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UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 8

FILED  
EPA REGION VIII  
HEARING CLERK

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IN THE MATTER OF: )

) U.S. EPA Region 8

Eagle Mine Superfund Site )  
Eagle County, Colorado )

) Docket No. CERCLA-08-2018-0007

TCI Pacific Communications, LLC, )

Respondent. )

Proceeding under Section 106(a) )  
of the Comprehensive Environmental )  
Response, Compensation and Liability )  
Act, 42 U.S.C. § 9606(a) )  
\_\_\_\_\_)

) **UNILATERAL ADMINISTRATIVE**  
) **ORDER FOR REMEDIAL DESIGN**  
) **AND REMEDIAL ACTION**

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## I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Order (Order) is issued under the authority vested in the President of the United States by section 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9606(a). This authority was delegated to the Administrator of the United States Environmental Protection Agency (EPA) by Executive Order No. 12580, 52 Fed. Reg. 2923 (Jan. 23, 1987), and further delegated to the Regional Administrators by EPA Delegation Nos. 14-14-A and 14-14-B. This authority was further re-delegated by the Regional Administrator of EPA Region 8 to the undersigned EPA officials.

2. This Order pertains to operable unit 1 (OU1) within the Eagle Mine Superfund Site located in Eagle County, Colorado (Site) and generally depicted on the map attached hereto as Appendix A. This Order directs Respondent to perform the remedial design and remedial action (RD/RA) described in the Operable Unit 1 Record of Decision Amendment for the Site, dated September 28, 2017 (OU1 ROD Amendment).

3. EPA has notified the State of Colorado (State) of this action pursuant to section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

## II. PARTIES BOUND

4. This Order applies to and is binding upon Respondent and its successors and assigns. Any change in ownership or control of the Site or change in corporate or partnership status of Respondent, including, but not limited to, any transfer of assets or real or personal property, shall not alter Respondent's responsibilities under this Order.

5. Respondent shall provide a copy of this Order to each contractor hired to perform the Work and to each person representing Respondent with respect to the Site or the Work, and shall condition all contracts entered into hereunder upon performance of the Work in conformity with the terms of this Order. Respondent or its contractors shall provide written notice of the Order to all subcontractors hired to perform any portion of the Work. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Order.

## III. DEFINITIONS

6. Unless otherwise expressly provided in this Order, terms used in this Order that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Order or in its appendices, the following definitions shall apply solely for the purposes of this Order:

“Affected Property” shall mean all real property within OU1 as addressed by the OU1 ROD Amendment.

“Agencies” shall mean EPA and CDPHE collectively.

“CDPHE” shall mean the Colorado Department of Public Health and Environment and any successor departments or agencies of the State.

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

“Day” shall mean a calendar day. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

“Effective Date” shall mean the effective date of this Order as provided in Section VIII.

“EPA” shall mean the United States Environmental Protection Agency and its successor departments, agencies or instrumentalities.

“EPA Hazardous Substance Superfund” shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

“Interest” shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at <https://www.epa.gov/superfund/superfund-interest-rates>.

“NCP” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan, also called the National 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.

“Order” shall mean this Unilateral Administrative Order and all appendices attached hereto. In the event of conflict between this Order and any appendix, this Order shall control.

“OU1” shall mean operable unit 1 of the Site. As defined in the OU1 ROD Amendment, OU1 is primarily media-based, focusing on protecting surface water at the Site by reducing metals loading to the Eagle River. On-going remediation within OU1 includes active engineered remedial features designed to capture and treat mine waste in surface and groundwater.

“OU1 ROD” shall mean the Record of Decision for OU1 issued by EPA on March 29, 1993.

“OU1 ROD Amendment” shall mean the amendment to the OU1 ROD issued by EPA on September 28, 2017.

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

“Parties” shall mean EPA and Respondent.

“Performance Standards” shall mean the cleanup standards and other measures of achievement of the goals of the remedial action objectives, as set forth in the OUI ROD Amendment.

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

“RA” shall mean the remedial action selected in the OUI ROD Amendment.

“RD” shall mean remedial design activities to be undertaken by Respondent to develop final plans and specifications for the RA as stated in the SOW.

“Respondent” shall mean TCI Pacific Communications, LLC, a Delaware limited liability company and its successors and assigns.

“Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in monitoring and supervising Respondent’s performance of the Work to determine whether such performance is consistent with the requirements of this Order, including costs incurred in reviewing deliverables submitted pursuant to this Order, as well as costs incurred in overseeing implementation of this Order, including, but not limited to, payroll costs, contractor costs, travel costs and laboratory costs.

“Section” shall mean a portion of this Order identified by a Roman numeral.

“Site” shall mean the Eagle Mine Superfund Site, encompassing approximately 235 acres, located approximately 1 mile southeast of the town of Minturn and 8 miles south of Vail in Eagle County, Colorado, and depicted generally on the map attached as Appendix A.

“State” shall mean the State of Colorado.

“State Project Manager” shall mean the CDPHE personnel designated as the Site project manager.

“SOW” shall mean the Statement of Work that describes the activities Respondent must perform to implement RD/RA regarding the Site, which is attached as Appendix B.

“Supervising Contractor” shall mean the principal contractor retained by Respondent to supervise and direct the implementation of the Work under this Order.

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

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

“Waste Material” shall mean: (a) any “hazardous substance” under section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under section 101(33) of CERCLA, 42 U.S.C. § 9601(33); or (c) any “solid waste” under section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

“Work” shall mean all activities Respondent is required to perform under this Order, except those required by Section XVI (Record Retention).

#### **IV. FINDINGS OF FACT**

##### **A. Site History**

7. The Site encompasses a large abandoned mining and milling facility along the banks of the Eagle River near Minturn, Colorado, in a rural area of Eagle County, and includes areas impacted by past mining activity between the towns of Red Cliff and Minturn. The 235-acre Site includes the Eagle Mine workings, the former town of Gilman, the mine tailings pond areas, Rex Flats, Rock Creek Canyon, and waste rock and roaster pile areas. The Site is bordered on the south and west by the White River National Forest which includes the Holy Cross Wilderness Area. The Eagle River and two of its principle tributaries, Cross Creek and Rock Creek, flow through the Site.

8. Mining activities began in the area in the late 1870s when gold, silver, lead and zinc deposits were discovered. The ore was processed first by roasting and later by milling. Large quantities of tailings and waste rock were piled along the banks of the Eagle River, on the steep side slopes of the canyon and at higher elevations. Mine waste was piped down canyon into the Old Tailings Pile and later into what is now called the Consolidated Tailings Pile.

9. In 1983, the State filed a complaint against a potentially responsible party, Gulf & Western Industries, Inc. (G&W-D), a Delaware corporation, the successor to a former operator of the Eagle Mine, in the U.S. District Court for the District of Colorado, captioned *State of Colorado v. Gulf & Western Industries, Inc.*, Civ. Action No. 83-C-2387, for natural resource damages pursuant to CERCLA. The State amended its complaint in 1985 to include a claim for CERCLA response costs and state pendent claims.

10. In the 1980s, the Agencies’ sampling showed that historic mining operations at the Site resulted in contamination of surface water, groundwater and soils with heavy metals including arsenic, cadmium, copper, iron, lead, manganese and zinc in levels that posed a threat

to human health and the environment. These heavy metals are listed as hazardous substances as defined by section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

11. In 1986, the Site was included on the National Priorities List pursuant to CERCLA section 105, 42 U.S.C. § 9605, by publication in the Federal Register, 51 Fed. Reg. 111 (June 10, 1986).

12. In 1988, the State and Gulf+Western, Inc. (G+W), a Delaware corporation, G&W-D's successor, entered into a consent decree that settled the State's complaint and set forth a remedial action plan (1988 CD/RAP) to remediate contamination at the Site. Pursuant to this agreement, G+W performed certain work, including implementation of a mine closure program to seal pathways from the mine workings and to grout fracture zones; construction of a groundwater extraction system to collect and pump contaminated groundwater from beneath the Consolidated Tailings Pile; construction of a groundwater diversion trench to direct the flow of clean groundwater away from the Consolidated Tailings Pile; construction of a system to collect seeps along Rock Creek; and installation and implementation of water quality monitoring.

13. In 1990, the State and G+W's successor, Paramount Communications, Inc. (Paramount), a Delaware corporation, amended the 1988 CD/RAP to include a chemical water treatment plant, mine seepage collection system and pipeline to transport and treat water from the Eagle Mine.

14. In 1993, EPA issued the OU1 ROD to institute additional remedial actions to address metals loading to the Eagle River. The major components of the selected remedy included the installation of a conveyance and collection system to collect additional mine seepage along Rock Creek, the diversion of Rock Creek up-gradient of contaminated mine seepage, revegetation of mine waste source areas, surface water run-off and groundwater monitoring, land use restrictions, capping of the Consolidated Tailings Pile, construction of a new up-gradient groundwater diversion structure and relocation of the Town of Minturn drinking water wells, continued treatment of contaminated mine seepage, removal of contaminated soils and sediments from the Maloit Park Wetlands, and regular monitoring of surface water, groundwater and the mine pool water within the mine workings.

15. In 1996, EPA, with the State as a signatory, entered into a consent decree (1996 Consent Decree) whereby Viacom International, Inc. (Viacom International), a Delaware corporation and a successor to G+W and Paramount, agreed to perform additional remedial actions set forth in the OU1 ROD, captioned *United States v. Viacom International, Inc.*, Civ. Action. No 95-N-2360 (June 12, 1996), filed in the U.S. District Court for the District of Colorado. The 1996 Consent Decree described the additional remedial actions in a statement of work (1996 CD/SOW).

