

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

_____)	
UNITED STATES OF AMERICA,)	
STATE OF NEW MEXICO, and)	
NEW MEXICO ENVIRONMENT)	
DEPARTMENT)	
)	
Plaintiffs,)	
)	
v.)	CIVIL ACTION NO. _____
)	
CHEVRON MINING INC.,)	
)	
Defendant.)	
_____)	

JOINT COMPLAINT

The United States of America (“United States”), by the authority of the Attorney General of the United States, acting at the request of the Administrator of the United States Environmental Protection Agency (“EPA”), and the State of New Mexico (“State”), by and through its Attorney General on behalf of the people of the State of New Mexico, and the New Mexico Environment Department (“NMED”) file this Complaint and allege as follows:

STATEMENT OF THE CASE

1. This is a civil action brought against Chevron Mining Inc. (“Defendant” or “CMI”) under Section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“CERCLA”), 42 U.S.C. § 9607 for the recovery of certain response costs. NMED also seeks implementation of specified actions pursuant to the New Mexico Water Quality Act (“WQA”), NMSA 1978, §§ 74-6-10 and 74-6-11.

2. The Plaintiffs seek the recovery of response costs that have been incurred by the United States, the State and NMED in response to releases and threatened releases of hazardous substances at and from the Chevron Questa Mine Superfund Site in Taos County, New Mexico (“the Site”).

3. Additionally, NMED also seeks injunctive relief pursuant to NMSA 1978, §§ 74-6-10 and 74-6-11, requiring Defendant to undertake the projects specified in Appendix A to this Complaint to abate conditions in certain areas of the Site that violate the WQA, including correlated regulations, and that may present an imminent and substantial endangerment resulting from pollution sources at the Site.

JURISDICTION AND VENUE

4. This Court has jurisdiction over this matter pursuant to Sections 107 and 113(b) of CERCLA, 42 U.S.C. §§ 9607 and 9613(b), and 28 U.S.C. §§ 1331 and 1345. This Court has supplemental jurisdiction over state law claims in this action pursuant to 28 U.S.C. § 1367.

5. Venue is proper in this district pursuant to Section 113(b) of CERCLA, 42 U.S.C. § 9613(b), and 28 U.S.C. § 1391(b) because the claim arose, and the releases of hazardous substances occurred, within the District of New Mexico.

THE DEFENDANT

6. Defendant CMI is a corporation organized under the laws of Missouri, and is a successor-in-interest to Molybdenum Corporation of America and Molycorp, Inc.

FACTUAL BACKGROUND

The Site

7. The Site consists of an inactive molybdenum mine and milling facility located near the Village of Questa in Taos County, New Mexico. Molybdenum is a metal that is frequently used in steel alloys, due to its ability to withstand high pressure and high heat, among other uses. The Site includes underground mine workings, an historic open pit, nine waste rock piles surrounding the open pit and a subsidence area (i.e., a surface-collapse feature above the ore extraction area). The Site also includes a nine-mile long tailing pipeline connecting the milling operations to the tailings ponds, the area around the pipeline, the tailing facility in the Village of Questa and all other areas where any hazardous substance, pollutant or contaminant from the mining, milling and tailing disposal operations is located.

8. Underground mining operations began at the Site in 1918. By 1954, the underground complex contained over 35 miles of mine workings. Defendant developed an open pit at the mine beginning in 1965. During open pit mining operations, Defendant excavated approximately 328 million tons of overburden rock, some of which had the potential to generate acidic drainage, to expose the molybdenum ore. Defendant deposited this overburden in rock piles at the Site. Defendant extracted molybdenite at the mine through milling and concentrating operations and then transported tailings and impacted water to the tailings ponds by pipeline. Defendant CMI, the current owner of the mine and milling facility, permanently ceased mining operations in June 2014.

9. The mining operations and related waste disposal practices contaminated soil, sediment, surface water and groundwater at the Site.

Site Ownership

10. The original owner and operator of the Questa Mine, as a surface molybdenum mine, was The Molybdenum Corporation of America, formed as a Delaware corporation in 1920. In 1974, this company changed its name to Molycorp, Inc. (“Molycorp”) and, in 1977, became a wholly owned subsidiary of Unocal Corporation. Molycorp owned and operated the mine as a Unocal subsidiary until 2005, when Unocal was acquired by Chevron Corporation. In 2007, as a Chevron subsidiary, Molycorp merged with another Chevron subsidiary, CMI, and Molycorp was dissolved. CMI has owned and operated the mine since 2007.

Site Investigations and Clean-up Activities to Date

11. In September 2001, EPA and Molycorp signed an Administrative Order on Consent for the performance of a Remedial Investigation and Feasibility Study to determine the nature and extent of the contamination, to evaluate risks to human health and the environment and to reimburse EPA for its response costs related thereto. Pursuant to this agreement, CMI submitted a Feasibility Study Report to EPA in November 2009 that identified the nature and extent of contamination at the Site. This Report also identified and evaluated clean-up action alternatives that would prevent, mitigate, respond to, and remedy the release or threatened release of contaminants at the Site.

12. EPA issued a Proposed Cleanup Plan in December 2009, setting forth the recommended clean-up actions, and published it for public comment.

13. EPA received comments on the Proposed Plan from more than 100 individuals and organizations. On December 20, 2010, EPA issued a Record of Decision (ROD) describing the selected remedy for the Site, explaining any significant differences between the Proposed Plan and the selected remedy and responding to the public comments received. On

September 16, 2011, pursuant to CERCLA § 105, 42 U.S.C. § 9605, the Site was listed on the National Priorities List (“NPL”). 76 Fed. Reg. 57662 (Sept. 16, 2011).

14. The ROD identifies cleanup actions for five areas of the Site: the Mill Area, the Mine Site Area, the Tailing Facility Area, the Red River, Riparian, and South of Tailing Facility Area, and a nearby recreation area known as Eagle Rock Lake. Among the actions selected in the ROD are excavation and off-site disposal of contaminated soil; removal, re-grading and cover of waste rock piles; operation of seepage interception and groundwater extraction systems; cover and revegetation of tailing impoundments, dredging and disposal of sediment in Eagle Rock Lake, and installation of storm water controls at Eagle Rock Lake.

15. On March 7, 2012, CMI and EPA signed an Administrative Settlement Agreement and Order on Consent for Removal Actions (In the Matter of: Chevron Mining Inc., Respondent, CERCLA Docket No. 06-09-12) (the “Removal AOC”). Pursuant to the Removal AOC, CMI has undertaken several short-term clean-up activities, including removing soil contaminated with polychlorinated biphenyls (“PCBs”) at the Mill Area, removing tailing spill deposits along the Red River, and removing contaminated sediment at Eagle Rock Lake.

16. In September 2012, CMI and EPA signed a second Administrative Settlement Agreement and Order on Consent, this time for Early Design Actions (In the Matter of: Chevron Mining Inc., Respondent, CERCLA Docket No. 06-13-12) (the “Early Design AOC”). This Early Design AOC, as amended, requires CMI to perform additional ground water investigation at the tailing facility, design groundwater extraction wells and expanded seepage collection systems, perform a pilot waste rock pile project that will aid in the evaluation of slope stability for the waste rock piles, design and construct a pilot surface-based mine dewatering system, and prepare a grading plan for the Tailing Facility. Much of this work is still underway.

FEDERAL LAW GOVERNING CLAIM FOR RELIEF

17. CERCLA was enacted in 1980 to provide a comprehensive governmental mechanism for abating releases and threatened releases of hazardous substances and other pollutants and contaminants, and for funding the costs of such abatement and related enforcement activities, which are known as “response” actions. 42 U.S.C. §§ 9604(a) and 9601(25).

18. Section 107(a) of CERCLA, U.S.C. § 9607(a), provides in pertinent part:

Notwithstanding any other provision or rule of law, and subject only to the defenses set forth in subsection (b) of this section [*i.e.* 42 U.S.C. § 9607(b)] –

(1) the owner and operator of a . . . facility,

(2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, . . . at any facility . . . owned or operated by another party or entity and containing such hazardous substances, and

(4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release, which causes the incurrence of response costs, of a hazardous substance, shall be liable for–

(A) all costs of removal or remedial action incurred by the United States Government or a State . . . not inconsistent with the national contingency plan;

. . .

(D) the costs of any health assessment or health effects study carried out under section 9604(i) of this title.

19. The National Oil and Hazardous Substances Pollution Contingency Plan (“NCP”) provides the “procedures and standards for responding to releases of hazardous substances, pollutants, and contaminants” 42 U.S.C. § 9605(a). The NCP is codified at 40 C.F.R. Part 300.

20. Section 107(a) of CERCLA, 42 U.S.C. § 9607, also provides that “[t]he amounts recoverable in an action under this Section shall include interest on the amounts recoverable under subparagraphs (A) through (D).”

21. Liability under Section 107(a) of CERCLA, 42 U.S.C. § 9607, is strict and joint and several.

STATE LAW GOVERNING CLAIMS FOR RELIEF

22. The WQA, NMSA 1978, § 74-6-10(A) provides in pertinent part:

Whenever, on the basis of any information, a constituent agency determines that a person violated or is violating a requirement, regulation or water quality standard adopted pursuant to the Water Quality Act or a condition of a permit issued pursuant to that act, the constituent agency may:...(2) commence a civil action in district court for appropriate relief, including injunctive relief.

23. The WQA, NMSA 1978, § 74-6-11(A) provides in pertinent part:

If a constituent agency determines upon receipt of evidence that a pollution source or combination of sources which it has been delegated authority by the commission poses an imminent and substantial danger to public health, it may bring suit in the district court for the county in which such a source is located to . . .restrain immediately any person causing or contributing to the alleged condition from further causing or contributing to the condition.

24. The WQA, NMSA 1978, §74-6-2(K) (1), includes NMED in the definition of a constituent agency.

GENERAL ALLEGATIONS

25. The Site is a “facility” as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9), and as used in Section 107 of CERCLA, 42 U.S.C. § 9607.

26. Cadmium, copper, lead, silver, zinc, arsenic, chromium, cobalt, sulfuric acid and PCBs are “hazardous substances” within the meaning of Sections 101(14) and 107(a) of CERCLA, 42 U.S.C. §§ 9601(14) and 9607(a). These hazardous substances include “water contaminants” as defined by the WQA, NMSA 1978, § 74-6-2(B), which can cause “water pollution” as defined by the WQA, NMSA 1978 § 74-6-2(C).

27. There have been “releases” and “threatened releases” of cadmium, copper, lead, silver, zinc, arsenic, chromium, cobalt, sulfuric acid and PCBs at and from the Site within the meaning of Sections 101(22) and 107(a) of CERCLA, 42 U.S.C. §§ 9601(22) and 9607(a).

28. There have been discharges of water contaminants into the environment from the Site that pose an imminent and substantial danger to public health within the meaning of NMSA 1978, § 74-6-11, and that have exceeded water quality standards adopted pursuant to the WQA, within the meaning of NMSA 1978, § 74-6-10.

29. The United States, the State and NMED have undertaken response actions at the Site to protect the public health, welfare, or the environment, including removal and remedial actions, in response to releases or threatened releases of hazardous substances, pollutants, or contaminants within the meaning of Sections 104 and 107 of CERCLA, 42 U.S.C. §§ 9604 and 9607.

30. The response actions taken by the United States are necessary to protect the public health or welfare or the environment, and are not inconsistent with the NCP.

31. As a result of the releases or threatened releases of hazardous substances from the Site, the United States, the State and NMED have incurred response costs, including the costs of a removal action, as defined in Sections 101(23), (24) and (25) of CERCLA, 42 U.S.C. § 9601(23), (24) and (25) and as used in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). Response costs include, but are not limited to, costs of monitoring, assessing and evaluating the release or threat of release of hazardous substances from the Site.

32. Defendant CMI is a “person” within the meaning of Sections 101(21) and 107 of CERCLA, 42 U.S.C. §§ 9601(21) and 9607.

33. Defendant CMI is currently the owner of the Site, was an owner of the Site when hazardous substances were disposed of, and is the successor-in-interest to Molycorp, Inc., which owned the Site when hazardous substances were disposed of there, and therefore is jointly and severally liable under Section 107(a)(1) and (2), 42 U.S.C. § 9607(a)(1), (2), for all response costs, including costs of removal and remedial actions incurred by the United States not inconsistent with the NCP, plus interest on those costs.

34. Defendant CMI is a “person” within the meaning of the WQA, NMSA 1978, § 74-6-2(I).

35. The United States has satisfied any and all conditions precedent to the response actions taken and to recovery of its costs under Section 107 of CERCLA, 42 U.S.C. § 9607.

36. The Defendant is jointly and severally liable to the United States for all costs of response actions incurred by the United States relating to the Site, including enforcement costs and pre-judgment interest on all such costs, pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

FIRST CLAIM FOR RELIEF

(Cost Recovery by the United States under CERCLA Section 107(a)(1) and (2),
42 U.S.C. § 9607(a)(1) and (2))

37. Paragraphs 1 through 36 are realleged and incorporated herein by reference.

38. Pursuant to Section 107(a)(1) and (2) of CERCLA, 42 U.S.C. § 9607(a)(1) and (2), Defendant is liable to the United States for all costs incurred by the United States in connection with the Site, including enforcement costs and interest on all such costs.

