluated for pH, specific conductance, temperature, dissolved oxygen, hardness, cadmium, and zinc.

7. Project Schedule

The design of the selected action is planned to begin during the Fall of 2004. Construction of the facilities is scheduled to begin during the summer of 2005. The water treatment system is scheduled to be operational in 2005. This schedule is dependent on obtaining agreements in a timely manner with B& B Mines as well as the Town of Breckenridge and Summit County, if they are successful in purchasing this property.

8. Estimated Costs

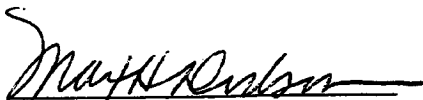
The estimated capital costs for this action using on-site sludge disposal are \$2,146,000. Annual operations and maintenance costs are estimated as \$192,000. The 30 year present value cost is estimated as \$5,070,000. If off-site disposal of the sludge is required, the 30 year present value costs increase to \$6,813,000.

9. Public Comment

A public comment period was held on EPA's proposed plans for this Removal Action from May 31 through June 29, 2002. A public meeting was held on June 13, 2002 in Breckenridge. A transcript of the public meeting is included in the administrative record for the site. EPA's responses to the comments received during the public meeting and written comments received during the public comment period are found in Attachment 2 of the November 24, 2002 Action Memorandum

This addendum to the Action Memorandum was discussed the French Gulch Remedial Opportunities Group (FROG), a community based advisory group. In addition, a public meeting was held on May 19, 2004 to provide an additional public forum to discuss this addendum. This public meeting was open to the general public and advertised in a local newspaper. No comments were received by EPA concerning the proposed amendment to the November 24, 2002 Action Memorandum.

Approval:



Max H. Dodson
Assistant Regional Administrator
Office of Ecosystems Protection
And Remediation

11/30/2004

Date

Disapproval

Max H. Dodson
Assistant Regional Administrator
Office of Ecosystems Protection
And Remediation

Appendix 4

STATEMENT OF WORK
FOR IMPLEMENTATION OF THE WELLINGTON ORO
WATER QUALITY ACTION MEMORANDUM

Introduction

This Statement of Work ("SOW") describes the work to be performed by Buyers to implement the Action Memorandum for a non-time-critical removal action to address water quality issues at the Wellington Oro Site issued by EPA on November 24, 2002, as amended by Addendum #1 on November 30, 2004 ("Action Memorandum") and to satisfy the requirements of Section V ("Work to Be Performed at the Wellington Oro Site") of the Settlement Agreement, Covenants Not to Sue and Consent Decree entered into by and among the United States, the State of Colorado, the Sellers and the Buyers ("Consent Decree"). The terms used in this SOW that are defined in the Consent Decree shall have the same meanings assigned to them in the Consent Decree.

Summary of Work

This section summarizes the work to be performed under this SOW to implement the non-time-critical removal response action set forth in the Action Memorandum, as amended by Addendum #1, for the Wellington Oro Site (the "Water Quality Action").

Selected Action

Buyers will implement the Water Quality Action in accordance with CERCLA, the Consent Decree and this SOW. The components of the Water Quality Action include the following:

- Water discharging from the Wellington Oro Mine at Seep FG-6C will be collected.
- The collected water will be pumped to the treatment system. The maximum pumping rate will be 150 gallons per minute. During spring runoff, flows are expected to exceed this pumping rate. During that time, flows exceeding 150 gallons per minute will bypass the treatment process.
- A physical/chemical process will be utilized to remove zinc and cadmium from the water. The treatment process will be selected based on cost, performance, reliability, sludge disposal, and operator preferences. Water quality will be monitored at the point of effluent discharge. The effluent water quality discharged is to have a thirty-day average cadmium concentration of less than 4 ug/l and a thirty-day average zinc concentration of less than 225 ug/l.
- Solids generated from the treatment process will be separated from the water prior to discharge.

- The treated water will be discharged into the French Creek alluvium.
- The metal sludge generated will be either pumped into the abandoned mine workings, sold as a metal concentrate, placed into an onsite repository, or disposed at a solid waste landfill or other appropriate waste management facility.
- If necessary, a physical barrier in French Creek that will prevent non-native trout from migrating from the Blue River into upper French Creek will be constructed and measures to ensure long-term maintenance of the integrity of such a barrier(s) will be implemented. If an adequate physical barrier already exists, it shall be maintained. A placard shall be permanently affixed to any fish barrier structures that indicates that the barrier protects sensitive aquatic species and that prior to modification the Colorado Division of Wildlife must be notified and consulted.
- The water treatment system will be operated twenty-four (24) hours per day, seven (7) days per week, until water discharges from FG-6C no longer pose an unacceptable risk to the environment as determined by EPA and CDPHE pursuant to the Periodic Review section of this SOW.
- Water quality will be monitored in Segment 2a of the Blue River for cadmium, zinc, pH, conductivity, alkalinity, and temperature.