16. On September 28, 2017, EPA issued the OU1 ROD Amendment, expanding the existing OU1 remedy since current water quality standards for the Eagle River have not yet been met. The decision by EPA on the RA to be implemented at the Site is embodied in the OU1 ROD Amendment, executed on September 28, 2017, on which the State has given its concurrence. The OU1 ROD Amendment includes a responsiveness summary to the public comments. Notice of

the final plan was published in accordance with section 117(b) of CERCLA, 42 U.S.C. § 9617(b).

17. In performing response actions in relation to the Affected Property, EPA has incurred response costs.

18. The Eagle River is the major surface water resource affected by metal contamination from the Site. The Eagle River is used as a water supply and for recreation (i.e., rafting and kayaking). Fishing also occurs on the Eagle River. There are numerous diversions from the Eagle River for municipal supply, stock watering and irrigation downstream. The closest population center, the town of Minturn, draws its public water supply both from area wells and from Cross Creek.

19. Hazardous substances at OU1 adversely affect aquatic organisms in the Eagle River. During spring flows, heavy metal concentrations in the Eagle River from Belden to Minturn are above levels that are acutely and/or chronically toxic to some trout species. In addition, the fish and aquatic macroinvertebrate communities are severely reduced in this reach of the Eagle River. Sampling conducted by Respondent in 2012 and 2013 established that arsenic is present at the Site in concentrations that exceed the current Colorado Surface Water Quality Standard for arsenic.

#### **B. Respondent's Corporate Succession**

20. In 1938, the New Jersey Zinc Company, Inc. (NJZ-NJ) acquired the Empire Zinc Company. NJZ's subsidiary, the Empire Zinc Company, operated the mine from 1915 until 1938. NJZ-NJ began operating the mine in 1938. NJZ-NJ conducted hard rock mining activities that resulted in the creation of mine tunnels and waste rock piles that contribute to contamination at the Site. In 1966, Zinminco Inc., a subsidiary of NJZ-NJ, was incorporated in Delaware.

21. In 1966, NJZ-NJ merged into Gulf & Western Industries, Inc., a Michigan corporation (G&W-MI). Zinminco Inc. later became a wholly-owned subsidiary of G&W-MI. Immediately after the merger, G&W-MI transferred all operating assets of NJZ-NJ to Zinminco Inc.

22. In February 1966, Zinminco Inc. changed its name to The New Jersey Zinc Company (NJZ-D) and remained a subsidiary of G&W-MI.

23. In 1967, G&W-MI merged with G&W-D, with G&W-D being the surviving entity. In 1977, G&W-D ceased most mining activities. G&W-D sold the Site to Glenn Miller on September 1, 1983.

24. In 1974, NJZ-D merged into G&W-D. NJZ-D became a division of G&W-D.

25. In 1986, G+W merged with G&W-D, with G&W-D being the surviving entity. G&W-D changed its name to G+W.

26. In 1989, Paramount merged into G+W, with G+W being the surviving entity. G+W changed its name to Paramount.

27. In 1995, Paramount merged into Viacom International, with Viacom International being the surviving entity. Viacom International was a wholly-owned subsidiary of Viacom Inc., a Delaware corporation. Viacom International changed its name to TCI Pacific Communications, Inc., a Delaware corporation.

28. In 2017, TCI Pacific Communications, Inc. changed its corporate structure from a corporation to a limited liability company incorporated in Delaware, changing its name to TCI Pacific Communications, LLC (Respondent). Respondent is the corporate successor to NJZ-NJ.

## V. CONCLUSIONS OF LAW AND DETERMINATIONS

29. Based on the Findings of Fact set forth above and the administrative record, EPA has determined that:

- a. The Site is a “facility” as defined in section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. Respondent is a “person” as defined by section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- c. Respondent is the corporate successor to former owners and operators at the time of disposal of hazardous substances at the facility under section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).
- d. The contamination found at the Site, as identified in the Findings of Fact above, includes “hazardous substances” as defined by section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- e. The conditions described in the Findings of Fact above constitute an actual and/or threatened “release” of a hazardous substance from the facility as defined by section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- f. The conditions at the Site may constitute a threat to public health or welfare or the environment, based on the factors set forth in the OU1 ROD Amendment.
- g. Solely for purposes of section 113(j) of CERCLA, 42 U.S.C. § 9613(j), the remedy set forth in the OU1 ROD Amendment and the Work to be performed by Respondent shall constitute a response action taken or ordered by the President for which judicial review shall be limited to the administrative record.
- h. The conditions described in the Findings of Fact above may constitute an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance from the facility within the meaning of section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

i. The actions required by this Order are necessary to protect the public health, welfare or the environment.

## **VI. ORDER**

30. Based on the Findings of Fact and Conclusions of Law and Determinations set forth above, and the administrative record, Respondent is hereby ordered to comply with this Order and any modifications to this Order, including, but not limited to, all appendices and all documents incorporated by reference into this Order.

## **VII. OPPORTUNITY TO CONFER**

31. No later than 10 days after the Order is signed by EPA, Respondent may, in writing, (a) request a conference with the Agencies to discuss this Order, including its applicability, the factual findings and the determinations upon which it is based, the appropriateness of any actions Respondent is ordered to take, or any other relevant and material issues or contentions that Respondent may have regarding this Order, or (b) notify the Agencies that it intends to submit written comments or a statement of position in lieu of requesting a conference.

32. If a conference is requested, Respondent may appear in person or by an attorney or other representative. Any such conference shall be held no later than 5 days after the conference is requested. Any written comments or statements of position on any matter pertinent to this Order must be submitted no later than 5 days after the conference or 15 days after this Order is signed if Respondent does not request a conference. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge this Order, and does not give Respondent a right to seek review of this Order. Any request for a conference or written comments or statements should be submitted to the Agencies as provided in Section XXII (Notices and Submissions).

## **VIII. EFFECTIVE DATE**

33. This Order shall be effective 10 days after the Order is signed by EPA, unless Respondent requests a conference or notifies the Agencies that written materials will be submitted in lieu of a conference in accordance with Section VII (Opportunity to Confer).

34. If a conference is requested or such notice is submitted, this Order shall be effective on the 10th day after the day of the conference, or if no conference is requested, on the 10th day after written materials, if any, are submitted, unless EPA determines that the Order should be modified based on the conference or written materials. In such event, EPA shall notify Respondent, within the applicable 10-day period, that EPA intends to modify the Order. The modified Order shall be effective 5 days after it is signed by EPA.

## IX. NOTICE OF INTENT TO COMPLY

35. On or before the Effective Date, Respondent shall notify the Agencies in writing of Respondent's irrevocable intent to comply with this Order. Such written notice shall be sent to the Agencies as provided in Paragraph 32.

36. Respondent's written notice shall describe, using facts that exist on or prior to the Effective Date, any "sufficient cause" defenses asserted by Respondent under sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(c)(3). The absence of a response by EPA to the notice required by this Section shall not be deemed to be acceptance of Respondent's assertions. Failure of Respondent to provide such notice of intent to comply within this time period shall, as of the Effective Date, be treated as a violation of this Order by Respondent.

## X. PERFORMANCE OF THE WORK

37. **Compliance with Applicable Law.** Nothing in this Order limits Respondent's obligations to comply with the requirements of all applicable federal and state laws and regulations. Respondent must also comply with all applicable or relevant and appropriate requirements of all federal and state environmental laws as set forth in the OUI ROD Amendment and the SOW.

### 38. Permits

a. As provided in section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and section 300.400(e) of the NCP, no permit shall be required for any portion of the Work conducted entirely on-Site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work). Where any portion of the Work that is not on-Site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

b. This Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

### 39. Coordination and Supervision

#### a. Project Coordinators

(1) Respondent's Project Coordinator must have sufficient technical expertise to coordinate the Work. Respondent's Project Coordinator may not be an attorney representing the Respondent in this matter and may not act as the Supervising Contractor. Respondent's Project Coordinator may assign other representatives, including other contractors, to assist in coordinating the Work.

(2) EPA has designated Jamie Miller of the Superfund Remedial Program in the Office of Ecosystems, Protection and Remediation, Region 8, as its Remedial

Project Manager (RPM). EPA shall have the right to change its RPM. The RPM shall be responsible for overseeing Respondent's implementation of this Order and the SOW.

(3) The RPM shall have the authority vested in an RPM by the NCP. This includes the authority to halt the Work and/or to conduct or direct any necessary response action when the RPM determines that conditions at the Site constitute an emergency or may present an immediate threat to public health or welfare or the environment due to a release or threatened release of Waste Material.

(4) CDPHE has designated Wendy Naugle of the Superfund and Brownfields Unit in the Hazardous Materials and Waste Management Division of CDPHE as its State Project Manager. CDPHE shall have the right to change its State Project Manager.

(5) Respondent's Project Coordinators shall meet with the RPM and the State Project Manager as described in the SOW.

b. **Supervising Contractor.** Respondent's proposed Supervising Contractor must have sufficient technical expertise to supervise the Work and a quality assurance system that complies with ASQ/ANSI E4:2014, "Quality management systems for environmental information and technology programs - Requirements with guidance for use" (American Society for Quality, February 2014).

c. **Procedures for Disapproval/Notice to Proceed**

(1) Respondent shall designate, and notify the Agencies, within 10 days after the Effective Date, of the names, titles, contact information and qualifications of Respondent's proposed Project Coordinator and Supervising Contractor, whose qualifications shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the Site.