SECOND CLAIM FOR RELIEF

(Cost Recovery by the State of New Mexico under CERCLA Section 107(a)(1) and (2),
42 U.S.C. § 9607(a)(1) and (2))

39. Paragraphs 1 through 36 are re-alleged and incorporated herein by reference.

40. Pursuant to Section 107(a)(1) and (2) of CERCLA, 42 U.S.C. § 9607(a)(1) and (2), Defendant is liable to the State for all costs incurred by the State in connection with the Site, including enforcement costs and interest on all such costs.

THIRD CLAIM FOR RELIEF

(Injunctive Relief by NMED under NMSA 1978, §§ 74-6-10
and 74-6-11)

41. Paragraphs 1 through 36 are re-alleged and incorporated herein by reference.

42. Pursuant to NMSA 1978, §§ 74-6-10 and 11, Defendant is liable for performing the projects specified in Appendix A to this Complaint at the Site.

PRAYER FOR RELIEF

WHEREFORE, the United States, the State and NMED respectfully request that this Court:

(a) Enter judgment in favor of the United States and against the Defendant for unreimbursed response costs incurred in connection with the Site, plus the costs of investigation and cost recovery related to the Site and to this suit, plus pre-judgment interest;

(b) Enter judgment in favor of the State and against the Defendant for unreimbursed response costs incurred in connection with the Site, plus the costs of investigation and cost recovery related to the Site and to this suit, plus pre-judgment interest;

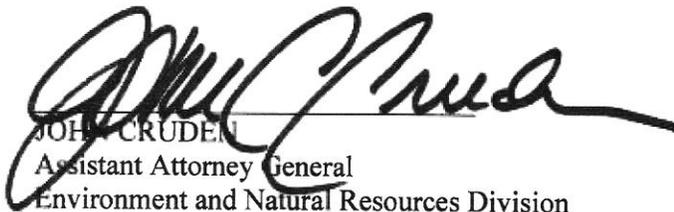
(c) Enter judgment in favor of NMED ordering the Defendant to perform the projects specified in Appendix A to this Complaint so as to abate the conditions that are in violation of the WQA and correlated regulations, and that may present an imminent and substantial danger to public health;

(d) Award the United States, the State and NMED their enforcement costs, including attorney fees, costs, and disbursements in this action; and

(e) Grant such other and further relief as the Court may deem just and proper.

Respectfully submitted,

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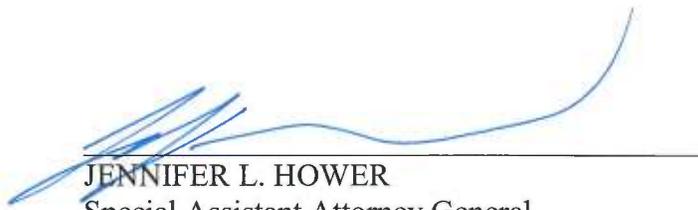
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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

UNITED STATES OF AMERICA,)
STATE OF NEW MEXICO, and)
NEW MEXICO ENVIRONMENT)
DEPARTMENT)
)
Plaintiffs,)
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v.)
)
CHEVRON MINING INC.,)
)
Defendant.)

APPENDIX A TO
JOINT COMPLAINT

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

UNITED STATES OF AMERICA,)	
STATE OF NEW MEXICO, and)	
NEW MEXICO ENVIRONMENT)	
DEPARTMENT,)	
)	
Plaintiffs,)	
)	
v.)	Civil Action No. _____
)	
CHEVRON MINING INC.,)	
)	
Defendant.)	

APPENDIX A TO THE FIRST PARTIAL CONSENT DECREE:

**STATEMENT OF WORK
FOR THE FIRST PARTIAL REMEDIAL DESIGN AND REMEDIAL ACTION (RD/RA)
CONSENT DECREE
AT THE CHEVRON QUESTA MINE SUPERFUND SITE**

**QUESTA, NEW MEXICO
CERCLIS ID NO: NMD002899094**

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**STATEMENT OF WORK
FOR THE FIRST PARTIAL
REMEDIAL DESIGN AND REMEDIAL ACTION**

**CHEVRON QUESTA MINE SUPERFUND SITE
QUESTA, NEW MEXICO**

1. INTRODUCTION

This Statement of Work (“SOW”) sets forth the framework and requirements for implementation of the work (“Work”) described in this First Partial Remedial Design/Remedial Action Consent Decree (“Consent Decree” or “Decree”), to be performed at the Chevron Questa Mine Superfund Site (“the Site”) (CERCLIS ID No. NMD002899094). The Site is located in and near the Village of Questa (Questa) in Taos County, New Mexico. The Site consists of a molybdenum mine and milling facility located approximately four miles east of the Village of Questa on land currently owned and operated by CMI. The mine includes underground mine workings, an historic open pit, nine waste rock dumps or piles surrounding the open pit and a subsidence area which represents a surface-collapse feature above the ore extraction area. The Site also includes a tailing pipeline running parallel to State Highway 38, the area in the vicinity of the pipeline and the Tailing Facility in the Village of Questa. The Site also includes all other areas where any hazardous substance, pollutant or contaminant from the Molycorp, Inc. (or successor) mining, milling and tailing disposal operations is located.

Maps of the Site are provided as Attachments 1 (Figure 1-2, the mine and milling facility) and 2 (Figure 1-3, the tailing impoundments) to this SOW, and incorporated by reference.

2. PURPOSE

The purpose of this SOW is to set forth the framework, requirements and schedules for the performance of the Work as required by the Consent Decree. The Work includes certain Remedial Design (RD) and Remedial Action (RA) activities, monitoring activities, and Operation and Maintenance (O&M) activities, consistent with the selected remedy for the Site, which is set forth in the Record of Decision (ROD) for the Site (issued by the U.S. EPA on December 20, 2010 (CERCLA SDMS # 9158694)). The remaining aspects of the Selected Remedy have been performed pursuant to Administrative Settlement Agreements and Orders on Consent as discussed in Section 3 or will be performed at a later date.

3. BACKGROUND INFORMATION

Site History: From 1919 to August 31, 2007, Molycorp, Inc. owned and operated a molybdenum mine on what is now the CMI Property. Underground mining operations were conducted from 1919 to 1958, resumed in 1981, and continued until June 2014. After molybdenum was extracted at the milling facility located at the Mine Site Area, the tailing was transported to the Tailing Facility where it was deposited in tailing impoundments. In addition to the underground mining operations, open pit mining was conducted at the Site from 1965 to 1983 by Molycorp, Inc. During open pit mining operations, approximately 328 million tons of acid-generating waste rock were excavated and deposited in nine large waste rock piles surrounding the open pit.

The Site and its Setting: As discussed in the ROD, the Site has been divided into the following five areas for clean-up: (1) the mine; (2) a milling facility; (3) a tailing facility; (4) the area of the Red River and associated riparian zone south of the tailing facility; and (5) Eagle Rock Lake.

Both the mine site and the milling facility are located in the Sangre de Cristo Mountains and the tailing facility is located in the Rio Grande Rift. Seepage from the tailing impoundments and acidic metal-laden leachate generated from the weathering of the waste rock piles at the mine site have contaminated groundwater and surface water. Past operating practices resulted in adjacent surface soil being contaminated with molybdenum. A small lake, known as Eagle Rock Lake, is located along the Red River and receives water from the river through an inlet gate. Sediments in Eagle Rock Lake were contaminated with heavy metals. The principal pollutants found at one or more locations at the Site include aluminum, arsenic, cadmium, chromium, cobalt, fluoride, lead, manganese, molybdenum, polychlorinated biphenyls (PCBs), sulfate, zinc and uranium.

Prior Investigations and Clean-up Activities: CMI conducted a Remedial Investigation/Feasibility Study (RI/FS) at the Site pursuant to an Administrative Order on Consent for RI/FS (hereinafter, “RI/FS AOC”), dated September 2001. EPA conducted a baseline human health risk assessment and baseline ecological risk assessment for the Site concurrently with CMI’s RI/FS.

Following completion of these efforts, EPA selected a Remedy for the Site, which is embodied in a Record of Decision (“ROD”), dated December 20, 2010. The entire ROD consists of 1,052 pages, exclusive of appendices, tables and figures. The Site was added to the National Priorities List on September 16, 2011.

On March 7, 2012, EPA and CMI entered into an Administrative Settlement Agreement and Order on Consent for Removal Actions, according to which CMI agreed to perform certain removal actions at the Site (hereinafter, “Removal AOC”) (CERCLA Docket #06-09-12). CMI is still performing the work required pursuant to the Removal AOC.

On September 26, 2012, EPA and CMI entered into a second Administrative Settlement Agreement and Order on Consent for Early Design Actions (hereinafter, “Early Design AOC”) (CERCLA Docket #06-13-12), according to which the parties agreed to undertake Early Design Actions that will be used to implement portions of the selected remedy for the Site. CMI is still performing the work required pursuant to the Early Design AOC. On September 30, 2014, EPA and CMI entered into the First Amendment to the Early Design AOC (“First Amendment”). The First Amendment expanded the scope of the Early Design AOC to include three additional early design projects: 1) design of a groundwater extraction system to collect drainage from one of the roadside waste rock piles, 2) design of groundwater extraction systems to enhance existing seepage barriers at the tailings facility, and 3) design and construction of a pilot surface-based mine dewatering system.

On November 13, 2014, EPA and CMI entered into the Second Amendment to the Early Design AOC (“Second Amendment”). The Second Amendment further expands the scope of the Early Design AOC to include two more early design projects: 1) design of the grading plan for the tailing facility and 2) design and construction of field trials of waste rock cover material.

4. ROLE OF EPA

EPA will provide oversight of Chevron Mining Inc.’s (CMI’s) Work. This will include the review and comment on deliverables such as work plans, reports, and other submittals related to the RD/RA. EPA’s acceptance or approval of deliverables is administrative in nature and allows CMI to proceed to the next steps in implementing the Work. EPA’s acceptance or approval does not imply any warranty of performance, nor does it imply that the Work, when completed, will meet performance standards and be accepted by EPA. Acceptance or approval of plans, reports,

and other required submittals by EPA does not relieve CMI or its contractors of responsibility for the adequacy of the submittal or from their professional responsibilities. Pursuant to Section VI of the Consent Decree (Performance of the Work), EPA retains the right to not accept any of the deliverables, including submittals associated with contractor selection, work plans, reports, schedules, or any other deliverables required by the Consent Decree, including this SOW. EPA may require that CMI submit detailed information to demonstrate that any contractor, subcontractor, or analytical laboratory selected is qualified to conduct the Work, including information on personnel qualifications, equipment and material specifications.

5. PARTIAL RD/RA WORK TO BE PERFORMED

CMI shall perform the Work in this Consent Decree and this SOW, including the Remedial Design (RD), Remedial Action (RA), and Operation and Maintenance (O&M) activities that are described herein and that are part of the Selected Remedy set forth in the ROD or in the Tailings Facility Cover Demonstration Pilot Project, set forth in section 5.2.1 of this SOW. The Work, as set forth herein, will take place in three areas of the Site: the Mine Site Area; the Tailing Facility Area; and Eagle Rock Lake. The Work to be performed in each area is described below.

The RD activities to be performed include a Tailing Facility Cover Demonstration Pilot Project (5.2.1) and, if certain conditions occur, the design of a Tailing Facility Groundwater Extraction Well System (5.2.4). The RA activities to be performed are divided into the following Remedial Action Projects (“RA Projects”):

- A. Surface-based Mine Dewatering System (5.1.1);
- B. Mine Site Groundwater Extraction System (5.1.2);
- C. Mine Site Area Water Treatment Plant (5.1.4);

- D. Excavation of Soil at Dry/Maintenance Area (5.2.2);
- E. Seepage Barrier Upgrade (5.2.3); and
- F. Tailing Facility Groundwater Extraction System (5.2.4).

The O&M activities to be performed include monitoring of Mine Site groundwater at various locations, monitoring of the Tailing Facility groundwater and surface water, monitoring and maintenance of the Tailings Dams, and monitoring, operation, and maintenance of the Eagle Rock Lake remedy.

5.1. Mine Site Area

5.1.1. Surface-based Mine Dewatering System Operation & Maintenance

Upon receipt of written EPA approval of the Surface-based Mine Dewatering System Completion Report under Section 6.11.3.2.6 of Revision 3 of the Statement of Work for Early Design Actions (“Early Design SOW”), CMI may request EPA’s approval of the Construction Phase of the Surface-based Mine Dewatering System, as described in Section 10.2.7 of this SOW (Certification of RA Project Completion). Following EPA’s Certification of Completion of the Surface-based Mine Dewatering System RA Project, CMI shall perform long-term operation and maintenance O&M of the mine dewatering system consistent with the O&M Manual and O&M Plan approved under Section 6.11 of the Early Design SOW.

CMI shall update the O&M Manual and O&M Plan to reflect any modifications to the system that EPA or CMI determines are needed. CMI must promptly notify EPA of any such modifications to the O&M Manual or the O&M Plan.

Following the Effective Date of this Decree, if EPA determines, based on a recommendation made by CMI or for any other reason, that one or more design modifications are needed, CMI

shall submit a pre-final design report for such design modifications to EPA for review and approval no later than 60 days following EPA's request. CMI shall submit a final design report for such modifications within 30 days after receipt of EPA's comments on the pre-final design report for those modifications.