Water Quality Action Work Plan

This section summarizes the plans and process to implement the required work for the Water Quality Action, including preparation of planning documents and reporting requirements.

Draft Work Plan

Within ninety (90) days after the Effective Date of the Consent Decree, Buyers shall submit to EPA for approval a draft Work Plan for performing the Water Quality Action. The draft Work Plan will provide a description of, and an expeditious schedule for, the actions required as part of the Water Quality Action. The Work Plan will include a draft Quality Assurance Project Plan ("QAPP") as part of the Work Plan. Buyers may incorporate appropriate sections of the QAPP previously submitted and approved in connection with the Wellington Oro Mine Pool, Draft Engineering Evaluation/Cost Analysis (May 29, 2002) (the "Water Quality EE/CA").

EPA may approve, disapprove, require revisions to, or modify the draft Work Plan in whole or in part, consistent with the provisions of the Consent Decree. If EPA requires revisions, the Buyers shall submit a revised draft Work Plan within sixty (60) days of receipt of EPA's notification of the required revisions. Buyers will implement the Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications,

the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under the Consent Decree.

Buyers shall not commence any Wellington Oro Work except in conformance with the terms of the Consent Decree. Buyers shall not commence implementation of the Work Plan developed under this SOW until receiving written authorization from EPA.

Health and Safety Plan

Within ninety (90) days after the Effective Date of the Consent Decree, Buyers shall submit to EPA a plan that ensures the protection of the public and worker health and safety during performance of the Wellington Oro Work. The Health and Safety Plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the Health and Safety Plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. Buyers may incorporate appropriate sections of the Health and Safety Plan previously submitted and approved in connection with the Water Quality EE/CA. EPA approval of the Health and Safety Plan is not required.

Quality Assurance and Sampling Plan

All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain-of-custody procedures. Buyers shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. The Buyers shall follow, as appropriate, QA/QC Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures (OSWER Directive No. 9360.4-01, April 1, 1990) as guidance for QA/QC and sampling. Buyers shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs (American National Standard, January 5, 1995), and EPA Requirements for Quality Assurance Project Plans (QA/R-5) (EPA/240/B-01/003, March 2001). EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP") as meeting the Quality System requirements. Buyers may incorporate appropriate sections of the Sampling and Analysis Plan previously submitted and approved in connection with the Water Quality EE/CA.

Upon request by EPA, Buyers shall have the laboratory analyze samples submitted by EPA for QA monitoring. Buyers shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

Upon request by EPA, Buyers shall allow EPA or its authorized representatives to take split and/or duplicate samples. Buyers shall notify EPA not less than fourteen (14) days in advance of any sample collection activity, unless EPA agrees to shorter notice. EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Buyers to take split or

duplicate samples of any samples it takes as part of its oversight of the Buyers implementation of the Work.

Preliminary Design

Within ninety (90) days after EPA approval of the Work Plan, Buyers will submit a Preliminary Design to EPA and CDPHE for review. The Preliminary Design shall reflect approximately 30 percent of the design effort. At this stage, Buyers shall have field-verified the existing conditions of the Wellington Oro Site, as necessary. Buyers shall provide supporting data and documentation with the design documents defining the functional aspects of the project to demonstrate that the completed project will be effective in meeting the remediation goals and applicable or relevant and appropriate requirements ("ARARs") as set forth in the Water Quality EE/CA and Action Memorandum as amended by Addendum #1. To define the applicable federal and State Clean Water Act requirements for the discharge from the water treatment system for the Water Quality Action, a Discharge Control Mechanism ("DCM") will be prepared in accordance with the Consent Decree and this SOW. The DCM will establish the effluent discharge limits and monitoring requirements for the Water Quality Action, and provide a basis for those requirements. The preliminary DCM will be submitted with the Preliminary Design. The discharge limits and monitoring requirements to be set forth in the DCM are as follows:

a. Effluent Limitations. The discharge limits to be specified in the DCM are set forth below and reflect effluent limits for the Water Quality Action that are deemed to be protective of existing conditions in Blue River Segment 11 (French Creek) and to allow for the attainment of water quality standards in Blue River Segment 2A (Blue River, downstream of its confluence with French Creek). Based on these water quality standards, the objectives of the Water Quality Action, and the quality of water discharging from the Wellington Oro mine, the following discharge limits will be established in the DCM: cadmium (4 ug/l) (thirty-day average), zinc (225 ug/l)(thirty-day average), pH (6.0 – 9.5), oil and grease (10.0 mg/l), total suspended solids (20 mg/l). In addition, technology-based effluent limits will be established as appropriate that are limited to and dependent upon the process Buyers select for treatment. Technology-based effluent limitations will be dependent on the specific treatment chemicals added or the specific chemicals produced during the treatment process for the Water Quality Action, and will be limited to such chemicals. Buyers shall select a water treatment system for the Water Quality Action that will attain the effluent limitations specified in this paragraph.

b. Monitoring Requirements. Monitoring requirements for the DCM are summarized in the following table. Additional monitoring requirements may be added to the extent that technology based effluent limitations are determined to be necessary pursuant to paragraph a. above.

Parameter	Effluent	Monitoring Frequency	Influent	Monitoring	Sample Type
Flow, mgd	<input type="checkbox"/>	Daily/ Continuously	<input type="checkbox"/>	Daily/Continuously	Continuous
pH	<input type="checkbox"/>	Daily/ Continuously	<input type="checkbox"/>	Daily/Continuously	Continuous
TSS, mg/L	<input type="checkbox"/>	Daily	<input type="checkbox"/>	Daily	24-hour composite
Parameter	Efflu-ent	Monitoring Frequency	Influent	Monitoring	Sample Type
TDS, mg/L	<input type="checkbox"/>	Weekly	<input type="checkbox"/>	Weekly	Grab
Hardness, mg/L as CaCO ₃	<input type="checkbox"/>	Daily	<input type="checkbox"/>	Daily	24-hour composite
Aluminum, (TRec), ug/L	<input type="checkbox"/> *	Monthly	<input type="checkbox"/> *	Quarterly	24-hour composite
Sulfate, mg/L	<input type="checkbox"/> *	Monthly	<input type="checkbox"/> *	Quarterly	24-hour composite
Cadmium, ug/L	<input type="checkbox"/>	Weekly	<input type="checkbox"/>	Quarterly	24-hour composite
Copper, ug/L	<input type="checkbox"/> *	Monthly	<input type="checkbox"/> *	Quarterly	24-hour composite
Iron, ug/L	<input type="checkbox"/> *	Monthly	<input type="checkbox"/> *	Quarterly	24-hour composite
Manganese, ug/L	<input type="checkbox"/> *	Monthly	<input type="checkbox"/> *	Quarterly	24-hour composite
Silver, ug/L	<input type="checkbox"/> *	Monthly	<input type="checkbox"/> *	Quarterly	24-hour composite
Nickel, ug/L	<input type="checkbox"/> *	Monthly	<input type="checkbox"/> *	Quarterly	24-hour composite
Zinc, ug/L	<input type="checkbox"/>	Weekly	<input type="checkbox"/>	Quarterly	24-hour composite

* The monitoring frequency may be reduced or eliminated after the first year of operation of the Wellington Oro Mine water treatment plant.

The Preliminary Design shall include the following:

1. The technical parameters upon which the design will be based as set forth in the Action Memorandum as amended by Addendum #1.
2. Updated Project Schedule.
3. Outline of Specifications.
4. Preliminary Drawings.

Pre-Final and Final Design

The State and EPA will provide Buyers with an initial draft of the DCM. Within ninety (90) days after receipt of EPA's comments on the Preliminary Design, Buyers shall submit the Pre-Final Design and a Pre-Final DCM for EPA approval, in consultation with the State. The Pre-Final Design and DCM shall be the draft version of the Final Design and DCM. The Pre-Final Design and DCM shall address comments generated from the Preliminary Design Review and clearly show any modifications of the design as a result of incorporation of the comments. Within sixty (60) days after EPA review and comment on the Pre-Final Design and DCM, the Final Design and DCM shall be submitted for EPA approval, in consultation with the State. All Final Design documents shall be approved by a Professional Engineer registered in Colorado.

EPA approval of the Final Design is required before initiating the Water Quality Action, unless specifically authorized by EPA. The Pre-Final Design shall include a complete set of construction drawings and specifications (general specifications, drawings, and schematics). Buyers will issue the final design after incorporating EPA comments.