(2) After consultation with CDPHE, EPA shall issue notices of disapproval and/or authorizations to proceed regarding the proposed Project Coordinator and Supervising Contractor, as applicable. If EPA issues a notice of disapproval, Respondent shall, within 30 days, submit to the Agencies a list of supplemental proposed Project Coordinators and/or Supervising Contractors, as applicable, including a description of the qualifications of each. After consultation with CDPHE, EPA shall issue a notice of disapproval or authorization to proceed regarding each supplemental proposed coordinator and/or contractor. Respondent may select any coordinator/contractor covered by an authorization to proceed and shall, within 21 days, notify EPA of Respondent's selection.

(3) Respondent may change its Project Coordinator and/or Supervising Contractor, as applicable, by following the procedures of Paragraphs 39.c(1) and 39.c(2).

40. **Performance of Work in Accordance with SOW.** Respondent shall develop the RD and perform the RA in accordance with the SOW and all EPA-approved, conditionally-

approved, or modified deliverables as required by the SOW. All deliverables required to be submitted for approval under the Order or SOW shall be subject to approval by EPA, after consultation with CDPHE, in accordance with the SOW.

41. **Emergencies and Releases.** Respondent shall comply with the emergency and release response and reporting requirements under the SOW.

42. **Community Involvement.** If requested by EPA, Respondent shall conduct community involvement activities under EPA's oversight as provided for in, and in accordance with the SOW. Such activities may include, but are not limited to, designation of a Community Involvement Coordinator.

43. **Modification**

a. EPA may, after consultation with CDPHE, by written notice from the RPM to Respondent, modify, or direct Respondent to modify, the SOW and/or any deliverable developed under the SOW, if such modification is necessary to achieve or maintain the Performance Standards or to carry out and maintain the effectiveness of the RA, and such modification is consistent with the Scope of the Remedy set forth in the SOW.

b. Respondent may submit written requests to the Agencies to modify the SOW and/or any deliverable developed under the SOW. If EPA, after consultation with CDPHE, approves the request in writing, the modification shall be effective upon the date of such approval or as otherwise specified in the approval. Respondent shall modify the SOW and/or related deliverables in accordance with EPA's approval.

c. No informal advice, guidance, suggestion or comment by the RPM or other EPA representatives, or the State Project Manager or other State representatives, regarding reports, plans, specifications, schedules or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Order, or to comply with all requirements of this Order, unless it is formally modified.

d. Nothing in this Order, the SOW, any deliverable required under the SOW, or any approval by EPA constitutes a warranty or representation of any kind by EPA or CDPHE that compliance with the work requirements set forth in the SOW or related deliverable will achieve the Performance Standards.

## **XI. AFFECTED PROPERTY REQUIREMENTS**

44. **Agreements Regarding Access and Non-Interference.**

a. Respondent shall refrain from using the Affected Property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or interfere with or adversely affect the implementation, integrity or protectiveness of any Work.

b. Respondent shall, with respect to any property owned or controlled by another person where EPA determines, at any time, that access is needed to implement Work, use best efforts to secure from such person an agreement, enforceable by Respondent, EPA and the State, providing that such person shall, with respect to any property: (i) provide EPA, CDPHE, and their representatives, contractors and subcontractors with access at all reasonable times to such property conduct any activity regarding Work, including those activities listed in Paragraph 45 (Access Requirements); and (ii) refrain from using such property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or interfere with or adversely affect the implementation, integrity or protectiveness of any Work.

c. Respondent shall provide a copy of such access agreement(s) to the Agencies.

45. **Access Requirements.** The following is a list of activities for which access is required:

- (1) Monitoring the Work;
- (2) Verifying any data or information submitted to the Agencies;
- (3) Conducting investigations regarding contamination at or near the Site;
- (4) Obtaining samples;
- (5) Assessing the need for, planning or implementing additional response actions at or near the Site;
- (6) Assessing implementation of quality assurance and quality control practices as defined in the approved construction quality assurance quality control plan as provided in the SOW;
- (7) Implementing the Work pursuant to the conditions set forth in Paragraph 58 (Work Takeover);
- (8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section XV (Access to Information);
- (9) Assessing Respondent's compliance with the Order; and
- (10) Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Order.

46. **Best Efforts.** As used in this Section, “best efforts” means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements. If, within 30 days after the Effective Date, Respondent is unable to accomplish what is required through “best efforts,” it shall notify EPA, and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access. EPA reserves the right to pursue cost recovery regarding all costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time and the amount of monetary consideration or just compensation paid.

## **XII. INSURANCE**

47. Not later than 15 days before commencing any on-Site Work, Respondent shall secure, and shall maintain until the first anniversary after the Notice of RA Completion pursuant to the SOW, commercial general liability insurance with limits of liability of \$1 million per occurrence, and automobile insurance with limits of liability of \$1 million per accident, and umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits, naming the United States as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondent pursuant to this Order. In addition, for the duration of the Order, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker’s compensation insurance for all persons performing Work on behalf of Respondent in furtherance of this Order. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificate and copies of policies each year on the anniversary of the Effective Date. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, then, with respect to that contractor or subcontractor, Respondent need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondent shall ensure that all submittals to EPA under this Paragraph identify the Eagle Mine Superfund Site, Eagle County, Colorado and the EPA docket number for this action.

## **XIII. DELAY IN PERFORMANCE**

48. Respondent shall notify the Agencies of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone and email to the RPM and the State Project Manager within 48 hours after Respondent first knew or should have known that a delay might occur. Respondent shall adopt all reasonable measures to avoid or minimize any such delay. Within 7 days after notifying the Agencies by telephone and email, Respondent shall provide to the Agencies written notification fully describing the nature of the delay, the anticipated duration of the delay, any justification for the delay, all actions taken or to be taken to prevent or minimize the delay or the effect of the delay, a schedule for implementation of any measures to be taken to mitigate the effect of the delay, and any reason why Respondent should not be held strictly accountable for failing to comply with any relevant

requirements of this Order. Increased costs or expenses associated with implementation of the activities called for in this Order is not a justification for any delay in performance.

49. Any delay in performance of this Order that, in EPA's judgment, is not properly justified by Respondent under the terms of Paragraph 48 shall be considered a violation of this Order. Any delay in performance of this Order shall not affect Respondent's obligations to fully perform all obligations under the terms and conditions of this Order.

#### **XIV. PAYMENT OF RESPONSE COSTS**

##### **50. Response Cost Payments**

a. Within 30 days after the Effective Date, Respondent shall provide to EPA an email billing address for electronic billing. On a periodic basis, EPA will send Respondent an electronic billing notification to the email billing address provided by Respondent. If the billing notification is undeliverable, EPA will mail a paper copy to the billing notification to Respondent.

b. The billing notification will include a standard regionally-prepared cost report with the direct and indirect costs incurred by EPA and its contractors, subcontractors, the State and the United States Department of Justice. Respondent shall make all payments not later than 30 days of receipt of the bill. Respondent shall make payments using one of the payment methods set forth in the billing notification.

c. Respondent may change its email billing address or mailing address by providing notice of the new address to:

Financial Management Officer  
US EPA Region 8 (TMS-FMP)  
1595 Wynkoop Street  
Denver, Colorado 80202

51. **Interest.** In the event that the payments for Response Costs are not made within 30 days after Respondent's receipt of a written demand requiring payment, Respondent shall pay Interest on the unpaid balance. The Interest on Response Costs shall begin to accrue on the date of the written demand and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to EPA by virtue of Respondent's failure to make timely payments under this Section. Respondent shall make all payments under this Paragraph in accordance with ¶ 50.b.

#### **XV. ACCESS TO INFORMATION**

52. Respondent shall provide to EPA, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as Records) within Respondent's possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of

this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

### 53. **Privileged and Protected Claims**

a. Respondent may assert that all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondent complies with Paragraph 53.b, and except as provided in Paragraph 53.c.

b. If Respondent asserts a claim of privilege or protection, it shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that it claims to be privileged or protected until EPA have had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in the Respondent's favor.

c. Respondent may make no claim of privilege or protection regarding: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site or (2) the portion of any Record that Respondent is required to create or generate pursuant to this Order.

54. **Business Confidential Claims.** Respondent may assert that all or part of a Record provided to EPA under this Section or Section XVI (Record Retention) is business confidential to the extent permitted by and in accordance with section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondent shall segregate and clearly identify all Records or parts thereof submitted under this Order for which Respondent asserts business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentially accompanies Records when they are submitted to EPA, or if EPA has notified Respondent that the Records are not confidential under the standards of CERCLA § 104(e)(7) or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondent.

## **XVI. RECORD RETENTION**

55. During the pendency of this Order and for a minimum of 10 years after EPA provides Notice of Work Completion under pursuant to the SOW, Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to its liability under CERCLA with respect to the Site, provided, however, that Respondent must

retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above, all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work. Additionally, Respondent (and its contractor and agents) must retain, in addition, copies of all data generated during performance of the Work and not contained in the aforementioned Records. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

56. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such Records, and, upon request by EPA, and except as provided in Paragraph 53, Respondent shall deliver any such Records to EPA.