5.1.2. New Groundwater Extraction System

CMI shall construct and operate a new groundwater extraction system in the pre-mine drainage of the Sulphur Gulch South Waste Rock Pile, the Lower Sulphur Gulch drainage. The general location of this extraction system is identified on Attachment 3 as "Lower Sulphur Gulch Extraction System." The purpose of this groundwater extraction system is to capture impacted groundwater in the Lower Sulphur Gulch colluvium before it enters the Red River alluvial aquifer. CMI shall construct and operate the extraction system so the extracted water is pumped to and treated with lime for pH adjustment at Sump 5000 until the water treatment plant located at the Mine Site Area is in operation. The extracted water will then be pumped to the water treatment plant. CMI shall use the approved "Lower Sulphur Gulch Waste Rock Pile Drainage Groundwater Extraction System Final Design Report" submitted under the First Amendment to the Early Design AOC to construct and operate the extraction system.

5.1.3. Performance Monitoring

CMI shall monitor performance of the Lower Sulphur Gulch Groundwater Extraction System and the Surface-based Mine Dewatering System to assess the effectiveness of the systems on attaining performance standards in alluvial, colluvial and bedrock groundwater. Monitoring shall include sampling of the existing monitoring well network and any other monitoring wells installed under the CERCLA action for alluvial, colluvial and bedrock groundwater in the mine site tributary drainages. Monitoring shall also include sampling of seeps and springs along the

Red River in the Mine Site Area. Upon written request by CMI and approval by EPA, in consultation with the State, the number of monitoring locations, the specific parameters, and the frequency of monitoring may be reduced over time.

5.1.4. New Mine Site Area Water Treatment Plant

CMI is constructing a new water treatment plant at the mine site. Although Section 300.400(e) of the National Contingency Plan (NCP) does not require CMI to obtain an National Pollutant Discharge Elimination System (NPDES) permit for effluent discharges to waters of the United States from the water treatment plant, the Selected Remedy set forth in the ROD requires CMI to obtain an NPDES permit for all effluent discharges to surface water from the water treatment plant. Once CMI has completed construction of the new Mine Site Area Water Treatment Plant and EPA determines that the waters being collected by the selected remedy are being treated to meet discharge requirements included in the NPDES permit CMI has already obtained, CMI may request EPA's approval of the Construction Phase as described in Section 10.2.5 of the SOW.

Following construction of the new mine site area water treatment plant, CMI shall perform long-term O&M of the Mine Site Area Water Treatment Plant as described in Section 10.3.1.A of this SOW.

5.2. Tailing Facility Area

5.2.1. Tailing Facility Cover Demonstration Pilot Project

CMI shall conduct a cover demonstration Pilot Project (Pilot Project) on approximately 275 acres of the Dam 1 tailing impoundment of the Chevron Questa Mine Tailing Facility. A map of the Pilot Project area is shown on Attachment 5.

The purpose of the Pilot Project is (1) to determine whether a two-foot thick cover can be successfully designed, constructed and maintained such that it is adequately protective of soil and groundwater, can be successfully revegetated, and can be maintained over time, and (2) to support an inquiry into whether the CERCLA remedy, as it pertains to cover thickness at the tailing facility, should be modified accordingly. This project serves as a pilot demonstration project because it is the first area of the tailing facility to be addressed and because it will test the effectiveness of the two-foot cover thickness during an initial five-year period. CMI shall design, construct, and maintain the Pilot Project in such a manner so as to achieve the Pilot Project success criteria outlined below.

To evaluate the cover's effectiveness in protecting groundwater, CMI shall install three (3) instrumented vertical profiles with nested matric suction and water content sensors in each of three decision units (DUs) of approximately 100 acres each, for a total of nine (9) profiles across the three DUs. The sensor profile locations shall be representative of the textural characteristics of the Dam 1 tailing impoundment based on available data and selected in consultation with the agencies. CMI shall collect five (5) years of performance monitoring data from the installed sensors to develop a calibrated evaporative flux model. CMI shall use the calibrated evaporative flux model along with the long-term climate data from the Cerro Station to provide an estimate of the water balance of the cover and tailing system. CMI shall evaluate the performance of the cover using the long-term average precipitation and net percolation through the cover, as described further below.

To evaluate the cover's effectiveness in establishing sufficient vegetation, CMI shall compare vegetative performance to standards developed from measurements obtained from one or more reference area(s). This process shall be based on EMNRD's "*Closeout Plan Guidelines for*

Existing Mines” – “Attachment 2, *Revegetation Standards and Sampling Methods*” (1996).

CMI, in consultation with the agencies, shall select, and propose for EPA’s review and approval, one or more reference area(s) that are in good range condition at the time of selection. CMI shall sample the reference area(s) for canopy cover by species (which will also yield diversity data) and shrub density. CMI shall use data collected from the reference area(s) to establish technical standards for review and approval by EPA. The technical standards approved by EPA will be used by EPA to determine the success of the Pilot Project in establishing sufficient vegetation, as discussed further below.

CMI may reseed or inter-seed the area only if (1) such seeding occurs no later than the start of the third growing season; and (2) there is less than an average of 1 seeded species per square foot. EPA will evaluate the success of the cover in establishing sufficient vegetation at the end of the fifth growing season regardless of any effort by CMI to reseed or inter-seed the area as mentioned above. That is, reseeded or inter-seeding will not, in any case, restart the timeframe for the demonstration Pilot Project, though it may affect application of the success criteria as discussed in success criterion C(3) below.

To evaluate the ability of the cover to be maintained over time, CMI shall design and construct the cover using alluvial materials from the northern portion of the Tailing Facility property. CMI shall design and construct the cover to ensure that it will achieve positive drainage. For purposes of this Pilot Project, CMI may design the cover system such that overall grade of the cover is less than 1-5% as required under the ROD. In no event shall the cover system design incorporate an overall grade of less than 0.5%.

EPA will evaluate the success of the Pilot Project after five growing seasons on the basis of the following four performance success criteria. The end of the fifth growing season shall be six years following completion of seeding of the cover.

EPA will make a determination that the Pilot Project has succeeded if it concludes, after five growing seasons, that the cover is showing progress toward a self-sustaining ecosystem through the satisfaction of all the following criteria:

- A. **Surface Soil:** Concentrations of molybdenum in soil (sampled to 3 inches below ground surface) averaged within each of the three decision units (of approximately 100 acres each) are maintained at or below the Tailing Facility soil remediation goal of 41 mg/kg molybdenum;
- B. **Groundwater:** Based on predictions using the calibrated evaporative flux model and the long term precipitation record (Cerro Station), there is a 90% probability that, in any given year, net percolation averaged across the entire cover demonstration project would be limited to less than 5% of mean annual precipitation.
- C. **Vegetation:**
 - (1) Canopy Cover: Total canopy cover is $\geq 40\%$ of the total canopy cover present at the selected reference area(s).
 - (2) Diversity:
 - a. Presence of 3 species of native perennial grasses
 - b. Presence of 2 species of native perennial forbs

c. Presence of 2 species of native shrubs

(3) Contingency: If circumstances unrelated to cover depth (for example, adverse climatic conditions) result or may result in non-achievement of the foregoing vegetation criteria by the end of the fifth growing season, such non-achievement of these criteria will not preclude success of the Pilot Project if CMI performs an evaluation and demonstrates, to EPA's satisfaction, that the pilot project area is likely to achieve the ARARs for vegetation success in the long term.

D. **Cover Integrity:** The cover does not show significant deterioration from erosion, slip-offs, or other impacts that cannot be repaired through normal operation and maintenance (O&M). CMI shall, no later than the end of the fifth growing season, provide documentation to EPA that demonstrates that the cover achieves positive drainage (i.e., that required grades have been maintained and that any observed ponding has been or can be addressed through normal O&M).

5.2.2. **Excavate Soil at the Dry/Maintenance Area**

Prior to covering and revegetating the tailing impoundments, CMI shall excavate an area of soil south of the dry/maintenance area where soil sample TSS11-4 indicates molybdenum levels over 41 ppm. The excavated soil shall be placed in the tailing impoundments. Based on sampling conducted in January 2015, the volume of affected soil to be excavated is estimated to be less than 200 cubic yards (yd³). The general location of the soil to be excavated is indicated in Attachment 4 (Figure 12-26) as soil sample location TSS11-4. CMI shall revegetate all disturbed areas within the dry/maintenance area. At its election, CMI may perform this work pursuant to an addendum to the Phase 2 Demolition and Decommissioning Plan (established

pursuant to Mining Act Permit No. TA001RE), which addendum must be approved by NMED and MMD before the Effective Date of this Consent Decree. CMI shall, no later than 180 days after the Effective Date, certify to EPA that the work has been completed consistent with the ROD and shall request a certification of completion of that portion of the RA as described in Section 10.2.7 of this SOW and Section VIII of the Consent Decree.

5.2.3. Upgrade Tailing Facility Seepage Interception Systems

There are two seepage interception systems located at the tailing facility which have been operating since 1975 and have had multiple phases of upgrades. The current Outfall 002 interception system is located south of Dam No. 1 and includes the lower 002 seepage barrier. CMI shall upgrade the Outfall 002 system by adding new groundwater extraction wells across the Dam No. 1 arroyo just downgradient of the location of the existing lower 002 seepage barrier. The general location of this upgrade is identified on Attachment 4 (Figure 12-26) as “New Lower 002 Extraction Wells.”

The current Outfall 003 seepage interception system includes seepage barriers across the drainage on the eastern slope of Dam No. 4 and an extraction well, EW-1. CMI shall upgrade the Outfall 003 system by installing a new, deeper seepage collection system. The general location of this upgrade is identified on Attachment 4 (Figure 12-26) as “New 003 Seepage Barrier.”

CMI shall construct and operate the Lower 002 and Upper 003 upgrades utilizing the approved “Tailing Facility Seepage Barrier Upgrade Final Design Report” developed under the Second Amendment to the Early Design AOC.

5.2.4. Install and Operate Groundwater Extraction Well System

CMI shall sample the groundwater downgradient of the historic buried tailing (in the area of monitoring wells MW-4 and MW-17) to assess the effectiveness of piping of irrigation water in the eastern diversion channel (as required by the Removal AOC) on achieving groundwater Performance Standards.

No later than April 1, 2017, CMI shall submit to EPA a “Groundwater Monitoring Evaluation Report” (Report). The Report shall present an evaluation, on the basis of the groundwater sampling results, of whether the eastern diversion channel removal action has been effective in reducing Chemicals of Concern (COC) concentrations in groundwater to (or toward) cleanup levels in the area of monitoring wells MW-4 and MW-17.

CMI shall use EPA’s “Recommended Approach for Evaluating Completion of Groundwater Restoration Remedial Actions at a Groundwater Monitoring Well” (OSWER 9283.1-44, August 2014) and EPA’s Groundwater Statistics Tool User’s Guide” (OSWER 9283.1-46) to develop the Report.

If EPA determines that there is a statistically significant trend of COC concentrations in groundwater towards achieving cleanup levels and that the cleanup levels will be achieved within 10 years, CMI shall continue to submit annual Reports to EPA until COC concentrations in groundwater achieve the cleanup levels.

If EPA determines, at any point after April 1, 2017, that there is not a statistically significant trend of COC concentrations in groundwater towards cleanup levels or that the cleanup levels will not be achieved within 10 years, EPA shall so notify CMI of this determination. Within 30 days of such notification, CMI shall provide a proposed schedule and plan for: (a) expeditiously

performing any hydrological investigations that EPA agrees are necessary to the design of a groundwater extraction well system for this area; and (b) submitting a pre-final design report for the installation and operation of such groundwater extraction well system. Upon EPA's approval of such plan and schedule, CMI shall implement the plan and schedule.

The general locations of the five extraction wells are shown on Attachment 4 (Figure 12-26) as "New Extraction Wells" southeast of the "Historic Tailing (Buried)" along an east-west line approximately 240 feet apart. The new wells shall be designed to create a continuous zone of groundwater capture over the 1,200 feet of potentially affected aquifer.

5.2.5. Monitor Groundwater and Surface Water

CMI shall conduct groundwater and surface water monitoring at the Tailing Facility as specified below to monitor progress toward achievement of the Performance Standards for the (COCs) at the Tailing Facility as set forth in Table 12-16 of the ROD.

CMI shall sample the groundwater downgradient of the historic buried tailing (in the area of monitoring wells MW-4 and MW-17) as provided in Section 5.2.4 of this SOW.

CMI shall also monitor groundwater and seeps/springs downgradient of Dam No. 4 and south of Dam No. 1, to assess the effectiveness of remedial actions in achieving groundwater Performance Standards within the alluvial and basal bedrock aquifers. The groundwater monitoring program shall, at a minimum, be consistent with monitoring conducted under permit DP-933 and include all wells at the Tailing Facility and all wells monitored under permit DP-933. In addition, for the Tailing Facility ground water monitoring wells, CMI shall provide to EPA and the State both total and dissolved concentrations for all analyzed compounds for the second quarterly sampling event in each of the first two years following the Effective Date of the

Consent Decree. The groundwater monitoring program shall include additional monitoring wells installed as part of the Administrative Settlement Agreement and Order on Consent for Early Design Actions and any others deemed appropriate by EPA. Upon written request by CMI and approval by EPA in consultation with the State, the number of monitoring wells, the specific parameters, and the frequency of monitoring may be reduced over time. CMI shall also monitor seeps and springs as directed by EPA. CMI shall add uranium and thorium to the list of analytical parameters to be monitored at all locations at the Tailing Facility.