Construction Quality Assurance Plan

Buyers shall submit a Construction Quality Assurance ("CQA") Plan for EPA review and approval. The CQA Plan shall then be finalized and submitted with the Final Design. At a minimum, the draft CQA Plan shall provide requirements for the following elements: 1) responsibility and authority of all organization and key personnel involved in the removal action construction; 2) the minimum qualifications of the CQA Officer and supporting inspection personnel; 3) a summary of inspection activities; and 4) reporting requirements for the CQA activities.

Construction

Within ninety (90) days of EPA approval of the Final Design, Buyers shall initiate construction of the treatment system in accordance with the Final Design approved by EPA. Construction will not be required during the winter season. During construction, Buyers will be responsible for implementing the CQA Plan, notifying EPA of the progress of the construction, and obtaining approval from EPA of all change orders.

Reporting

Buyers shall submit written monthly progress reports to EPA concerning actions undertaken pursuant to this SOW beginning thirty (30) days after the date of receipt of EPA's approval of the Work Plan until the water treatment system is determined to be operational and functional, unless otherwise directed in writing by EPA. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting

period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

Buyers shall submit one hard copy and one electronic copy to EPA and CDPHE of all plans, reports or other submissions required by this SOW or any approved work plan.

Operation and Maintenance Plan

Within ninety (90) days after the start of construction, Buyers shall submit for EPA review and approval an operation and maintenance plan ("O&M Plan") for the water treatment system. The O&M Plan shall outline all procedures needed for continuous operation of the water treatment system, including a preventative maintenance program, standard operating procedures, discharge water quality monitoring, Blue River water quality monitoring, and Agency reporting requirements.

Final Report

Within sixty (60) days after the water treatment system is determined to be operational and functional, the Buyers shall submit for EPA review and approval a final report summarizing the actions taken to comply with this SOW. To the extent applicable, the final report shall conform with the requirements set forth in Superfund Removal Procedures: Removal Response Reporting – POLREPS and OSC Reports (OSWER Directive No. 9360.3-03, June 1, 1994). The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the SOW, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (e.g., manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

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

Off-Site Shipments

Buyers shall, prior to any off-Site shipment of Waste Material from the Wellington Oro Site to a waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the On-Scene

Coordinator. This notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

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

The identity of the receiving facility and state will be determined by the Buyers following the award of the contract for the removal action. The Buyers shall provide the information required by the paragraph set forth above as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

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

Operations and Maintenance

Buyers shall perform all operations and maintenance activities required to assure that water treatment is not interrupted and facility performance standards are being attained. In addition, Buyers will report the status of the water treatment operations on a quarterly basis. Quarterly reports will include operator logs, influent and effluent water quality data, and discharge monitoring reports. Quarterly reports will be provided to EPA and CDPHE fifteen (15) days after the end of the quarter. In the event that there are any discharges from the water treatment system that exceed the effluent limitations for zinc and cadmium set forth above, Buyers shall submit the discharge monitoring reports with respect to such discharges within thirty (30) days of such exceedance.

Annual reports will summarize the system's performance, discuss any variances from facility performance goals, identify the operations and maintenance procedures conducted during the past year and planned for the next year, and provide water quality data for the influent and effluent of the water treatment facilities, and water quality data collected from French Creek and the Blue River. The annual reports are to be provided to EPA by January 30 for the preceding year.

Cleanup Validation

Buyers will collect water quality data in Segment 2a of the Blue River to evaluate if the water quality performance standards set forth in the Action Memorandum have been attained. If Buyers cannot

establish that the water quality standards set forth in the Action Memorandum have been achieved within five (5) years after the water treatment system has been fully operational and functional, EPA may withdraw all of the funds in the escrow account, including both principal and interest, to conduct or finance additional response actions at the Wellington Oro Site in accordance with Paragraph 61 of the Consent Decree. The Buyers will not be liable for undertaking additional work to achieve water quality standards.

Periodic Review

Buyers will cooperate with EPA, in order to permit EPA to conduct reviews of whether the Water Quality Action is protective of human health and the environment at least every five (5) years in accordance with EPA's "Comprehensive Five-Year Review Guidance," OSWER Directive 9355.7-03BP, dated June 2001 (the "Guidance").

Buyers may request that EPA and CDPHE consider changes to or improvements in the Water Quality Action at any time, if, after assessing the protectiveness of the remedy in accordance with Section 4.0 of the Guidance, EPA and CDPHE determine that such change or improvement will result in the removal of greater quantities of hazardous substances and, therefore, greater net environmental benefit to the watershed than the Water Quality Action.