57. Within 30 days after the Effective Date, Respondent shall submit a written certification to the Agencies that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by the United States or the State and that it has fully complied with any and all EPA requests for information regarding the Site pursuant to sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and section 3007 of RCRA, 42 U.S.C. § 6927, and state law. If Respondent is unable to so certify, it shall submit a modified certification that explains in detail why it is unable to certify in full with regard to all Records.

## **XVII. ENFORCEMENT/WORK TAKEOVER**

58. Any willful violation, or failure or refusal to comply with any provision of this Order may subject Respondent to civil penalties of up to \$53,907 per violation per day, as provided in section 106(b)(1) of CERCLA, 42 U.S.C. § 9606(b)(1), and the Civil Monetary Penalty Inflation Adjustment Rule, 81 Fed. Reg. 43,091, 40 C.F.R Part 19.4. In the event of such willful violation, or failure or refusal to comply, EPA may carry out the required actions unilaterally, pursuant to section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Order pursuant to section 106 of CERCLA, 42 U.S.C § 9606. Respondent may also be subject to punitive damages in an amount up to 3 times the amount of any cost incurred by the United States as a result of such failure to comply, as provided in section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3).

## **XVIII. RESERVATIONS OF RIGHTS**

59. Nothing in this Order limits the rights and authorities of EPA and the United States or CDPHE:

a. To take, direct, or order all actions necessary, including to seek a court order, to protect public health, welfare, or the environment or to respond to an actual or threatened release of Waste Material on, at, or from the Site;

- b. To select further response actions for the Site in accordance with CERCLA and the NCP;
- c. To seek legal or equitable relief to enforce the terms of this Order;
- d. To take other legal or equitable action as they deem appropriate and necessary, or to require Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law;
- e. To bring an action against Respondent under section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of any costs incurred by EPA or the United States regarding this Order or the Site;
- f. Regarding access to and to require institutional controls at the Site under CERCLA, RCRA, or other applicable statutes and regulations; or
- g. To obtain information and perform inspections in accordance with CERCLA, RCRA and any other applicable statutes or regulations.

#### **XIX. OTHER CLAIMS**

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

61. Nothing in this Order constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Order, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States under sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

62. Nothing in this Order shall be deemed to constitute preauthorization of a claim within the meaning of section 111 of CERCLA, 42 U.S.C. § 9611, or C.F.R. § 300.700(d).

63. No action or decision by EPA or CDPHE pursuant to this Order shall give rise to any right to judicial review, except as set forth in section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

#### **XX. ADMINISTRATIVE RECORD**

64. EPA has established an administrative record that contains the documents that form the basis for the issuance of this Order, including, but not limited to, the documents upon which EPA based the selection of the RA selected in the OU1 ROD Amendment. EPA will make

the administrative record available for review by appointment. Persons may request an appointment to review the administrative record by contacting the RPM.

## XXI. APPENDICES

65. The following appendices are attached to and incorporated into this Order:

“Appendix A” is the map of the Site.

“Appendix B” is the SOW.

## XXII. NOTICES AND SUBMISSIONS

66. All approvals, consents, deliverables, modifications, notices, notifications, objections, proposals, reports and requests specified in this Order must be in writing unless otherwise specified. Whenever, under this Order, notice is required to be given, or a report or other document is required to be sent, it must be directed to the person(s) specified below at the address(es) specified below. The Agencies may change the person and/or address applicable to it by providing notice of such change to Respondent. All notices under this Section are effective upon receipt, unless otherwise specified. Except as otherwise provided, notice by email (if that option is provided below) or by regular mail in accordance with this Section satisfies any notice requirement of this Order.

**As to EPA:**

Jamie Miller  
Remedial Project Manager  
Mail Code: 8EPR-SR  
U.S. Environmental Protection Agency  
Region 8  
1595 Wynkoop Street,  
Denver, Colorado 80202  
Miller.Jamie@epa.gov  
(303) 312-6519

**and:**

Kayleen Castelli  
Enforcement Attorney  
Mail Code: 8ENF-L  
U.S. Environmental Protection Agency  
Region 8  
1595 Wynkoop Street,  
Denver, Colorado 80202  
Castelli.kayleen@epa.gov  
(303) 312-6174

**As to CPDHE:**

Wendy Naugle  
State Project Manager  
Colorado Department of Public Health &  
Environment  
HMWMD-RP-B2  
4300 Cherry Creek Drive South  
Denver, Colorado 80246  
Wendy.naugle@state.co.us  
303-692-3394

**and:**

Jason King  
Assistant Attorney General  
Colorado Attorney General's Office  
1300 Broadway,  
Denver, Colorado 80203  
Jason.King@coag.gov  
720-508-6283

### XXIII. SEVERABILITY

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

It is so ORDERED.

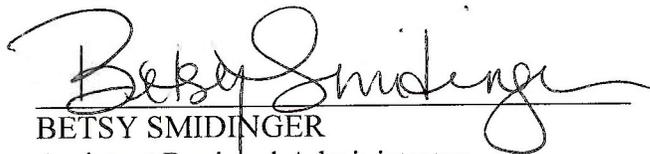
BY:

  
\_\_\_\_\_  
SUZANNE J. BONAN  
Assistant Regional Administrator  
Office of Enforcement, Compliance  
and Environmental Justice  
U.S. Environmental Protection Agency,  
Region 8

DATE:

5/29/18

BY:

  
\_\_\_\_\_  
BETSY SMIDINGER  
Assistant Regional Administrator  
Office of Ecosystems Protection and Remediation  
U.S. Environmental Protection Agency,  
Region 8

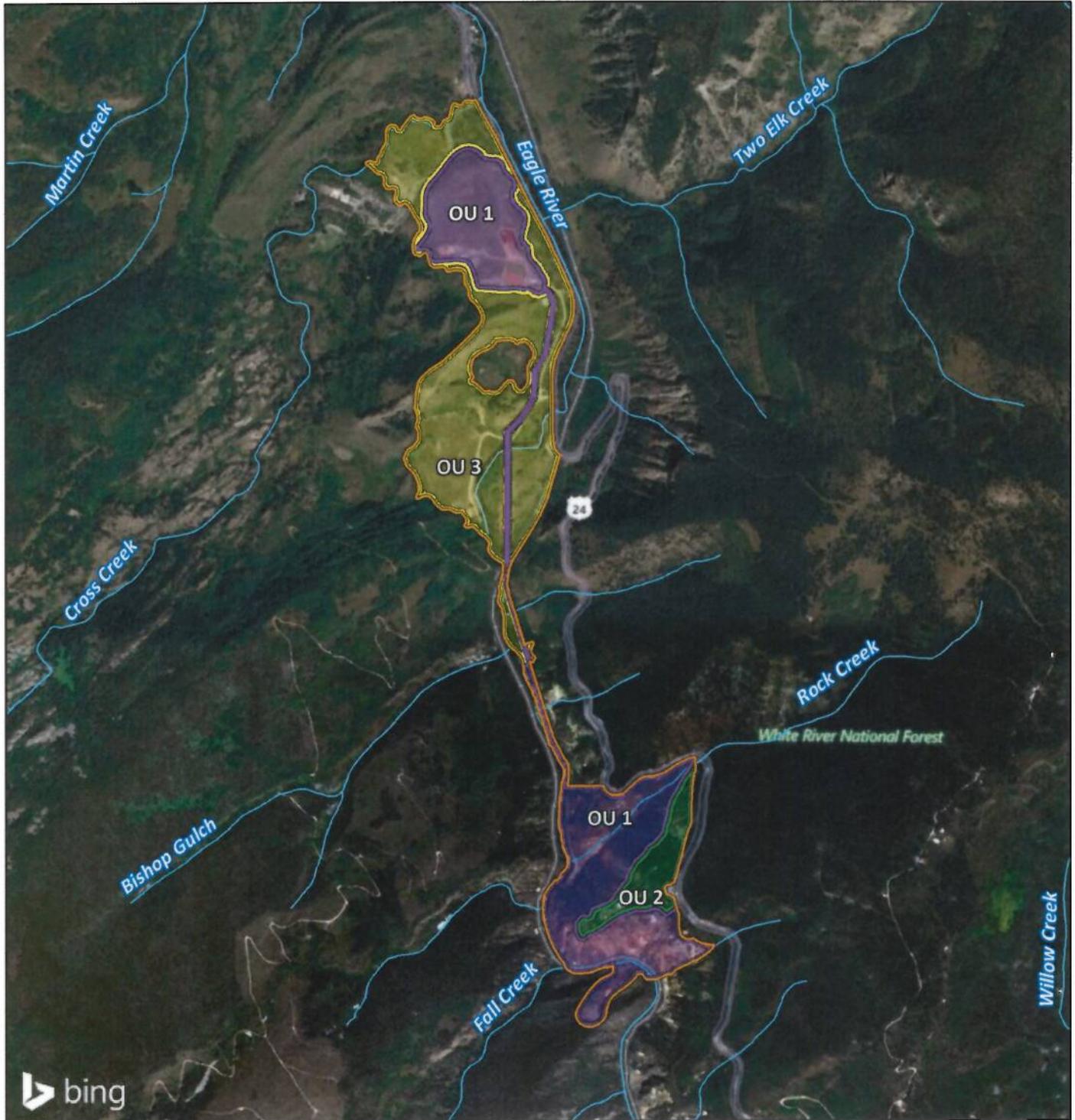
DATE:

5/24/18

**Appendix A**  
**Site Map**

Castle Hill - GU 5000000





### Eagle Mine OU Boundaries

-  NPL Boundary
-  OU 1
-  OU 2
-  OU 3
-  Stream

Date: February 22, 2018

Map Projection: UTM, Meters, 13 North, WGS84

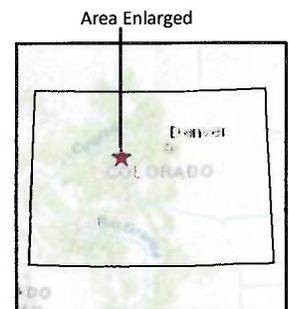
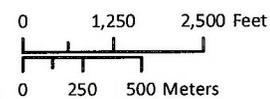
Data Sources: Boundaries - U.S. EPA Region 8 (2018);

Streams - CDOW (2004);

Imagery - Microsoft Bing Web Service (2018).