5.2.6. Monitor and Maintain Tailing Dams

CMI shall monitor and maintain the tailing dams. CMI shall collect quarterly piezometer data and perform quarterly inspections of the Tailing Facility dams to meet requirements of the New Mexico Office of the State Engineer. CMI shall continue such monitoring as part of the Selected Remedy until it has demonstrated to EPA's satisfaction that the tailing dams have been dewatered.

5.2.7. General Site Maintenance

CMI shall perform general site maintenance at the Tailing Facility area. General maintenance of the tailing facility will be continued during operation and after closure of the tailing impoundments and shall include grading of roads and maintenance of all structures, including the dams, as EPA deems appropriate.

5.3. Eagle Rock Lake

This Section 5.4 supersedes Section 6.3.4.9.1 and the portions of Section 7.0 of the Statement of Work for the Removal AOC relating to Eagle Rock Lake as of the Effective Date of this Consent Decree.

5.3.1. Operation of Inlet Control Structure

In order to minimize sediment loading to Eagle Rock Lake during and after storm events, CMI shall continue to operate the inlet controls, including the head gate and data collection systems that CMI installed pursuant to the Removal AOC. CMI shall operate the inlet controls in accordance with the EPA-approved Post-Construction Inspection and Monitoring Plan developed per paragraph 6.3.4.9.1 of the Removal SOW. Consistent with the Removal AOC, CMI, in coordination with the United States Forest Service (“USFS”), shall ensure proper operation of the inlet controls for a period of at least five years following the Effective Date of the Removal AOC. Following this five year period, CMI shall continue to operate and maintain the inlet controls, including equipment replacements and technology upgrades, in coordination with the USFS for an additional five years, unless otherwise requested in writing by the USFS. CMI shall, in consultation with the EPA and USFS, transition the sole operational responsibility of the inlet controls to the USFS by the end of this second five-year period, if agreed to by the USFS; provided, however, that CMI may elect to maintain responsibility for the operation and maintenance of the inlet controls beyond the second five-year period for successive five-year periods. CMI may, in consultation with the EPA and USFS, transition the sole operational responsibility of the inlet controls to the USFS at the end of any of these successive five-year periods. If such transition of responsibility to USFS has not occurred by the date that EPA certifies that the construction is complete for all remedial action at the Mine Site that is required by the ROD, CMI shall no longer be required to continue to operate and maintain the inlet controls; provided, however, that if EPA determines that a release from the Mine Site or from a CMI mining-related activity to the Red River has occurred that was not authorized by an EPA-

issued permit and that has contaminated the sediment of Eagle Rock Lake, EPA may require CMI to perform additional operation and maintenance of the inlet controls.

5.3.2. **Performance Monitoring of Eagle Rock Lake Remediation**

Consistent with Section 7.0 of the Removal SOW, following completion of the Removal Actions, CMI shall perform post-construction inspection and monitoring to maintain the effectiveness and integrity of the Removal Actions in accordance with the EPA-approved Post Construction Inspection and Monitoring Plan required by paragraph 6.3.4.9.1 of the Removal SOW.

The monitoring requirements under the Post Construction Inspection and Monitoring Plan are described further in Section 10.3.2 of this SOW.

6. **PERFORMANCE STANDARDS**

CMI shall ensure that the Work meets the Performance Standards, as that term is defined in the Consent Decree and herein. The Work shall not be considered complete until EPA determines that CMI's Work has achieved the Performance Standards. Performance Standards include, but are not limited to, the remedial action objectives (RAOs) and remediation goals set forth in Section 8.0 of the ROD or other measures of achievement as defined in the ROD, the Consent Decree, this SOW, and other EPA-accepted submissions. Performance Standards also reflect the standards, standards of control, and other substantive requirements, criteria and limitations contained in state or federal ARARS as set forth in the ROD.

6.1. Remedial Action Objectives

RAOs were developed for the areas to be addressed by the Selected Remedy to protect human health and the environment. They provide general descriptions of the objectives of the cleanup. They are media-specific goals that specify the COCs, exposure routes and receptors, and an acceptable contaminant level or range of levels for each exposure route (*i.e.*, remediation goal). The RAOs are established on the basis of the nature and extent of the contamination, the resources that are currently and potentially threatened, and the potential for human and environmental exposure. The RAOs relevant to the Work to be performed are set out in Section 8.0 of the ROD.

6.2. Remediation Goals

Remediation goals are media-specific, quantitative goals that define the extent of cleanup required to achieve the RAOs. They are based primarily on health or ecological criteria developed by EPA in risk assessment or federal and State of New Mexico (State) numeric criteria or standards identified by EPA to be ARARs for the Site. These goals represent the cleanup levels set forth in the ROD for the COCs targeted in each medium being addressed by the Selected Remedy. The remediation goals relevant to the Work to be performed are set out in Section 8 of the ROD and serve as a design basis for the remedial design and remedial action.

7. GENERAL REQUIREMENTS

7.1. Deliverables

CMI shall simultaneously submit copies of all deliverables required by the Consent Decree and SOW to EPA, the New Mexico Environment Department (NMED) and New Mexico Energy,

Minerals and Natural Resources Department's Mining and Minerals Division (MMD) for their review and comment in accordance with Section XXV, Paragraph 109 of the Consent Decree.

CMI shall submit any deliverables being submitted for meetings, such as any preliminary and final data, draft responses to agency comments, and draft reports that are to be used during meetings at least five working days in advance of the meeting to EPA, NMED, MMD and other stakeholders as appropriate, to allow for review prior to the meeting, unless otherwise agreed by the Project Coordinators.

CMI shall submit a minimum of one hard copy of all plans, reports, and other major deliverables to each of the following: the EPA Project Coordinator, the EPA Oversight Contractor, and the NMED and MMD Project Coordinators. In addition, CMI shall maintain a SharePoint site on which it will make available to EPA, NMED, and MMD electronic copies of all such documents in both PDF (portable document format) and, upon request, in its original MS Office format (e.g., Word, Excel, Project, etc.) or in native or raw data formats. All Excel spreadsheets submitted shall include all underlying formulas and calculations. The number of copies required by EPA, NMED and MMD will periodically be reassessed throughout performance of the Work by the EPA Project Coordinator, and CMI will be notified if additional copies are needed. If requested, CMI shall provide additional electronic copies and/or hard copies of final submissions to other key stakeholders (e.g., Village of Questa, Taos County, U.S. Forest Service, Amigos Bravos, and other interested non-governmental organizations) as well as to other EPA technical consultants and regulatory officials, as directed by EPA.

7.2. Personnel, Materials and Services

CMI shall furnish all necessary and appropriate personnel, materials, and services needed for, or incidental to, performing and completing the Work.

7.3. Communication

The CMI Project Coordinator shall communicate and hold at least weekly meetings with the EPA Project Coordinator, either in face-to-face meetings, through conference calls, or through electronic mail, unless otherwise agreed to in writing. CMI shall invite the NMED and MMD Project Coordinators to participate in those weekly meetings or calls with EPA and shall copy NMED and MMD Project Coordinators on all emails to EPA regarding weekly meetings. CMI shall document all decisions that are made in those meetings and conversations and forward this documentation, which may be in the form of an email, to EPA, NMED, and MMD within five working days of the meeting or conversation.

7.4. Monthly Progress Reports

CMI shall submit to EPA monthly progress reports to document the status of the Work, beginning in the month following the Effective Date of the Consent Decree and ending with the month following EPA's issuance of a Certificate of Completion, as provided in Section XIII of this Decree. CMI shall provide copies of the monthly progress reports to NMED and MMD.

The monthly progress reports shall include the following:

- a. Progress made: describe all actions that have been taken toward achieving compliance with the Consent Decree, SOW, and completion of the Work during the previous month

- b. Problem areas and recommended solutions: describe efforts made to mitigate delays or anticipated delays
- c. Status of all deliverables required by the Consent Decree and this SOW and those submitted during the previous month
- d. Schedule updates: include any modifications to the work plans or schedules that Settling Defendants proposed to EPA or that have been approved by EPA
- e. Activities planned for the next six (6) weeks
- f. Results of field sampling, tests and all other data received by CMI pertaining to this Consent Decree (or reference to the posting of such data on a SharePoint site available to EPA)
- g. Copies of laboratory data received during the month (or reference to the posting of such data on a SharePoint site available to EPA)
- h. Summary of key personnel changes
- i. Community relations support activities: describe all community relations activities undertaken or planned
- j. Quantity of waste generated and quantity of waste disposed
- k. Health and safety issues affecting project implementation or schedule

7.5. Attendance at Meetings

CMI shall attend periodic project meetings as requested by EPA, unless otherwise agreed to in writing or through e-mail. Such meetings and events shall be attended by at least one representative of EPA, EPA's Oversight Contractor, NMED and MMD. CMI shall coordinate all meetings, site visits, and conference call meetings with the EPA, NMED, and MMD Project Coordinators (or designees). CMI shall also attend all Work-related meetings at the Site with EPA, unless otherwise agreed in writing or through e-mail. CMI shall provide documentation of all final decisions made at each meeting to EPA within 5 working days following the meeting.

CMI shall invite EPA, NMED and MMD to each project meeting it holds with its contractors and subcontractors in the field.

7.6. Field Operation Office and Equipment

CMI shall provide office space for the EPA Project Coordinator and EPA authorized oversight officials/contractors, as well as NMED and MMD personnel, unless EPA determines that such office space is not needed. The office space may be in on-Site project trailers as a substitute for independent office accommodations. At a minimum, the office space shall have air conditioning, heating, lighting, privacy, one office desk, two chairs, a refrigerator, access to a fax machine, photocopier and sanitation facilities, and any other accessories needed to conduct oversight activities. CMI shall provide the field operation office space and equipment no later than one week prior to the start of field activities and shall maintain such office space and equipment until EPA has approved all *Final Remedial Action Construction Completion Reports* under the Consent Decree. CMI shall notify EPA in writing upon completion of these field support activities. The requirements of this paragraph may be met through compliance with the corresponding requirements of the Removal AOC and Early Design AOC until all field activities under those AOCs have been completed.

7.7. Community Relations Support

CMI shall provide the following community relations support to EPA throughout the Performance of the Work:

7.7.1. Attendance at Community Relations Events:

CMI and its contractors shall attend community meetings as requested by EPA, unless otherwise agreed to in writing or through e-mail.

7.7.2. Logistics and Presentation Support:

CMI shall help EPA in selecting and reserving meeting space for EPA to hold community meetings, as well as the logistics for such events. This includes helping to set up the seating arrangements, tables, presentation equipment, and any visual displays and then take down such arrangements after the meetings. CMI shall also prepare presentation materials/handouts (i.e., transparencies, slides, and/or handouts) as instructed by EPA. Such materials/handouts shall be approved by EPA before distribution or use.

7.7.3. Technical Support:

CMI shall provide technical support for community relations, including community meetings. This support may include preparing technical input to news releases, briefing materials and other community relations vehicles, arranging for Site tours upon request, and helping EPA to coordinate with local agencies as requested.

7.7.4. Fact Sheet Preparation Support:

CMI shall help EPA prepare fact sheets that inform the public about activities related to the Work, schedules for the Work, field investigations, construction, measures to be taken to protect the community, provisions for responding to emergency releases and spills, any potential inconveniences such as excess traffic and noise that may affect the community during the performance of the Work, and other topics as required by EPA. EPA will determine the final content of all fact sheets related to the Work.

7.7.5. Information Repository Support:

CMI shall support EPA in maintaining the Site information repositories by providing hard and/or electronic copies of all documents related to the Work to the repositories as directed by EPA.

CMI shall periodically visit the Village of Questa repository at EPA's request to verify that Site-related documents are being maintained and available for review by the public.

8. REMEDIAL DESIGN REQUIREMENTS

8.1. Site-Wide Plans

CMI shall prepare and submit for EPA's approval, update as needed, and maintain all Site-wide plans specified below for implementation of the RD work described in this SOW. CMI shall submit drafts of the Site-wide plans to EPA for review within 120 days of the Effective Date, with the exception of the Health and Safety Plan (HASP), which shall be submitted within 60 days of the Effective Date. Other than the HASP, the following plans may be provided as sections of a single Overall Site Plan.

CMI shall review the existing Site-wide plans that were prepared as part of the CERCLA Remedial Investigation and Feasibility Study (RI/FS), Removal Actions, or Early Design Actions and update the plans, as necessary, to implement the RD. The Site-wide plans prepared or developed for the RI/FS, Removal Actions or Early Design Actions should be referenced or adapted whenever possible when preparing such plans for the RD. Since CMI's contractors or subcontractors may prepare their own RD plans, CMI may incorporate such plans and procedures into the Site plans submitted to EPA for review and approval in accordance with the Consent Decree and this SOW. CMI shall make revisions to the Site-wide plans as a result of EPA's comments or agreements. Copies of draft final and, if necessary, final Site-wide plans shall be submitted within 30 days after receipt of EPA comments or within the time frames determined by the EPA RPM.

CMI shall periodically reassess and update Site-wide plans throughout the performance of the Work as necessary, or upon request from EPA.

8.1.1. General Project Schedule

CMI shall prepare and submit to EPA for approval a General Project Schedule showing the sequencing of all major deliverables and tasks under this SOW, based on the time periods set forth in the Consent Decree and this SOW. CMI shall update the General Project Schedule annually, or as EPA determines is needed.

8.1.2. Site Management Plan

CMI shall prepare and submit to EPA for approval a Site Management Plan (SMP) that provides EPA with a written understanding of how CMI will manage access, security, contingency procedures, management responsibilities, and waste disposal during all RD and RA activities.

The SMP shall consist of the following plans:

A. Pollution Control and Mitigation Plan

The Pollution Control and Mitigation Plan (PCMP) shall that outline the process, procedures, and safeguards that CMI will use to ensure contaminants or pollutants are not released off-Site.

B. Waste Management Plan

The Waste Management Plan (WMP) shall outline how CMI will manage and dispose of any wastes that are encountered during performance of the Work. CMI shall specify the procedures that it will follow when wastes are managed, including on-Site and off-Site storage, treatment, and/or disposal. The WMP shall include the following plans:

(1) Decontamination Plan

The Decontamination Plan shall describe the equipment and methods that CMI will use as part of its decontamination procedures.

(2) Water Control Plan

The Water Control Plan a plan that addresses CMI's methods for collection, treatment, disposal or discharge of decontamination water, dust control water, storm water, and other surface water.

(3) Transportation and Disposal Plan

The Transportation and Disposal Plan shall establish procedures for any waste material that is to be transported off-Site for treatment and/or disposal. The Transportation and Disposal Plan shall be consistent with the Off-site Rule, 40 CFR § 300.440, all ARARs (including any applicable U.S. Department of Transportation regulations), and any applicable regulations or guidance documents listed in Attachment 6.

8.1.3. Health and Safety Plan

CMI shall update the Health and Safety Plan (HASP) for RD activities to be prepared in conformance with applicable Mine Safety and Health Administration (MSHA)¹, Occupational Safety and Health Administration (OSHA), and EPA requirements, including, but not limited to, 29 C.F.R. § 1910. EPA shall not approve or disapprove the HASP, but shall review it and shall require compliance by CMI with its terms as part of the Consent Decree.

¹ Conformance with MSHA requirements shall be for that portion of the Site on CMI property.

The HASP shall specify employee training, protective equipment, medical surveillance requirements, and standard operating procedures, and include an Emergency Response Plan in accordance with 40 C.F.R. § 300.150 of the NCP and 29 C.F.R. §§ 1910.120(1)(1) and (1)(2). A task-specific section of the HASP shall also be included to address health and safety requirements for Site visits. Since the Site is regulated under MSHA, the HASP shall identify health and safety requirements specified under MSHA for Site visitors. The Emergency Response Plan describes how to handle emergencies at the Site and minimize risks associated with a response. This response plan should be reviewed and rehearsed by CMI regularly, and a copy should be provided to local emergency response facilities.

8.1.4. **Sampling and Analysis Plans**

CMI shall prepare sampling and analysis plans (“SAPs”) as EPA determines necessary to conduct Remedial Design activities in particular Site areas. The SAPs shall be written to reflect the specific objectives of all data acquisition efforts required to be conducted during the RD activities under the Consent Decree. The SAPs will outline the data collection and quality assurance requirements of all sampling and analysis conducted by CMI. CMI shall design the Plans to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols, as determined by EPA, and that the data meet all applicable data quality objectives (DQOs). The SAPs shall include laboratory analytical methods for each COC identified in the ROD for the appropriate media, including Target Analyte List metals, molybdenum, uranium, pH, total dissolved solids (TDS), sulfate, and other inorganic chemicals or physical properties tests as appropriate. CMI shall also include in the SAPs a mechanism for planning field activities and a Field Sampling Plan. The SAP(s) shall include the following plans:

A. Quality Assurance Project Plan

CMI shall update or prepare a “Quality Assurance Project Plan” (“QAPP”) as part of the SAP. The QAPP shall be prepared in accordance with EPA QA/R-5 (latest draft or revision). The QAPP shall describe the project objectives and organization, functional activities, and quality assurance/quality control (QA/QC) protocols that shall be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytical methods for identifying and remediating contamination consistent with the levels for the RAOs and Performance Standards set forth in the ROD. The QAPP shall address sampling procedures, sample custody, analytical procedures, and data reduction, validation, reporting and personnel qualifications.

B. Field Sampling Plan

CMI shall prepare a Field Sampling Plan (“FSP”) as part of the SAP that defines the sampling and data collection methods that shall be used in performing the Work. The FSP shall include sampling objectives, sampling media, sampling locations, depths and frequency; sampling equipment and procedures; sample handling, analytical methods, analytical parameters and constituents; and a breakdown of samples to be analyzed through Contract Laboratory Program (CLP) and other sources, as well as the justification for those decisions. The FSP shall include tables of geographical coordinates and the appropriate maps showing locations of previous sampling locations and proposed sampling locations. The FSP shall be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and field information required.

8.1.5. Data Management Plan

CMI shall prepare a Data Management Plan that outlines the procedures for storing, handling, accessing, retaining and securing data collected during the RD phases. CMI shall consistently document the quality and validity of field and laboratory data compiled during the RD. CMI shall supply all data to EPA in ArcView® format or other electronic format as directed by the RPM in accordance with the Data Management Plan. All Geographic Information System (GIS) data sets will be in a Universal Transverse Mercator (UTM) or State Plane coordinate system.

8.1.6. Contingency Plan

CMI shall prepare a Contingency Plan that will provide contingency measures for potential spills and discharges from materials handling or transportation. The Contingency Plan shall describe methods, means, and facilities required to prevent contamination of soil, water, atmosphere, uncontaminated structures, equipment or material from the discharge of waste due to spills. CMI shall provide for equipment and personnel to perform emergency measures required to contain a spill and to remove and properly dispose of any media that become contaminated due to spillage, and provide for equipment and personnel to perform decontamination measures that may be required to remove spillage from previously uncontaminated structures, equipment, or material. CMI shall include the name and telephone number of the person or entity that is responsible for responding in the event of an emergency situation or incident. The Contingency Plan shall include a Spill Prevention, Control and Countermeasures Plan as specified in 40 CFR Part 112.

9. REMEDIAL DESIGN

9.1 Tailing Facility Cover Demonstration Pilot Project

As detailed below, CMI shall design the Tailing Facility Cover Demonstration Pilot Project (“Pilot Project”) as described in Section 5.2.1 of this SOW and then implement the design. The design process for the Pilot Project shall consist of two stages, as described below: pre-final design and final design. The final design shall provide sufficient detail to support invitation-to-bid packages for tailing facility demonstration Pilot Project construction.

9.1.1. Pre-Final Design

Within 60 days after receipt of EPA’s comments on the “Tailing Facility Dam 1 Grading Final Design Report,” submitted under Section 6.12.5 of the Early Design AOC, or 60 days after lodging of the Consent Decree, whichever is later, CMI shall submit a Pre-Final Design for the Pilot Project. The pre-final design shall include or discuss, at a minimum, the following:

- A. A pre-final “Design Criteria Report”, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995);
- B. A pre-final “Basis of Design Report”, as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995);
- C. Pre-final/final drawings and specifications;
- D. Construction Quality Assurance Plan (“CQAP”)/Construction Quality Control Plan (“CQCP”). The purpose of the 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 CQCP is to describe the activities to verify that RA construction has satisfied all plans,

specifications, and related requirements, including quality objectives. The CQAP/CQCP must:

- (1) Identify, and describe the responsibilities of, the organizations and personnel implementing the QA/QC;
- (2) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the QA/QC;
- (3) Describe industry standards and technical specifications used in implementing the QA/QC;
- (4) Describe procedures for tracking construction deficiencies from identification through corrective action;
- (5) Describe procedures for documenting all QA/QC activities; and
- (6) Describe procedures for retention of documents and for final storage of documents.

E. A Pre-final O&M Plan and O&M Manual; The O&M Manual and O&M Plan shall be developed in accordance with *Operation and Maintenance in the Superfund Program*, OSWER 9200.1 37FS, EPA/540/F-01/004 (May 2001).

F. Pre-final performance monitoring plan, developed to evaluate the effectiveness of the Pilot Project. The plan shall be designed to collect information that will be used to evaluate the success of the Pilot Project in accordance with the criteria described in Section 5.2.1 of this SOW;

G. Pilot Project schedule;

H. A description of any permit requirements;

- I. Identification of coordination issues with mining personnel and other coordination issues (*e.g.*, utilities, environmental, community impacts);
- J. Potential work zone transportation and management strategies;
- K. Potential work zone impacts; and
- L. A description of how the Pilot Project will be implemented in a manner that minimizes environmental impacts in accordance with EPA's *Principles for Greener Cleanups* (Aug. 2009).

CMI shall address all EPA comments on the Pre-Final Design in the Final Design.

9.1.2. **Final Design**

Within 30 days after receipt of EPA's comments on the pre-final design, CMI shall submit to EPA a Final Design for the Pilot Project. The Final Design shall address comments generated from the Pre-final Design reviews and clearly show any modifications of the design as a result of incorporation of the comments. The Final Design must include final versions of all the Pre-final Design submitted under Section 9.1.1 of this SOW and the "Tailing Facility Dam 1 Grading Final Design Report" under Section 6.12.5 of the Early Design AOC. The Final Design shall be approved by a Professional Engineer registered in New Mexico. CMI shall obtain EPA's written approval of a Final Design before implementing the Final Design, unless specifically authorized in writing by EPA.

CMI shall address all EPA comments on the draft Final Design Report within 30 days after receipt of EPA comments. Upon EPA approval of the Final Design, the Final Design shall become enforceable as part of the Consent Decree.

9.1.3. Update Overall Site Plan

CMI shall update and maintain the necessary plans within the Overall Site Plan and the HASP for conducting the Pilot Project. Within 30 days after receipt of EPA's written acceptance of the Pilot Project Final Design, CMI shall review the existing plans and submit to EPA updated plans or addenda to plans, as necessary, to conduct the Pilot Project. The updated plans shall include an updated SAP, QAPP and FSP. Since CMI contractors or subcontractors may prepare their own plans, CMI shall incorporate any plans or procedures received from any of its contractors or subcontractors into the Overall Site Plan. CMI shall revise and update the appropriate plans, as necessary, throughout the Pilot Project.

9.1.4. Implement Tailing Facility Cover Demonstration Pilot Project

CMI shall implement the Tailing Facility Cover Demonstration Pilot Project by performing the Work set forth in the Consent Decree, this SOW, and the EPA-approved Tailing Facility Cover Demonstration Pilot Project Final Design. CMI shall perform the Pilot Project in accordance with the EPA-approved work plan schedule and the deadlines in Section 9.1.5. The Pilot Project implementation will be broken into two major phases:

- Construction; and
- Monitoring.

9.1.5. Construction Phase

The construction phase includes tasks covering the period of major construction activities. Activities which shall be conducted by CMI during this phase of the Pilot Project include without limitation the following:

A. Attend Pre-Construction Meeting

Within 15 days after receipt of EPA's written approval of the Pilot Project Final Design, or within 15 days after the Effective Date of this Consent Decree, or by September 15, 2016, whichever is latest, CMI shall hold a pre-construction meeting with EPA, NMED, and MMD. Participants at the meetings shall include CMI's Project Coordinator, QA Official(s), and a representative of each of CMI's contractors and subcontractors that will perform the Work. Other participants for the meeting may include local emergency responders to implement the HASP (e.g., police and fire departments), State Department of Transportation officials (for potential road closures or vehicular traffic on state highways), or any other local or State government officials whose presence is appropriate for the nature of the Work to be performed. At the meeting, CMI shall provide participants with a detailed construction schedule that includes the actual dates for mobilization to the Site and construction start up.

B. Advance Notice of Start of Construction

CMI shall provide a 10-day advanced notification of the start of the Pilot Project field activities to EPA, NMED, MMD and all other participants at the pre-construction meeting.

C. Construct Pilot Project

Within 15 days following the Pre-Construction Meeting (9.1.5.A), CMI shall begin construction on the Pilot Project.

D. Mobilization and Demobilization

CMI shall provide the necessary personnel, equipment, and materials for mobilization and demobilization to and from the Site for the purpose of

performing the Pilot Project, including all required field testing, confirmatory sampling and performance and environmental monitoring. The following mobilization and demobilization Work shall be performed:

- (1) identify field support equipment, supplies and facilities;
- (2) mobilization;
- (3) site preparation;
- (4) installation of utilities;
- (5) construction of temporary utilities; and
- (6) demobilization.

E. Provide Site Access

CMI shall provide EPA, NMED, MMD and other regulatory officials and their designated representatives with access to the Site and to all property owned or controlled by CMI and utilized by CMI in carrying out the Work, as provided in Section VIII of the Consent Decree (Access and Institutional Controls).

F. Maintain Field Logs and Daily Records

CMI shall maintain field logs and daily records documenting activities occurring in the field during construction as specified in Section 10.2.3(C) of this SOW.