\*Boundaries are based on the nature and extent of contamination and are subject to change.

\*This site map does not depict legal boundaries and has not been surveyed. It is intended to be a visual representation.



**Appendix B**

**REMEDIAL DESIGN/REMEDIAL ACTION**

**STATEMENT OF WORK**

**OPERABLE UNIT 01**

**EAGLE MINE SUPERFUND SITE**

**Eagle County, State of Colorado**

**EPA Region 8**

**April 2018**

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## **1. INTRODUCTION**

### **1.1 Purpose of the SOW**

This Statement of Work (SOW) sets forth the procedures and requirements for implementing the Work as defined in the Unilateral Administrative Order (UAO).

### **1.2 Structure of the SOW**

- (a) Section 2 (Community Involvement) sets forth the U.S. Environmental Protection Agency's (EPA's) and the Respondent's, TCI Pacific Communications, LLC (TCI), responsibilities for community involvement.
- (b) Section 3 (Remedial Design) sets forth the process for developing the Remedial Design (RD), which includes the submission of specified primary deliverables.
- (c) Section 4 (Remedial Action) sets forth requirements regarding the completion of the Remedial Action (RA), including primary deliverables related to completion of the RA.
- (d) Section 5 (RA Completion) describes the requirements for documenting completion of RA.
- (e) Section 6 (Reporting) sets forth TCI's reporting obligations.
- (f) Section 7 (Deliverables) describes the content of the supporting deliverables and the general requirements regarding TCI's submission of, and EPA's review of, approval of, comment on, and/or modification of, the deliverables.
- (g) Section 8 (Schedules) sets forth the schedule for submitting the primary deliverables, specifies the supporting deliverables that must accompany each primary deliverable, and sets forth the schedule of milestones regarding the completion of the RA.
- (h) Section 9 (State Participation) addresses participation by the State of Colorado (State).
- (i) Section 10 (References) provides a list of references, including URLs.

### **1.3 Scope of the Remedy**

The Scope of the Remedy includes: (1) the collection of groundwater at Belden, at the mouth of Rock Creek and from the Mill Level of the mine during the early spring period of March and April; and (2) conveyance of the water to the existing water treatment plant (WTP). These actions are described in Section 4.2 of the Record of Decision Amendment (RODA) for Operable Unit 1 (OU1) of the Eagle Mine Superfund Site (Site), issued on September 28, 2017.

## 1.4 Remedy Compliance

The RODA adopted the Colorado Discharge Permit System (CDPS) Regulations and the Colorado Effluent Limitations Regulations to establish an arsenic effluent standard for the WTP point source discharge. The Site has operated under a CDPS permit issued by the Water Quality Control Division since 1991. The RODA also adopted the Colorado Basic Standards and Methodologies for Surface Water and the Colorado Surface Water Quality Classifications and Numeric Standards for Upper Colorado River Basin to establish surface water quality standards listed in Table 2 and Appendix B of the RODA. The CDPS permit for the Site was recently renewed and contains a report-only requirement for arsenic until after 12/31/21 and then sets an interim limit of 6.1 ug/L until 12/31/2026. EPA granted a technical impracticability waiver for the arsenic standard, which sets an alternate remedial goal for arsenic in the WTP effluent at 3 ug/L. As an alternate remedial goal in place of the applicable or relevant and appropriate requirement for the RODA, TCI shall comply with the alternate remedial goal for arsenic of 3 ug/L.

TCI (or its designated representative) will complete design and construction for the above-listed OU1 remedial components as described in the UAO. For OU1, TCI will prepare an RDWP describing the design of the new groundwater extraction system. TCI shall also conduct a proof of principal test to show that the groundwater extraction system will be sufficient to capture metal loading to the Eagle River from the Belden area and the mouth of Rock Creek in order to attain applicable water quality standards during the spring period. This test shall be conducted prior to finalizing the design for the extraction system.

## 1.5 Definitions

The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the UAO, have the meanings assigned to them in CERCLA, in such regulations, or in the UAO, except that the term "Paragraph" or "¶" means a paragraph of the SOW, and the term "Section" means a section of the SOW, unless otherwise stated.

# 2. COMMUNITY INVOLVEMENT

## 2.1 Community Involvement Responsibilities

- (a) EPA has the lead responsibility for developing and implementing community involvement activities at the Site. In 2006, EPA developed a Community Involvement Plan (CIP) for the Site. Pursuant to 40 C.F.R. § 300.435(c), EPA shall review the existing CIP and determine whether it should be revised to describe further public involvement activities during the Work that are not already addressed or provided for in the existing CIP.
- (b) If requested by EPA, TCI shall participate in community involvement activities, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media

and/or Internet notification and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. EPA may describe in its CIP TCI's responsibilities for community involvement activities. All community involvement activities conducted by TCI at EPA's request are subject to EPA's oversight.

### **3. REMEDIAL DESIGN**

#### **3.1 RD Work Plan**

TCI shall submit an RD Work Plan (RDWP) for EPA approval. The RDWP must include:

- (a) Plans for implementing all RD activities identified in this SOW, in the RDWP, or required by EPA to be conducted to develop the RD;
- (b) A description of the overall management strategy for performing the RD, including a proposal for phasing of design and construction, if applicable;
- (c) A description of the proposed general approach to contracting, construction, operation, maintenance, and monitoring of the RA as necessary to implement the Work;
- (d) A description of the responsibility and authority of all organizations and key personnel involved with the development of the RD;
- (e) Descriptions of any areas requiring clarification and/or anticipated problems (e.g., data gaps);
- (f) Description of any proposed pre-design investigation;
- (g) Descriptions of any applicable permitting requirements and other regulatory requirements;
- (h) Description of plans for obtaining access in connection with the Work, such as property acquisition, property leases, and/or easements;
- (i) The following supporting deliverables described in ¶ 7.7 (Supporting Deliverables): Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP);
- (j) Description of any changes that may be needed to the existing Emergency Response/Contingency Plan (ER/CP);
- (k) Plan for reporting and complying with the arsenic effluent limit in the WTP discharge; and
- (l) Certification in accordance with ¶ 7.5 (Certification).

### 3.2 Design Meetings

TCI shall meet with EPA to discuss design issues as necessary, as directed, or determined by EPA.

### 3.3 Pre-Design Investigation

The purpose of the Pre-Design Investigation (PDI) is to provide proof of the amount of groundwater extraction needed to confirm that the system will prevent water quality exceedances during the spring melt period.

- (a) **PDI Work Plan.** TCI shall submit a PDI Work Plan (PDIWP) for EPA approval. The PDIWP must include:
- (1) An evaluation and summary of existing data and description of data gaps, including an update to any calculations relevant to the design included in the OU1 Focused Feasibility Study (FFS) and FFS Addendum;
  - (2) An evaluation of existing infrastructure to demonstrate that the existing pipeline and WTP have adequate capacity and integrity to convey and treat the additional collected water;
  - (3) A test plan and a Field Sampling Plan (FSP) including media to be sampled, contaminants or parameters for which sampling will be conducted, location (areal extent and depths), and number of samples as described in ¶ 7.7(c). The test plan should include any new wells to be installed for the test period and the complete test parameters including wells to be pumped, rate and period of pumping along with any modifications to the existing pipeline to carry the extracted flow. The FSP should include a comprehensive sampling plan including sampling locations, analytical parameters and monitoring frequency to document changes in Eagle River water quality as a result of system operation;
  - (4) Cross references to quality assurance/quality control (QA/QC) requirements set forth in the QAPP as described in ¶ 7.7(d);
  - (5) A design criteria report, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995);
  - (6) Preliminary drawings and specifications;
  - (7) Descriptions of permit requirements, if applicable;
  - (8) Preliminary Operation and Maintenance (O&M) Plan for the operation of the new remedy components;

- (9) A description of how the RA will be implemented in a manner that minimizes environmental impacts in accordance with EPA's *Principles for Greener Cleanups* (Aug. 2009);
- (10) A description of monitoring and control measures to protect human health and the environment, such as air monitoring and dust suppression, during the RA;
- (11) Any proposed revisions to the RA Schedule that is set forth in ¶ 0 (RA Schedule);
- (12) A plan for disposal of material excavated during pipeline construction, including estimated material quantities and proposed disposal locations;
- (13) A plan for utility installation, if needed (note that a clean utility corridor is required to minimize future waste handling during utility repair);
- (14) A proposed PDI schedule in a Gantt Chart format;
- (15) A HASP that covers activities during the PDI;
- (16) Plans for satisfying the substantive requirements of permits for on-site activity;
- (17) Updates of all supporting deliverables required to accompany the RDWP and the following additional supporting deliverables described in ¶ 7.7 (Supporting Deliverables): FSP; Construction Quality Assurance/Quality Control Plan (CQA/QCP); Transportation Plan; Preliminary O&M Plan; and
- (18) Certification in accordance with ¶ 7.5 (Certification).