G. Pre-final Construction Inspection

CMI shall schedule and conduct a pre-final construction inspection of the Pilot Project with EPA, NMED, and MMD. CMI shall develop a punch list of any deficiencies identified as part of the pre-final construction inspection.

Within 30 days after conducting the pre-final construction inspection, CMI shall prepare and submit to EPA a pre-final construction inspection report which

includes the list of deficiencies and completion dates for outstanding items, and the proposed date for a final construction inspection. The date for final construction inspection shall be scheduled within 14 days after completion of the corrective measures.

H. Corrective Measures to Address Deficiencies

CMI shall perform corrective measures to adequately address all deficiencies identified on the punch list in accordance with the EPA-approved schedules included with the pre-final construction inspection report.

I. Final Construction Inspection

CMI shall conduct a final construction inspection for the Pilot Project with EPA, NMED, and MMD. The final construction inspection shall consist of a walk-through of the project to determine the completeness of the Pilot Project construction and its consistency with the EPA-approved Final Design, the Consent Decree, and this SOW. The inspection will also be used to determine if all punch list items have been adequately addressed. Based on the final construction inspection, CMI shall provide written notification that all field construction activities have been completed in accordance with the EPA-approved work plan and the date such work was completed. The written notification shall be submitted to EPA within 14 days of the final construction inspection, unless otherwise agreed to in writing.

J. Final Pilot Project Construction Completion Report

Within 30 days after the final construction inspection, CMI shall prepare and submit to EPA for approval a draft "Final Tailing Facility Cover Demonstration

Pilot Project Construction Completion Report.” The final construction completion report shall include without limitation the following elements:

- (1) Background;
- (2) Chronology of the Pilot Project construction;
- (3) Pertinent Performance Standards and construction quality control;
- (4) Pertinent ARARs and TBC material;
- (5) Construction activities;
- (6) As-built drawings that are certified by professional engineer licensed in the State of New Mexico;
- (7) Final inspection documentation and date;
- (8) Summary of project costs;
- (9) Evaluation of construction methodology;
- (10) Observations and lessons learned; and
- (11) Contact information for key CMI and contractor personnel.

CMI shall make revisions to the Pilot Project construction completion report consistent with EPA’s comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments or the time period determined by EPA.

9.1.6. **Monitoring Phase**

The monitoring phase includes tasks covering the period of monitoring subsequent to the completion of major construction. Activities which shall be conducted by CMI during this phase of the Pilot Project include without limitation the following:

A. Data Acquisition, Analysis, Validation and Evaluation

CMI shall perform all sample acquisition, field testing and performance monitoring for the Pilot Project in conformance with the updated SAP, QAPP, FSP and EPA-approved Final Design required under the Consent Decree and this SOW.

B. Performance Monitoring

CMI shall monitor the performance of the Pilot Project, in accordance with the monitoring plan included in the Pilot Project Final Design.

C. Operation and Maintenance of Pilot Project

After construction is completed, CMI shall perform O&M of the Pilot Project pursuant to the O&M Plan included in the Pilot Project Final Design.

D. Quarterly Inspections

CMI shall conduct quarterly inspections of the constructed Pilot Project with EPA, NMED and MMD. CMI may reduce the inspection frequency over time based on the data collected if approved by EPA. CMI shall develop a punch list of deficiencies or recommended modifications or adjustments to the Pilot Project as part of the quarterly inspections. CMI shall prepare and submit to EPA an Inspection Report which documents the inspection, the participants, all observations and list of deficiencies or modifications that require corrective measures. The quarterly Inspection Report shall be submitted within 30 days after each inspection. Any significant modifications which are recommended by CMI in the Inspection Reports, or directed by EPA, that require additional

planning, shall also be documented in the Annual Monitoring and Assessment Reports described in the following section of this SOW.

E. Annual Monitoring and Assessment Reports for Pilot Project

CMI shall prepare and submit to EPA an “Annual Monitoring and Assessment Report for the Tailing Facility Cover Demonstration Pilot Project” (Annual Monitoring Report”) no later than one year following CMI’s notification pursuant to Section 9.1.5(I) (Final Construction Inspection) and annually thereafter for each year that the Pilot Project is ongoing. The Annual Monitoring Report shall include but not be limited to:

- 1) A description of all performance monitoring and O&M activities completed and data acquired the previous year;
- 2) All acquired data and an analysis of the acquired data, including a description of the progress towards attaining the success criteria described in Section 5.2.1 of the SOW; and
- 3) A description of any issues or problems that were raised as a result of the inspections and how they were solved or if they remain unresolved.

CMI shall revise the Annual Monitoring Report to address all EPA comments.

The revised Report shall be submitted to EPA for approval within 30 days after receipt of EPA comments or the time period determined by EPA.

F. Modifications to Pilot Project

Upon receiving EPA’s acceptance of any recommended modification or adjustment to the ongoing Pilot Project or EPA’s direction for modification, CMI shall implement the modifications in accordance with the EPA-approved

schedules contained in the Annual Monitoring Reports required in the previous section of this SOW.

G. Pilot Project Completion Report

No later than six years following CMI's notification pursuant to Section 9.1.5(I) (Final Construction Inspection), CMI shall prepare and submit to EPA for approval a draft "Tailing Facility Cover Demonstration Pilot Project Completion Report" ("Completion Report") summarizing and evaluating the data collected during the Pilot Project and evaluating the performance of the elements of the Pilot Project. The Completion Report shall include without limitation the following elements:

- 1) Summary of all monitoring results;
- 2) Evaluation of long term cover stability;
- 3) Evaluation of erosion;
- 4) Evaluation of cover performance;
- 5) Operations and maintenance requirements;
- 6) Evaluation of vegetation design performance; and
- 7) Summary of lessons learned.

CMI shall make revisions to the Completion Report consistent with EPA's comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments. EPA approval of the Tailing Facility Cover Demonstration Pilot Project Completion Report shall not be unreasonably delayed.

9.2. Tailing Facility Groundwater Extraction Well System

9.2.1. Pre-final Remedial Design

CMI shall submit a Pre-final Remedial Design for Installation and Operation of Tailing Facility Groundwater Extraction Well System based on the conditions identified in Section 5.2.4 of this SOW, in accordance with any plan and schedule approved by EPA under Section 5.2.4 for such work.

A. Pre-final RD Elements

The Pre-final RD will serve as the approved Final RD if EPA approves the Pre-final RD without comments. The pre-final design shall include or discuss, at a minimum, the following:

- 1) Pre-final drawings, detail drawings, list of materials and quantities;
- 2) Pre-final design calculations;
- 3) Design assumptions and parameters;
- 4) Pre-final technical specifications;
- 5) A pre-final/final O&M Plan and O&M Manual for the groundwater extraction system; The O&M Manual and O&M Plan shall be developed in accordance with Operation and Maintenance in the Superfund Program, OSWER 9200.1 37FS, EPA/540/F-01/004 (May 2001); and
- 6) Pre-final CQAPP.

B. Respond to Design Review Comments

CMI shall consolidate and respond to all comments on the Pre-final RD within the timeframe specified in the approved plan under Section 5.2.4. CMI shall provide a

written response to each comment, indicating whether CMI has decided to implement a design change as result of the comment, and how the change will impact the selected remedy, RD/RA costs, and/or schedule. For the Pre-final RD, CMI shall submit responses to EPA's comments prior to initiation of the Final RD.

C. Participate in Pre-final Design Reviews or Briefings

As requested by EPA, CMI shall participate in design review meetings to be held at locations as determined by the EPA RPM. Locations may include, but are not limited to, CMI's mining facility near Questa, EPA Region 6 offices in Dallas, Texas, or the NMED or MMD offices in Albuquerque, Santa Fe, or Taos, New Mexico.

9.2.2. **Final Remedial Design**

CMI shall submit a Final Remedial Design for the Installation and Operation of Tailing Facility Groundwater Extraction Well System based on the conditions identified in Section 5.2.4 of this SOW. CMI shall submit to EPA, for approval, a Final Remedial Design within 45 days after receipt of EPA comments on the Pre-Final RD (unless the pre-Final RD was approved by EPA without comment). The Final RD shall address comments generated from the Pre-final RD review and clearly show any modifications of the design as a result of incorporation of the comments. The Final RD must include final versions of all Pre-final deliverables. The Final RD shall be approved by a Professional Engineer registered in New Mexico. CMI shall obtain EPA's written approval of a Final RD before initiating the associated RA unless specifically authorized in writing by EPA. CMI shall make revisions to the Final RD as a result of EPA's comments and/or agreements.

A. Participate in Final Design Reviews (if needed)

As requested by EPA, CMI shall participate in Final RD review meetings to be held at locations as determined by the EPA RPM. Locations may include, but are not limited to, CMI's mining facility near Questa, EPA Region 6 offices in Dallas, Texas, or the NMED or MMD offices in Albuquerque, Santa Fe, or Taos, New Mexico.

B. Final RD

CMI shall incorporate into the Final RD any comments and/or changes recommended by EPA in the Pre-final RDs or Pre-final RD meetings. The Final RDs shall be submitted within 45 days of any final design review meeting that is needed.

10. **REMEDIAL ACTION**

CMI shall perform all necessary RA Projects to construct and complete the work described in the Final RDs submitted under this SOW or the Early Design AOC SOWs. CMI shall ensure that all RA Projects are consistent with the applicable Regulations and Guidance Documents listed in Attachment 6. In order to construct and complete the RA Projects, CMI shall plan for and implement the Work described below.

10.1. **Project Planning and Support**

CMI shall plan for the execution and overall management of all RA Work by performing the following project planning and support activities to implement the RA Projects:

10.1.1. Attend Scoping Meetings

Before or concurrent with developing the RA Project Work Plans, CMI shall attend all scoping meetings, whether held at the Site in conjunction with Site visits, or at other locations, to be determined by the EPA RPM.

10.1.2. Conduct Site Visits

CMI shall conduct Site visits with EPA, NMED, and MMD officials and their designated representatives during RA Project planning phases to assist all parties in developing an understanding of the Site and any construction logistics. CMI shall use the information gathered during the visits to better scope the projects and to implement the RA Projects. A Health and Safety Plan is required prior to conducting Site visits.

10.1.3. Develop Draft RA Project Work Plans

Within 60 days after receiving EPA's written approval of each Final RD, or within 60 days after the Effective Date, whichever is later, CMI shall prepare and submit the following draft RA Project Work Plans for the construction of the Selected Remedy components according to the Final RD. CMI shall obtain EPA's approval of each RA Project Work Plan and all other related plans before conducting each component of the RA Project.

- A. Mine Site Groundwater Extraction System (SOW Section 5.1.2)
- B. Upgrade Tailing Facility Seepage Interception Systems (SOW Section 5.2.3)
- C. Install and Operate Tailing Facility Groundwater Extraction Well System
(SOW Section 5.2.4 – if required)

10.1.4. RA Project Work Plan Elements

The RA Project Work Plans shall include a detailed description of:

- A. The technical approach and overall management strategy for the remediation;
- B. The O&M, performance monitoring, other monitoring, and construction activities in accordance with the final designs and ROD;
- C. The necessary procedures, inspections, deliverables, and RA schedules shall be specified;
- D. The comprehensive construction management schedule for completion of each major activity and submittal;
- E. The organizational structure outlining the roles, relationships, and responsibilities and authority of all organizations and key personnel involved in the RA including a description of key project personnel's qualifications (e.g., project coordinator, supervising contractor, resident engineer, quality assurance official, etc.); and
- F. Information related to the execution of contracts for construction and the identification of and satisfactory compliance with permitting requirements.

10.1.5. Revise Draft RA Project Work Plans

CMI shall revise the draft RA Project Work Plans based on EPA's comments and provide revised Work Plans within 30 days of receipt of EPA's comments.

10.1.6. Update Site-wide Plans

Within 60 days after receiving EPA's written acceptance of each individual Final RD, CMI shall review the existing Site-wide plans identified below that were prepared during the RD, and submit to EPA an updated plan or addendum to the plan as part of each RA Project Work Plan, as necessary, to implement each RA Project.

Since CMI and any of its contractors or subcontractors will prepare their own RA Project plans, CMI shall incorporate the plans and procedures received from any of its contractors or subcontractors into the overall Site-wide plans. Construction plans and procedures are living documents and CMI's contractors shall update the appropriate plans, as necessary, throughout the Work. Any revisions to the Site-wide Plans will be submitted with the final version of each individual RA Project Work Plan.

A. Site Management Plan

CMI shall update the Site Management Plan (SMP) that was prepared during RD.

(1) Pollution Control and Mitigation Plan

CMI shall include in the SMP an update of the PCMP that outlines the process, procedures, and safeguards that will be used to ensure contaminants or pollutants are not released off Site.

(2) Waste Management Plan

CMI shall include in the SMP an update of the WMP that outlines how wastes that are encountered during the RAs will be managed and disposed. CMI shall specify the procedures that will be followed when wastes are managed, including on-Site and off-Site storage, treatment, and/or disposal. CMI shall include in the WMP updates to the Decontamination Plan, Water Control Plan, and Transportation and Disposal Plan.

B. Health and Safety Plan

CMI shall update the Health and Safety Plan (HASP) for RA activities in conformance with applicable Occupational Safety and Health Administration

(OSHA) and EPA requirements, including 29 C.F.R. 1910. EPA shall not approve or disapprove the Health and Safety Plan, but shall review it and require compliance by CMI with its terms as part of the Consent Decree.

The HASP shall specify employee training, protective equipment, medical surveillance requirements, standard operating procedures and a contingency plan in accordance with 29 C.F.R. 1910.120 (1)(1) and (1)(2). The plan shall address employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan in accordance with 40 C.F.R. 300.150 of the NCP and 29 C.F.R. 1910.120 1(1) and (1)(2).

Whenever possible, CMI shall refer to the HASP developed for the RD when preparing the HASP for the RA. CMI shall also ensure the HASP identifies health and safety requirements specified under MSHA for Site visitors since the Site is an operating mining facility.

C. Sampling and Analysis Plan

CMI shall update the SAP to reflect the specific objectives of any data acquisition conducted during construction. CMI shall ensure that the SAP outlines the data collection and quality assurance requirements of any sampling and analysis to be conducted by CMI during the RA. As part of the SAP update, CMI shall also update the QAPP, FSP, and Data Management Plan. The QAPP, FSP and Data Management Plan developed for the RD and/or RI/FS should be referenced or adapted whenever possible when preparing updates for the RA.

D. Update Construction Quality Assurance Project Plan (CQAPP)

CMI shall review and update the final CQAPP submitted as part of each individual Final RD. The CQAPP shall detail the approach for quality assurance by addressing quality assurance requirements and standards related to construction activities, including installation, excavation, and decontamination.

The updated CQAPP shall include the following updated elements:

- (1) personnel;
- (2) CQAPP personnel qualifications;
- (3) inspection activities;
- (4) sampling requirements; and
- (5) documentation

E. Contingency Plans

CMI shall update the contingency plans to provide contingency measures for potential spills and discharges from materials handling or transportation. This plan shall describe methods, means, and facilities required to prevent contamination of soil, water, atmosphere, uncontaminated structures, equipment or material from the discharge of waste due to spills. CMI shall provide for equipment and personnel to perform emergency measures required to contain a spill and to remove and properly dispose of any media that become contaminated due to spillage, and provide for equipment and personnel to perform decontamination measures that may be required to remove spillage from previously uncontaminated structures, equipment, or material.

10.2. Construction Phase

CMI shall construct the portions of the Selected Remedy described in Section 10.1.3 of this SOW by performing the Work set forth in the EPA-approved Final RA Project Work Plans. CMI shall perform the Work in accordance with the EPA-approved RA Project Work Plan schedules. Activities that shall be conducted by CMI during this phase of the project include, but are not limited to the following:

10.2.1. Attend Pre-Construction Meeting

Within seven (7) days of receipt of EPA's written approval of each individual RA Project Work Plan, CMI shall schedule a pre-construction meeting with EPA, NMED and MMD. The pre-construction meeting shall be held within 30 days after receipt of EPA's written approval of the RA Project Work Plan. Participants at the pre-construction meetings shall include CMI's Project Coordinator, Supervising Contractor, QA Official, a representative from each of CMI's RA Project contractors and subcontractors, and a representative of its RD contractor(s). Other participants of the pre-construction meeting may include local emergency responders to implement the HASP (e.g., police and fire departments), State Department of Transportation officials (for potential road closures or vehicular traffic on state highways), or any other local or State government officials whose presence is appropriate for the nature of the Work to be performed. At the meeting, CMI shall provide participants with a detailed construction schedule that includes the actual dates for mobilization to the site and construction start up.

10.2.2. Advance Notice of Start of Construction

CMI shall provide a 14-day advanced notification of the start of all field construction activities to EPA, NMED, MMD and all other participants at the pre-construction meeting.

10.2.3. RA Project Construction

Within 30 days after conducting each pre-construction meeting, or as otherwise provided in the approved schedule, CMI shall commence construction activities. CMI shall perform the following activities as part of each RA Project construction:

A. Mobilization and Demobilization

CMI shall provide the necessary personnel, equipment, and materials for mobilization and demobilization to and from the Site for the purpose of performing construction and construction-related activities, including all required field testing, confirmatory sampling and performance and environmental monitoring. CMI shall perform all of the following mobilization and demobilization Work:

- (1) identify field support equipment, supplies and facilities;
- (2) mobilization;
- (3) site preparation;
- (4) installation of utilities;
- (5) construction of temporary utilities; and
- (6) demobilization.

B. Provide Site Access

CMI shall provide EPA, NMED, MMD, and other regulatory officials and their designated representatives with access to the Site, and to all property owned or controlled by CMI and utilized by CMI in carrying out the Work, as provided in Section VII of the Consent Decree (Access to the Site and Other Property).

C. Maintain Field Logs and Daily Records

CMI shall maintain field logs and daily records documenting activities occurring in the field during construction.

D. Perform Field Testing and Confirmatory Sampling

CMI shall provide the necessary personnel and equipment to collect any confirmatory samples, perform any necessary field testing, and conduct inspections of work. Such field testing shall include testing of materials used during construction to determine if they are consistent with all screening criteria and specifications contained in the final designs and construction contract documents (*e.g.*, soils testing, materials testing, etc.). Confirmatory sampling shall be performed to verify that the Performance Standards, as set forth in the ROD, have been achieved.

E. Data Acquisition, Analysis, Validation and Evaluation

CMI and its contactors shall perform all sample acquisition and field testing in conformance with the updated Site-wide SAP, QAPP, FSP and EPA-approved monitoring plans required under the Consent Decree and this SOW.

CMI shall perform the appropriate combination of CLP analytical tests for any materials and/or confirmatory samples taken at the Site in accordance with the updated Site-wide SAP, QAPP and FSP. CMI shall also ensure the proper management of samples in the field and arrange for shipment to the designated laboratory. Accurate chain-of-custody procedures for sample tracking, protective sample packing techniques, and proper sample-preservation techniques must be used in accordance with the SAP, QAPP and FSP.

CMI shall evaluate, interpret, and tabulate data in an appropriate presentation format for final data tables. CMI shall design and set up an appropriate database for pertinent information collected that will be used to validate and monitor the RA and monitor the environment. These tables will include soil/sediment data, air data, groundwater data, surface water data, biological data, and waste data, if required to be collected during the RA. On a quarterly basis and upon request, CMI shall make these data tables available to EPA, NMED and MMD in a native and searchable format.

Within 14 days of receipt of validated analytical data, CMI shall evaluate the data and notify EPA of the results and identify what additional response actions are necessary, if any, to achieve the Performance Standards (e.g., additional excavation of soil). Within 14 days of providing such notification, CMI shall compile the sampling and analytical results in a summary report and submit it to EPA, NMED and MMD for review. The report will assess the progress of the RA Project based on these results and identify any actions required.

F. Perform Additional Work and Confirmatory Sampling, As Needed

If initial confirmatory sampling shows Performance Standards have not been attained after work is conducted, CMI shall perform additional work necessary to achieve the Performance Standards. CMI shall provide a 3-day advance notification to EPA, NMED, and MMD prior to start up of any additional work. Following performance of any additional work, CMI shall repeat the activities for confirmatory sampling, analysis, validation and evaluation to assess attainment of

the Performance Standards. This process shall be repeated until the Performance Standards are attained or EPA determines that the work performed is adequate.

G. Field Change Requests

During performance of the construction Work, CMI may identify and request approval for field changes to final RA Project work plans, final design reports, or the EPA-approved RA Project work plan schedules as necessary to complete the Work. EPA will approve, disapprove or require modification of any requests for field changes in accordance with the procedures set forth in Section VI of the Consent Decree.

H. Attend Additional Meetings and Conduct Inspections

CMI and its contractors shall attend additional meetings or conduct Site inspections at any time throughout implementation of construction activities, at the request of the EPA, to provide clarification on contract documents, specifications, construction progress, and field schedules.

I. Dispose of Investigation-Derived Waste

CMI shall characterize and dispose of investigation-derived wastes in accordance with the Waste Management Plan.

10.2.4. RA Project Construction Completion

CMI shall conduct all necessary inspections to obtain EPA's approval of the construction completion of the following RA Projects: the Mine Site Groundwater Extraction System (Section 5.1.2), the Seepage Barrier Upgrade (Section 5.2.3) and the Tailing Facility Groundwater Extraction System (Section 5.2.4). For those RA Projects in which Performance

Standards are not achieved during the RA, CMI shall conduct the following activities to verify that each RA Project has been constructed and is performing as designed.

A. RA Project Construction Completion Inspections

For those RA Projects in which performance standards are not achieved at the completion of the RA construction phase, CMI shall schedule and conduct a pre-final inspection of the RA Project with, EPA, NMED, and MMD. CMI shall develop a punch list of deficiencies as part of the pre-final inspection.

Within twenty one (21) days after conducting a pre-final construction inspection, CMI shall prepare and submit to EPA a pre-final construction inspection report which includes the list of deficiencies and completion dates for outstanding items, and the proposed date for a final construction inspection. The date for final construction inspections shall be scheduled within 14 days after completion of the corrective measures.

B. Corrective Measures to Address Deficiencies

CMI shall perform corrective measures to adequately address all deficiencies identified on the punch list in accordance with the EPA-approved schedule included with the pre-final construction inspection report.

C. Final Construction Inspections

CMI shall conduct final construction inspections for each RA with its contractors, EPA and its representatives, NMED, and MMD. The final construction inspections will consist of a walk-through of each project to determine the completeness of the remedial construction and its consistency with the EPA-accepted final design reports, the final RA Project work plans, the ROD, the

Consent Decree, and this SOW. The inspections will also be used to determine if all punch list items have been adequately addressed. Based on the final construction inspection, CMI shall provide written notification that all field construction activities have been completed. The written notification shall be submitted to EPA within 14 days of the final construction inspection, unless otherwise agreed to in writing.

D. 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. CMI shall provide such information as EPA requests for its review.

E. RA Project Construction Completion Report

Within 60 days after completion of the shakedown period, CMI shall prepare and submit to EPA an "RA Project Construction Completion Report" requesting EPA's approval of the Construction Phase and EPA's determination that the RA Project is operating as intended. The RA Project Construction Completion Report must:

- (1) include statements by a registered professional engineer and by CMI's Project Coordinator that the Construction Phase is complete and that the RA Project is operating as intended;
- (2) include a demonstration, and supporting documentation (with a summary of the documentation), that the Construction Phase is complete and that the RA Project is performing as designed;

(3) include as-built drawings signed and stamped by a professional engineer;
and

(4) be prepared in accordance with Chapter 2 (Remedial Action Completion)
of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011).

If EPA notifies CMI that the RA Project Construction is not complete, does not comply with Final RD specifications, or the RA Project is not performing as designed, CMI shall meet with EPA as soon as practicable regarding such notice. EPA's notice may include a description of the activities that CMI must perform in order to complete the RA Project Construction or cause the RA Project to operate as intended. EPA's notice may include specifications and a schedule for such activities or must require CMI to submit specifications and a schedule for EPA approval. CMI shall perform all activities described in the notice or in the EPA-approved specifications and schedule.

F. Final RA Construction Completion Report

Within 30 days after receipt of EPA comments on each draft RA Project Construction Completion Report, CMI shall revise each such report to adequately address all EPA comments and submit a Final RA Project Construction Completion Report. CMI shall also submit written responses to all EPA comments with the report.

10.2.5. Mine Site Water Treatment Plant RA Project Construction Completion

Once CMI has completed construction of the new Mine Site Area Water Treatment Plant and concluded the initial shakedown period, or within 30 days of the Effective Date of this Consent Decree, whichever is later, CMI shall submit a RA Project Construction Completion Report to

EPA in accordance with Section 10.2.4(E). The Report should certify to EPA that the waters being collected by the selected remedy are being treated to meet discharge requirements included in the NPDES permit CMI has already obtained. Within 30 days after receipt of EPA comments on the draft RA Project Construction Completion Report, CMI shall revise the report to adequately address all EPA comments and submit a Final RA Project Construction Completion Report for the Mine Site Water Treatment Plant. CMI shall also submit written responses to all EPA comments with the report.

10.2.6. Surface Based Mine Dewatering System RA Project Construction Completion

Once CMI has completed construction of the Surface Based Mine Dewatering System, CMI shall submit a RA Project Construction Completion Report to EPA in accordance with Section 10.2.4(E). EPA may determine that the Final Pilot Surface-Based Mine Dewatering System Construction Completion Report submitted under Section 6.11.3.1.10 of Revision 3 of the Early Design SOW satisfies all the requirements of Section 10.2.4(E) and Section 10.2.6 of this SOW. Within 30 days after receipt of EPA comments on the draft RA Project Construction Completion Report (if required), CMI shall revise the report to adequately address all EPA comments and submit a Final RA Project Construction Completion Report for the Surface-Based Mine Dewatering System. CMI shall also submit written responses to all EPA comments with the report.

10.2.7. Dry/Maintenance Area Soil Excavation RA Project Completion

A. RA Project Completion Inspection.

Because CMI has performed the required soil excavation of the Dry/Maintenance Area pursuant to an addendum to the Phase 2 Demolition and Decommissioning Plan

(established pursuant to the Mining Act Permit No. TA001RE), an RA Project Completion Inspection is not required.