### 3.4 Meetings and Inspections

- (a) **Pre-Design Investigation Conference.** TCI shall hold a PDI conference with EPA and others as directed or approved by EPA and as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). TCI shall prepare a meeting summary and shall distribute the summary to all Parties to the UAO and meeting attendees.
- (b) **Periodic Updates.** During periods of construction of the PDI, TCI shall provide weekly written summaries to EPA, and others as directed or determined by EPA, describing construction progress and any issues/problems that were encountered.
- (c) **Annual Summary Report.** At the conclusion of each calendar year that TCI conducts Work under the PDIWP, TCI shall provide a summary report detailing activities performed, compliance with PDIWP milestones, data collected and test system operating status.

- (d) **Inspections.** EPA or its representative shall conduct periodic inspections and may have an on-Site presence during the Work. At EPA's request, TCI's Project Coordinator or other designee shall accompany EPA or its representative during inspections.
- (e) Upon notification by EPA of any deficiencies in the Work, TCI shall take all necessary steps to correct the deficiencies and/or bring the Work into compliance with the approved Final Work Plans and/or any approved design changes. If applicable, TCI shall comply with any schedule provided by EPA in its notice of deficiency.

### 3.5 Emergency Response and Reporting

- (a) **Emergency Response and Reporting.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from OU1 and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, TCI shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized EPA officer (as specified in ¶ 4.3(c)) orally; and (3) take such actions in consultation with the authorized EPA officer and in accordance with all applicable provisions of the HASP, ER/CP, and any other deliverable approved by EPA under the SOW.
- (b) **Release Reporting.** Upon the occurrence of any event during performance of the Work that TCI is required to report pursuant to section 103 of CERCLA, 42 U.S.C. § 9603, or section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004. TCI shall immediately notify the authorized EPA officer orally. TCI shall also notify the State Project Manager and the State's Environmental Release and Incident Reporting Line at (877) 518-5608 and follow notification procedures as detailed in the ER/CP for the Site, as amended.
- (c) The "authorized EPA officer" for purposes of immediate oral notifications and consultations under ¶ 4.3(a) and ¶ 4.3(b) is the EPA Remedial Project Manager (RPM) as designated in Section VIII of the UAO or the EPA Regional Duty Officer at (800) 424-8802 and the EPA National Response Center at (800) 424-8802 (if the RPM is not available).
- (d) For any event covered by ¶ 4.3(a) and ¶ 4.3(b), TCI shall, within 5 days after the onset of such event, submit a report to EPA and the Colorado Department of Public Health and Environment (collectively, the Agencies): (1) describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) all actions taken in response to such event.
- (e) The reporting requirements under ¶ 4.3 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304 and must be consistent with Section XIV of the UAO.

### 3.6 Off-Site Shipments

- (a) TCI may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. EPA will deem TCI to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if TCI obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).
- (b) TCI may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, it provides notice to the appropriate state environmental official in the receiving facility's state and to the EPA Remedial Project Manager. This notice requirement will not apply to any off-Site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. TCI also shall notify the state environmental official referenced above and the EPA Remedial Project Manager of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. TCI shall provide the notice after the award of the contract for RA construction and before the Waste Material is shipped.
- (c) TCI may ship Investigation-Derived Waste (IDW) from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, *EPA's Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the ROD. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 CFR § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.
- (d) All actions taken under ¶ 4.3(c) must be consistent with Paragraph 48 of the UAO.

### 3.7 Pre-Design Investigation Report

TCI shall submit a Pre-Design Investigation Summary Report (PDI Summary Report) for EPA's comment. The PDI Summary Report must include:

- (a) A summary of any investigations performed, summary of investigation results, summary of validated data, photographs documenting the Work and conclusions and recommendation as they may relate to the final design;
- (b) Certification in accordance with ¶ 7.5 (Certification); and

- (c) As-built drawings of any new construction elements that are: (1) certified by a registered professional engineer and (2) follow the Construction Specifications Institute's Master Format 2012.

### **3.8 Notice of Work Completion after PDI Summary Report**

- (a) Within 30 days following the PDI Summary Report Work, TCI may elect to pursue RA Construction Completion. If TCI so elects, TCI shall follow the procedures outlined in Section 5 (RA Construction Completion).
- (b) If EPA concludes that the Work is complete following the PDI Summary Report, ¶ 3.9 (Pre-Final (95%) RD), ¶ 3.10 (Final (100%) RD), and Section 4 (Remedial Action) shall not apply.

### **3.9 Pre-Final (95%) RD**

TCI shall submit the Pre-final (95%) RD for EPA's comment. The Pre-final RD must be a continuation and expansion of the PDI Work Plan and must address EPA's comments regarding the PDI Summary Report. The Pre-final RD will serve as the approved Final (100%) RD if EPA approves the Pre-final RD without comments. The Pre-final RD must include:

- (a) A complete set of construction drawings and specifications that are: (1) certified by a registered professional engineer; (2) suitable for procurement; and (3) follow the Construction Specifications Institute's Master Format 2012;
- (b) A survey and engineering drawings showing existing OU1 features, such as elements, property borders, easements, and OU1 conditions;
- (c) Pre-Final versions of the same elements and deliverables as are required for the Preliminary RD;
- (d) A specification for photographic documentation of the RA;
- (e) Updates of all supporting deliverables required to accompany the PDI Work Plan; and
- (f) Certification in accordance with ¶ 7.5 (Certification).

### **3.10 Final (100%) RD**

TCI shall submit the Final (100%) RD for EPA approval. The Final RD must address EPA's comments on the Pre-final RD and must include final versions of all Pre-final RD deliverables and be certified in accordance with ¶ 7.5 (Certification). If no additional RA Construction is necessary, then this ¶ 3.9 will not apply.

## 4. REMEDIAL ACTION

### 4.1 RA Work Plan

TCI shall submit an RA Work Plan (RAWP) for EPA approval that includes:

- (a) A proposed RA Construction Schedule in a Gantt chart format;
- (b) A HASP that covers activities during the RA;
- (c) Plans for satisfying substantive requirements of permits for on-Site activity; and
- (d) Certification in accordance with ¶ 7.5 (Certification).

### 4.2 Meetings and Inspections

- (a) **Preconstruction Conference.** TCI shall hold a preconstruction conference with EPA and others as directed or approved by EPA and as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). TCI shall prepare a meeting summary and shall distribute the summary to all Parties to the UAO and meeting attendees.
- (b) **Periodic Updates.** During the construction portion of the RA (RA Construction), TCI shall provide weekly written summaries to EPA, and others as directed or determined by EPA, describing construction progress and any issues/problems that were encountered.
- (c) **Inspections.** EPA or its representative shall conduct periodic inspections and may have an on-Site presence during the Work. At EPA's request, TCI's Project Coordinator or other designee shall accompany EPA or its representative during inspections.
- (d) Upon notification by EPA of any deficiencies in the RA Construction, TCI shall take all necessary steps to correct the deficiencies and/or bring the RA Construction into compliance with the approved Final RD, any approved design changes, and/or the approved RAWP. If applicable, TCI shall comply with any schedule provided by EPA in its notice of deficiency.

### 4.3 Emergency Response and Reporting

- (a) **Emergency Response and Reporting.** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from OU1 and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, TCI shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized EPA officer (as specified in ¶ 4.3(c)) orally; and (3) take such actions in consultation with the authorized

EPA officer and in accordance with all applicable provisions of the HASP, ER/CP, and any other deliverable approved by EPA under the SOW.

- (b) **Release Reporting.** Upon the occurrence of any event during performance of the Work that TCI is required to report pursuant to section 103 of CERCLA, 42 U.S.C. § 9603, or section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004. TCI shall immediately notify the authorized EPA officer orally. TCI shall also notify the State Project Manager and the State's Environmental Release and Incident Reporting Line at (877) 518-5608 and follow notification procedures as detailed in the ER/CP for the Site, as amended.
- (c) The "authorized EPA officer" for purposes of immediate oral notifications and consultations under ¶ 4.3(a) and ¶ 4.3(b) is the EPA Remedial Project Manager (RPM) as designated in Section VIII of the UAO or the EPA Regional Duty Officer at (800) 424-8802 and the EPA National Response Center at (800) 424-8802 (if the RPM is not available).
- (d) For any event covered by ¶ 4.3(a) and ¶ 4.3(b), TCI shall, within 5 days after the onset of such event, submit a report to EPA and the Colorado Department of Public Health and Environment (collectively, the Agencies): (1) describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) all actions taken in response to such event.
- (e) The reporting requirements under ¶ 4.3 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304 and must be consistent with Section XIV of the UAO.

#### 4.4 Off-Site Shipments

- (a) TCI may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. EPA will deem TCI to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if TCI obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).
- (b) TCI may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, it provides notice to the appropriate state environmental official in the receiving facility's state and to the EPA Remedial Project Manager. This notice requirement will not apply to any off-Site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. TCI also shall notify the state environmental official referenced above and the EPA Remedial Project Manager of any major changes in the shipment plan, such

as a decision to ship the Waste Material to a different out-of-state facility. TCI shall provide the notice after the award of the contract for RA construction and before the Waste Material is shipped.