B. RA Project Completion Report

Because CMI has performed the required soil excavation of the Dry/Maintenance Area pursuant to an addendum to the Phase 2 Demolition and Decommissioning Plan (established pursuant to the Mining Act Permit No. TA001RE), CMI shall submit the RA Project Completion Report within 90 days of the Effective Date of this Consent Decree. The report must:

- 1) Include a certification by CMI's Project Coordinator that the RA Project has been completed in accordance with the Building Demolition and Cleanup Plan, Phase 2 Activities – Tailing Facility Area, Addendum No. 1 – Soil Removal at the Old Maintenance Shop (Cleanup Plan);
- 2) Include drawings showing the area and volume of soil removed; and
- 3) Include the results of X-ray fluorescence measurements and laboratory confirmation samples showing that the soil greater than 41 ppm molybdenum has been removed.

C. Final RA Project Completion Report

Within 30 days after receipt of EPA comments on the draft RA Project Completion Report, CMI shall revise the report to adequately address all EPA comments and submit the Final RA Project Completion Report for the Dry/Maintenance Area Soil Excavation. CMI shall also submit written responses to all EPA comments with the report.

10.2.8 EPA Certification of Completion Based on RA Project Completion Reports

A. The following RA Projects will be “Complete” when EPA has determined that the RA Project has been fully performed and the pertinent Performance Standards have been achieved:

(1) Mine Site Groundwater Extraction System (5.1.2); (2) Tailing Facility Seepage Barrier Upgrade (5.2.3); (3) Tailing Facility Groundwater Extraction System (5.2.4).

B. Monitoring Report: For those Remedial Action Projects identified in Section 10.2.8(A), CMI shall submit a Monitoring Report to EPA requesting Certification of RA Project Completion. The reports must:

- (1) include certification by CMI’s Project Coordinator that the RA is complete;
- (2) be prepared in accordance with EPA’s Close Out Procedures for NPL Sites guidance (May 2011).

C. If EPA concludes that a RA Project is not Complete, EPA shall notify CMI. EPA’s notice must include a description of any deficiencies. EPA’s notice may include a schedule for addressing such deficiencies or may require CMI to submit a schedule for EPA approval. CMI shall perform all activities described in the notice in accordance with the schedule.

D. If EPA concludes, based on the initial or any subsequent submittal of a Final RA Project Completion Report requesting Certification of Completion of a RA Project, that the RA Project is Complete, EPA shall timely so certify to CMI. Certification of Completion of a RA Project will not affect CMI’s remaining obligations under the Consent Decree.

10.3 Monitoring, Operation and Maintenance

CMI shall conduct operation and maintenance (O&M) of the following RA Projects to protect the integrity of the remedy. O&M activities shall be conducted using the O&M Plan and O&M Manuals included in the EPA-approved Final RD or plans developed pursuant to Section 10.3.1 for the following RA Projects:

- Surface-based Mine Dewatering System (SOW Section 5.1.1)
- New Groundwater Extraction System (SOW Section 5.1.2)
- New Mine Site Area Water Treatment Plant (SOW Section 5.1.4)
- Replace the Lower 002 Seepage Barrier with Extraction Wells and Replace the Upper 003 Seepage Barrier with a Deeper Collection System (SOW Section 5.2.3)
- Install and Operate Groundwater Extraction System (SOW Section 5.2.4)
- Operate Inlet Control Structure (SOW Section 5.3.1)

CMI shall conduct performance monitoring of the following RA projects to evaluate performance of the constructed remedies. Performance monitoring shall be conducted using monitoring plans developed pursuant to Section 10.3.2 for the following work components:

- Performance Monitoring (SOW Section 5.1.3)
- Monitor Groundwater and Surface Water (SOW Section 5.2.5)
- Monitor and Maintain Tailing Dams (SOW Section 5.2.6)

Performance monitoring and O&M for each of the RA components shall continue for as long as deemed necessary by EPA.

10.3.1 O&M Plan and O&M Manual

A. New Mine Site Area Water Treatment Plant

Within 30 days of the Effective Date of this Consent Decree, or November 30, 2016, whichever is later, CMI shall submit to EPA an O&M Plan and O&M Manual for the Mine Site Area Water Treatment Plant. The O&M Plan and O&M Manual shall be developed in accordance with *Operation and Maintenance in the Superfund Program*, OSWER 9200.1 37FS, EPA/540/F-01/004 (May 2001).

Within 30 days after receipt of EPA's comments on the O&M Plan and O&M Manual, CMI shall submit to EPA a revised O&M Plan and O&M Manual for the New Mine Site Water Treatment Plant for EPA's approval.

B. Surface-based Mine Dewatering System

Within 30 days of EPA's approval of the Pilot Surface-based Mine Dewatering System Completion Report, submitted pursuant to SOW Section 6.11.3.2.6 of Revision 3 of the Early Design SOW, CMI shall submit to EPA a revised Surface-based Mine Dewatering System O&M Plan and O&M Manual for EPA's approval.

C. Eagle Rock Lake Operation of Inlet Control Structure

In order to minimize sediment loading to Eagle Rock Lake during and after storm events, CMI shall continue to operate the inlet controls, including the head gate and data collection systems that CMI installed pursuant to the Removal AOC. CMI shall operate the inlet controls in accordance with the EPA-approved Post-Construction Inspection and Monitoring Plan developed per paragraph 6.3.4.9.1 of the Removal SOW. Consistent with the Removal AOC, CMI, in coordination with the USFS, shall ensure proper operation of the inlet controls for a period of at least five years following the Effective Date of the Removal AOC. Following this five year

period, CMI shall continue to operate and maintain the inlet controls, including equipment replacements and technology upgrades, in coordination with the USFS for an additional five years, unless otherwise requested in writing by the USFS. CMI shall, in consultation with the EPA and USFS, transition the sole operational responsibility of the inlet controls to the USFS by the end of this second five-year period, if agreed to by the USFS; provided, however, that CMI may elect to maintain responsibility for the operation and maintenance of the inlet controls beyond the second five-year period for successive five-year periods. CMI may, in consultation with the EPA and USFS, transition the sole operational responsibility of the inlet controls to the USFS at the end of any of these successive five-year periods. If such transition of responsibility to USFS has not occurred by the date that EPA certifies that the construction is complete for all remedial action at the Mine Site that is required by the ROD, CMI shall no longer be required to continue to operate and maintain the inlet controls; provided, however, that if EPA determines that a release from the Mine Site or from a CMI mining-related activity to the Red River has occurred that was not authorized by an EPA-issued permit and that has contaminated the sediment of Eagle Rock Lake, EPA may require CMI to perform additional operation and maintenance of the inlet controls.

10.3.2 Performance Monitoring Plans

A. Mine Site Performance Monitoring Plan

Within 60 days of the Effective Date, CMI shall develop and submit to EPA a plan to monitor performance of the Mine Site Groundwater Extraction System and Surface-based Mine Dewatering System under Section 5.1.3 (Performance Monitoring) of this SOW to assess the effectiveness of the systems on attaining performance standards in alluvial, colluvial and bedrock

groundwater. The Mine Site Performance Monitoring Plan shall include a schedule for implementation and monitoring.

Within 30 days after receipt of EPA's comments on the monitoring plan, CMI shall submit to EPA a revised Mine Site Performance Monitoring Plan for EPA's approval.

B. Tailing Facility Performance Monitoring Plan

Within 60 days of the Effective Date, CMI shall develop and submit to EPA a plan to monitor groundwater and surface water at the Tailing Facility. The plan shall be written to address the requirements contained in Section 5.2.5 of this SOW. The Tailing Facility Performance Monitoring Plan shall include a schedule for implementation and monitoring.

Within 30 days after receipt of EPA's comments on the monitoring plan, CMI shall submit to EPA a revised Tailing Facility Performance Monitoring Plan for EPA's approval.

C. Tailing Dams Monitoring and Maintenance Plan

Within 90 days of the effective date, CMI shall develop and submit to EPA a plan to monitor and maintain the tailing dams. The plan shall be written to address the requirements contained in Section 5.2.6 of this SOW.

Within 30 days after receipt of EPA's comments on the monitoring plan, CMI shall submit to EPA a revised Tailing Dam Monitoring and Maintenance Plan for EPA's approval.

10.3.3 Eagle Rock Lake Performance Monitoring

In addition to the performance monitoring described above, CMI shall conduct performance monitoring at Eagle Rock Lake. CMI shall perform post-construction inspection and monitoring in accordance with the requirements in the Post-Construction Inspection and Monitoring Plan for the Eagle Rock Lake Removal Action developed under Paragraph 6.3.4.9.1 of the Removal AOC SOW and approved by EPA on November 12, 2015. The plan requires physical, chemical and

biological monitoring of Eagle Rock Lake to assess the long-term effectiveness of the remedy. The plan requires monitoring within Eagle Rock Lake be performed a total of three times over a period of ten years after completion of Eagle Rock Lake Removal Action construction. The three monitoring events shall occur at the following intervals: one month (baseline, completed September 30, 2015), five years, and ten years after the completion of the Removal Action construction. The plan requires monitoring of potential releases from the Mine Site, turbidity monitoring and monitoring of other appropriate parameters of the Red River upstream and downstream of the Mine Site. The plan also requires monitoring of the continuing performance and integrity of the inlet controls in limiting contamination entering the lake during storm and other high-flow events.

EPA will conduct five-year reviews of the Removal Actions. After the second Five-Year Review, EPA will assess the need to continue Eagle Rock Lake monitoring beyond the 10-year monitoring period established in the Removal Action SOW and continued in this Consent Decree. If EPA determines that a release from the Mine Site or from a CMI mining-related activity to the Red River has occurred that was not authorized by an EPA-issued permit and that has contaminated the sediment of Eagle Rock Lake, EPA may require CMI to perform additional monitoring of the lake.

10.3.4 Operation and Maintenance of Remedial Actions

CMI shall commence O&M activities as described in the Final RD for each of the following RA projects within 30 days after receiving EPA's approval of the relevant RA Construction Completion Report:

- A. New Groundwater Extraction Systems (SOW Section 5.1.1);

- B. Replace the Lower 002 Seepage Barrier with Extraction Wells and Replace the Upper 003 Seepage Barrier with a Deeper Barrier (SOW Section 5.2.3); and
- C. Install and Operate Groundwater Extraction Well System (SOW Section 5.2.4).

Immediately following EPA's approval of the Mine Site Area Water Treatment Plant O&M Plan and O&M Manual, CMI shall commence O&M activities for the New Mine Site Area Water Treatment Plant (SOW Section 5.1.4).

Immediately following EPA's approval of the Surface-based Mine Dewatering System O&M Plan and O&M Manual, CMI shall commence O&M activities for the Surface-based Mine Dewatering System (SOW Section 5.1.1).

CMI shall commence O&M activities for Eagle Rock Lake in accordance with the schedule in the Post-Construction Inspection and Monitoring Plan for the Eagle Rock Lake Removal Action developed under Paragraph 6.3.4.9.1 of the Removal AOC SOW and approved by EPA on November 12, 2015.

10.3.5 Performance Monitoring

CMI shall perform all monitoring required by the EPA-approved Mine Site, Tailing Facility and Tailing Dams Performance Monitoring Plans developed under Section 10.3.2. CMI shall perform all sample acquisition, field testing and performance monitoring in conformance with the updated SAP, QAPP, FSP and EPA-approved O&M Plans and O&M Manuals.

10.3.6 Annual Remedial Action Effectiveness Report

No later than one year after the effective date, and annually thereafter, CMI shall prepare and submit an annual RA Effectiveness Report for all Work conducted at the Site.

The annual RA Effectiveness Report shall include but not be limited to:

- A description of all RA, performance monitoring and O&M activities completed and data acquired the previous year;
- An analysis of the acquired data including a description of the progress towards attaining Performance Standards;
- Updated isoconcentration contour maps of COCs in Mine Site Area and Tailing Facility Area groundwater based on acquired water chemistry data;
- A description of any issues or problems that were raised as a result of the inspections and how they were solved or if they remain unresolved;
- A description of all permitting activities performed the previous year related to the Work and achievement of permit requirements or notification of permit violations, if any;
- Documentation of the volumes of water collected by all extraction well and seepage interception systems (system totals and per/well or basis);
- Documentation of the volumes of water treated at water treatment plant(s);
- Documentation of the volume of water discharged under NPDES permitting to Red River via outfall(s);
- Copy of NPDES permit effluent discharge reports; and
- A review of safety and emergency systems; and
- A description of the periodic evaluations to optimize system performance.

CMI shall make revisions to the annual Remedial Action Effectiveness Report as necessary to address EPA's comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments or the time period determined by EPA.

11 FIVE-YEAR REVIEWS

CMI shall conduct any studies and investigations requested by EPA, to support EPA's reviews of whether the Remedial Action is protective of human health and the environment in accordance with Section 121(c) of CERCLA, 42 U.S.C. § 9621(c) and the NCP. EPA's determination of remedy protectiveness occurs within five years after commencement of remedial construction and at least every consecutive five years thereafter, as required by Section 121(c) of CERCLA, 42 U.S.C. §9621(c), and the NCP. The five year reviews will continue in this manner and on this schedule as long as contaminants remain in place at the Site that prevent its unrestricted use.