- (c) TCI may ship Investigation-Derived Waste (IDW) from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, *EPA's Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the ROD. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 CFR § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.
- (d) All actions taken under ¶ 4.3(e) must be consistent with Paragraph 48 of the UAO.

## 5. RA CONSTRUCTION COMPLETION

### 5.1 RA Construction Completion Definition

For purposes of this Section 5, "RA Construction Completion" includes all actions necessary to construct and operate any system designed to achieve Performance Standards as set forth in the OU1 RODA. RA Construction Completion may occur after the completion of the PDI, if EPA determines the PDI system accomplishes the goals of the Work without the need for additional RA.

- (a) **Inspection of Constructed Remedy.** TCI shall schedule an inspection to review the construction and operation of the system and to review whether the system is functioning properly and as designed. The inspection must be attended by TCI and EPA and/or their representatives. A re-inspection must be conducted if requested by EPA.
- (b) **Shakedown Period.** There shall be a shakedown period of up to one year for EPA to review whether the remedy is functioning properly and performing as designed. TCI shall provide such information as EPA requests for such review.
- (c) **RA Report.** Following the shakedown period, TCI shall submit an "RA Report" requesting EPA's determination that RA Construction has been completed. The RA Report must: (1) include statements by a registered professional engineer and by TCI's Project Coordinator that construction of the system is complete and that the system is functioning properly and as designed; (2) include a demonstration, and supporting documentation, that construction of the system is complete and that the system is functioning properly and as designed; (3) include as-built drawings signed and stamped by a registered professional engineer; (4) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011), as supplemented by *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017); and (5) be certified in accordance with ¶ 7.5 (Certification).

- (d) If EPA determines that RA Construction is not complete, EPA shall so notify TCI. EPA's notice must include a description of, and schedule for, the activities that TCI must perform to complete RA Construction. EPA's notice may include a schedule for completion of such activities or may require TCI to submit a proposed schedule for EPA approval. TCI shall perform all activities described in the EPA notice in accordance with the schedule.
- (e) If EPA determines, based on the initial or any subsequent RA Report, that RA Construction is complete, EPA shall so notify TCI.

## 5.2 Notice of RA Completion

- (a) **RA Completion Inspection.** The RA is "Complete" for purposes of this ¶ 5.2 when it has been fully performed and the Performance Standards have been achieved. TCI shall schedule an inspection for the purpose of obtaining EPA's Notice of RA Completion. The inspection must be attended by TCI and EPA and/or their representatives.
- (b) **Monitoring Report.** Following the inspection, TCI shall submit a Monitoring Report to EPA requesting EPA's Notice of RA Completion. The report must: (1) include certifications by a registered professional engineer and by TCI's Project Coordinator that the RA is complete; (2) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011), as supplemented by *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017); (3) contain monitoring data to demonstrate that Performance Standards have been achieved; and (4) be certified in accordance with ¶ 7.5 (Certification).
- (c) If EPA concludes that the RA is not Complete, EPA shall so notify TCI. EPA's notice must include a description of any deficiencies. EPA's notice may include a schedule for addressing such deficiencies or may require TCI to submit a schedule for EPA approval. TCI shall perform all activities described in the notice in accordance with the schedule.
- (d) If EPA concludes, based on the initial or any subsequent RA Report requesting Notice of RA Completion, that the RA is Complete, EPA shall so notify TCI. This notice will constitute the Notice of RA Completion for purposes of the UAO. Issuance of the Notice of RA Completion will not affect TCI's remaining obligations under the UAO or existing or future consent decrees.

## 5.3 Notice of Work Completion

- (a) **Work Completion Inspection.** Within 30 days of Notice of RA Completion, TCI shall schedule an inspection for the purpose of obtaining EPA's Certification of Work Completion. The inspection must be attended by TCI (and/or its representatives) and EPA (and/or its representatives).

- (b) **Work Completion Report.** Within 30 days following the Work Completion Inspection, TCI shall submit a report to EPA requesting EPA's Certification of Work Completion. The report must: (1) include certifications by a registered professional engineer and by TCI's Project Coordinator that the Work is complete; and (2) be certified in accordance with ¶ 7.5 (Certification). If the Monitoring Report submitted under ¶ 5.2(b) includes all elements required under this ¶ 5.3(b), then the RA Report(s) suffices to satisfy all requirements under this ¶ 5.3(b).
- (c) If EPA concludes that the Work is not complete, EPA shall so notify TCI. EPA's notice must include a description of the activities that TCI must perform to complete the Work. EPA's notice must include specifications and a schedule for such activities or must require TCI to submit specifications and a schedule for EPA approval. TCI shall perform all activities described in the notice or in EPA-approved specifications and schedule.
- (d) If EPA concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, EPA shall so certify in writing to TCI. Issuance of the Certification of Work Completion does not affect the following continuing obligations: (1) obligations under Sections X (Property Requirements), XII (Record Retention), and XI (Access to Information) of the UAO; and (4) reimbursement of EPA's Future Response Costs or the State's Future Response Costs under Section XV (Payments of Future Response Costs) of the UAO.

## 6. REPORTING

### 6.1 Progress Report Submittal

TCI shall submit weekly written Progress Reports via electronic mail during the PDI, and RA construction, as required in ¶ 4.2(b).

### 6.2 Notice of Progress Report Schedule Changes

If the schedule for any activity described in the Progress Reports, including activities required to be described under ¶ 4.1(a) changes, TCI shall notify EPA of such change at least 7 days before performance of the activity.

### 6.3 Monitoring Data

TCI will report any environmental monitoring data collected as part of the RD/RA in the Annual Site Monitoring and Activity Report, as required by the CD/SOW.

## 7. DELIVERABLES

### 7.1 Applicability

TCI shall submit deliverables for EPA approval or for EPA comment as specified in the SOW and UAO. If neither is specified, the deliverable does not require EPA's approval

or comment. Paragraphs 7.2 (In Writing) through 7.4 (Technical Specifications) apply to all deliverables. Paragraph 7.5 (Certification) applies to any deliverable that is required to be certified. Paragraph 7.6 (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval.

## **7.2 In Writing**

All deliverables under this SOW must be in writing unless otherwise specified.

## **7.3 General Requirements for Deliverables**

TCI must submit all deliverables by the deadlines in the RD Schedule or RA Schedule, as applicable. TCI shall submit all deliverables to EPA in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 7.4. All other deliverables shall be submitted to EPA in the electronic form specified by the RPM. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", TCI shall also provide EPA with paper copies of such exhibits.

## **7.4 Technical Specifications**

- (a) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format; and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at <https://edg.epa.gov/EME/>.
- (b) Each file must include an attribute name for the relevant Site operable unit. Consult <https://www.epa.gov/geospatial/geospatial-policies-and-standards> for any further available guidance on attribute identification and naming.
- (c) Spatial data submitted by TCI does not, and is not intended to, define the boundaries of the Site.

## **7.5 Certification**

All deliverables that require compliance with this Certification must be signed by the TCI's Project Coordinator, or other responsible corporate official of TCI, and must contain the following statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified

personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

## 7.6 Approval of Deliverables

### (a) Initial Submissions.

(1) After review of any deliverable that is required to be submitted for EPA approval under the UAO or the SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.

(2) EPA also may modify any submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

(b) **Resubmissions.** Upon receipt of a notice of disapproval under ¶ 7.6(a) (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ 7.6(a), TCI shall, within 30 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring TCI to correct the deficiencies; or (5) any combination of the foregoing.

(c) **Implementation.** Upon approval, approval upon conditions, or modification by EPA under ¶ 7.6(a) (Initial Submissions) or ¶ 7.6(b) (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the UAO; and (2) TCI shall take any action required by such deliverable, or portion thereof.

## 7.7 Supporting Deliverables

TCI shall submit each of the following supporting deliverables for EPA approval, except as specifically provided. TCI shall develop the deliverables in accordance with all applicable regulations, guidance, and policies (see ¶ 10 References). TCI shall update each of these supporting deliverables as necessary or appropriate during the course of the Work, and/or as requested by EPA.

- (a) **Health and Safety Plan.** The Health and Safety Plan (HASP) describes all activities to be performed to protect on-Site personnel and area residents from physical, chemical, and all other hazards posed by the Work. TCI shall develop a HASP in accordance with EPA's Emergency Responder Health and Safety and Occupational Safety and Health Administration (OSHA) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should cover RD activities and should be, as appropriate, updated to cover activities during the RA and updated to cover activities after RA completion. EPA does not approve the HASP, but will review it to ensure that all necessary elements are included and that the HASP provides for the protection of human health and the environment.
- (b) **Emergency Response/Contingency Plan update.** TCI is required to submit an updated ER/CP if the Work to be conducted may result in a release that is not anticipated in the existing ER/CP, or if the existing ER/CP is inconsistent with the requirements of ¶ 4.3 above.
- (c) **Field Sampling Plan(s).** The FSPs augment the QAPP and address RA sample collection activities. The FSP must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. TCI shall develop the FSP in accordance with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G 89/004 (Oct. 1988). The FSP shall be certified in accordance with ¶ 7.5 (Certification).
- (d) **Quality Assurance Project Plan.** The QAPP addresses sample analysis and data handling regarding the Work performed to support the PDI and RA. The QAPP must include a detailed explanation of TCI's quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance, and monitoring samples and be certified in accordance with ¶ 7.5 (Certification). TCI shall develop the QAPP in accordance with *EPA Requirements for Quality Assurance Project Plans*, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006); *Guidance for Quality Assurance Project Plans*, QA/G-5, EPA/240/R 02/009 (Dec. 2002); and *Uniform Federal Policy for Quality Assurance Project Plans*, Parts 1-3, EPA/505/B-04/900A through 900C (Mar. 2005). The QAPP also must include procedures:
- (1) To ensure that EPA and its authorized representatives and the State and its authorized representatives have reasonable access to laboratories used by TCI in implementing the UAO (TCI's Labs);
  - (2) To ensure that TCI's Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;
  - (3) To ensure that TCI's Labs perform all analyses using EPA-accepted methods (i.e., the methods documented in *USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis*, ILM05.4 (Dec. 2006); *USEPA Contract Laboratory Program Statement of Work for Organic Analysis*, SOM01.2 (amended Apr. 2007); and *USEPA Contract*

*Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration)*, ISM01.2 (Jan. 2010) or other methods acceptable to EPA;

- (4) To ensure that TCI's Labs participate in an EPA-accepted QA/QC program or other program QA/QC acceptable to EPA;
  - (5) For TCI to provide EPA with notice at least 7 days prior to any sample collection activity;
  - (6) For TCI to provide split samples and/or duplicate samples to EPA upon request;
  - (7) For EPA to take any additional samples that it deems necessary;
  - (8) For EPA to provide to TCI, upon request, split samples and/or duplicate samples in connection with EPA's and the State's oversight sampling; and
  - (9) For TCI to submit to EPA and the State all sampling and tests results and other data in connection with the implementation of the UAO.
- (e) **Construction Quality Assurance/Quality Control Plan.** The purpose of the Construction Quality Assurance Plan (CQAP) is to describe planned and systemic activities that provide confidence that the RA construction will satisfy all plans, specifications, and related requirements, including quality objectives. The purpose of the Construction Quality Control Plan (CQCP) is to describe the activities to verify that RA construction has satisfied all plans, specifications, and related requirements, including quality objectives. The CQA/QCP must:
- (1) Identify, and describe the responsibilities of the organizations and personnel implementing the CQA/QCP;
  - (2) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the CQA/QCP;
  - (3) Describe industry standards and technical specifications used in implementing the CQA/QCP;
  - (4) Describe procedures for tracking construction deficiencies from identification through corrective action;
  - (5) Describe procedures for documenting all CQA/QCP activities;
  - (6) Describe procedures for retention of documents and for final storage of documents; and
  - (7) Be certified in accordance with ¶ 7.5 (Certification).

- (f) **Transportation Plan.** The Transportation Plan (TP) must include:
- (1) Proposed routes for transportation of Waste Material to the CTP;
  - (2) Estimated quantities of materials and number of truck trips; and
  - (3) Plan for compliance with Air Pollution Control Applicable or Relevant and Appropriate Requirements.
- (g) **O&M Plan.** The O&M Plan describes the requirements for inspecting, operating, and maintaining the new components of the remedy. TCI shall develop the O&M Plan in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017). The O&M Plan must include the following additional requirements:
- (1) Description of Cleanup Levels required to be met to implement the RODA;
  - (2) Description of activities to be performed: (i) to provide confidence that Cleanup Levels will be met and (ii) to determine whether Cleanup Levels have been met;
  - (3) O&M Reporting. Description of records and reports that will be generated during O&M, such as daily operating logs, laboratory records, records of operating costs, reports regarding emergencies, personnel and maintenance records, monitoring reports, and monthly and annual reports to EPA and State agencies;
  - (4) Description of corrective action in case of systems failure, including:
    - (i) alternative procedures to prevent the release or threatened release of Waste Material which may endanger public health and the environment or may cause a failure to achieve Cleanup Levels;
    - (ii) analysis of vulnerability and additional resource requirements should a failure occur;
    - (iii) notification and reporting requirements should O&M systems fail or be in danger of imminent failure; and
    - (iv) community notification requirements; and
  - (5) Description of corrective action to be implemented in the event that Cleanup Levels are not achieved and a schedule for implementing these corrective actions.

## 8. SCHEDULES

### 8.1 Applicability and Revisions

All deliverables and tasks required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the RD and RA Schedules set forth below. TCI may submit proposed revised RD Schedules or RA Schedules for EPA

approval. Upon EPA's approval, the revised RD and/or RA Schedules supersede the RD and RA Schedules set forth below, and any previously-approved RD and/or RA Schedules.

## 8.2 RD Schedule

	Description of Deliverable / Task	¶ Ref.	Start Date	Finish Date
1	RDWP (includes HASP, ER/CP, and QAPP)	3.1 7.7(a) 7.7(b) 7.7(d)	Within 60 days after the Effective Date of the UAO (anticipated 5/25/18)	7/7/18
2	QAPP	3.1(i) 7.7(d)	5/25/18	1/31/2019
3	PDIWP (includes contents of an FSP)	3.3(a) 7.7(c)	Concurrent start with RDWP (5/25/18)	2/6/19
4	PDI Summary Report	3.4 7.7(e)	Within 90 days after completion of field sampling activities and testing of the relevant construction season but no later than January 1 of the following year.	TBD
5	Pre-final (95%) RD	3.9	Within 45 days after EPA approval of the PDI Summary Report	TBD
6	Final (100%) RD	3.10	Within 20 days after EPA approval on Pre-Final (95%) RD	TBD

\*Applicable if work is not complete pursuant to ¶ 3.8 (Notice of Work Completion after PDI Summary Report) and Section 5 (RA Construction Complete).

## 8.3 RA Schedule

	Description of Deliverable / Task	¶ Ref.	Deadline
1	RAWP (includes RA FSPs)*	4.1, 7.7(c)	Within 45 days after EPA approval of the Final (100%) RD
2	Preconstruction Conference*	4.2(a)	Within 10 days after EPA approval of the RAWP
3	Start of Construction*		Within 30 days or by the beginning of the next construction Season following EPA's approval of the RAWP
4	Completion of Construction*		To Be Outlined in the RAWP
5	RA Completion Inspection	5.1(a)	Within 10 days after completion of construction
6	RA Report	5.1(c)	Within 45 days after RA Completion Inspection
7	Work Completion Report	5.3(b)	Within 90 days after Work Completion Inspection

\*Applicable if work is not complete pursuant to ¶ 3.8 (Notice of Work Completion after PDI Summary Report) and Section 5 (RA Construction Complete).

## **9. STATE PARTICIPATION**

### **9.1 Copies**

TCI shall, at any time it sends a deliverable to EPA, send a copy of such deliverable to the State. EPA shall, at any time it sends a notice, authorization, approval, disapproval, or certification to TCI, send a copy of such document to the State.

### **9.2 Review and Comment**

The State will have opportunity for review and comment prior to:

- (a) Any EPA approval or disapproval under ¶ 7.6 (Approval of Deliverables) of any deliverables that are required to be submitted for EPA approval; and
- (a) Any approval or disapproval of the Construction Phase under ¶ 5 (RA Construction Completion), any disapproval of, or Notice of RA Completion under ¶ 5.2 (Notice of RA Completion), and any disapproval of, or Notice of Work Completion under ¶ 5.3 (Notice of Work Completion).

## 10. REFERENCES

### 10.1 Regulations and Guidance Documents

The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA Web pages listed in ¶ 10.2:

- (a) A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).
- (b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).
- (c) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
- (d) Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G-90/001 (Apr. 1990).
- (e) Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).
- (f) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 1992).
- (g) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).
- (h) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).
- (i) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).
- (j) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (k) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (l) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- (m) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A through 900C (Mar. 2005).

- (n) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016), <https://www.epa.gov/superfund/community-involvement-tools-and-resources>.
- (o) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (p) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (q) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (r) USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).
- (s) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), <https://www.epa.gov/geospatial/geospatial-policies-and-standards> and <https://www.epa.gov/geospatial/epa-national-geospatial-data-policy>.
- (t) Principles for Greener Cleanups (Aug. 2009), <https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups>.
- (u) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- (v) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (w) Construction Specifications Institute's MasterFormat 2012, available from the Construction Specifications Institute, <http://www.csinet.org/masterformat>.
- (x) EPA's Emergency Responder Health and Safety Manual, OSWER 9285.3-12 (July 2005 and updates), <https://www.epaossc.org/HealthSafetyManual/manual-index.htm>.
- (y) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (z) Focused Feasibility Study. CBS Operations, Inc., prepared by NewFields. July 26, 2013 and Focused Feasibility Study Addendum, Eagle Mine Site, prepared by NewFields. February 2017.
- (aa) Emergency Response/Contingency Plan, Eagle Mine Superfund Site, March 2014, prepared by ENVIRON International Corporation.
- (bb) EPA 1993. Record of Decision for Operable Unit Number 1, Eagle Mine Site. March 29.

- (cc) Eagle Mine Operable Unit Number 1 Partial Consent Decree and Final Statement of Work, filed June 1996.

## **10.2 Comprehensive Guidance**

A more complete list may be found on the following EPA Web pages:

Laws, Policy, and Guidance: <https://www.epa.gov/superfund/superfund-policy-guidance-and-laws>

Test Methods Collections: <https://www.epa.gov/measurements/collection-methods>

## **10.3 Regulation or Guidance Modification**

For any regulation or guidance referenced in the UAO or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after TCI receives notification from EPA of the modification, amendment, or replacement.