Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 12/31/2019 7:23:55 PM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]
CC: Chris Dail [Dail@midasgoldinc.com]; Austin Zinsser [zinsser@midasgoldinc.com]; akoulermos@formationenv.com; L. Michael Bogert [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]
Subject: Meeting in Seattle
Attachments: ATT00001.txt

Helen,

It was a pleasure speaking with you today.

As discussed, we would like to participate in a technical meeting to discuss potential remedial early actions at Stibnite as soon as possible. I understand you will be unavailable for the first half of January, so the meeting would likely take place in the second half of the month. FYI, we have developed a list of potential early actions, in addition to our discussion about Hennessy Creek, and will be prepared to discuss those at the meeting.

The likely participants from our side would be me, Chris Dail (Midas Gold Idaho, Chief Geologist), Austin Zinsser (Midas Gold Idaho, Senior Resource Geologist), and Andy Koulermos (Formation Environmental, Consultant). I have copied Chris, Austin and Andy on this email. I have also copied Laurel Sayer (Midas Gold Idaho, CEO) and Michael Bogert (Midas Gold Idaho, General Counsel) as they may also want to participate.

Also as discussed, I will ask Laurel to touch base with you directly regarding any preparation required by your team for the January 13 meeting with Regional Administrator Hladick.

Lastly, I will make sure you are provided with access to the SharePoint site with have setup for this project as soon as our site administrator returns from break.

I look forward to working with you.

Happy New Year, and safe travels!

John

John Meyer, P.Eng.
Vice President, Development

MAX.TSX / MDRPF.OTCQX
405 South 8th Street, Suite 201
Boise, Idaho 83702

T: 208.901.3063
M: 208.608.3543
E: meyer@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 7/19/2019 11:28:25 PM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Bradley M. Marten [bmarten@martenlaw.com]; Andy Koulermos [akoulermos@formationenv.com]
Subject: Revised SOW
Attachments: ATT00001.txt; 2019-07-19 Draft Stibnite SOW Rev 6.docx

Kathy and Elizabeth,

A few proposed changes didn't make it into the document I just sent you.

Could you replace the last version with the attached version?

I apologize for the confusion.

Regards,

John

From: John Meyer <JMeyer@midasgoldcorp.com>
Date: Friday, July 19, 2019 at 5:17 PM
To: "Cerise, Kathy" <Cerise.Kathryn@epa.gov>, "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Cc: Bradley Marten <bmarten@martenlaw.com>, L Bogert <mbogert@midasgoldinc.com>, Andy Koulermos <akoulermos@formationenv.com>
Subject: Revised SOW

Kathy and Elizabeth,

The attached file provides a revised draft of the Stibnite AOC Statement of Work (SOW) for your review.

We have tracked our proposed changes relative to your original draft, so hopefully our proposed changes are clear, and that they reflect our discussions from this past Wednesday.

I have not copied personnel with any of the other agencies (USFS and/or IDEQ) on this email, as I assumed you would either distribute the document, or I can if you wish.

If you have any questions or comments that require clarification before our next meeting you can contact me anytime.

Have a great weekend.

John

John Meyer
Vice President, Development

MAX.TSX / MDRPF.OTCQX
405 South 8th Street, Suite 201
Boise, Idaho 83702

T: 208.901.3063
M: 208.608.3543
E: meyer@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

Appendix 1

STATEMENT OF WORK FOR THE STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY Valley County ID near Yellow Pine, ID

Purpose

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Stibnite Mine Site ("Site") located in northwest Idaho approximately 14 miles from the town of Yellow Pine (see Figure 1). The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of Work that will be carried out by Midas Gold Idaho, Inc. ~~Corporation~~ ("Midas Gold" or "Respondent") as it implements the RI/FS at the Site.

In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS must be consistent with the PRO and the subsequent restoration. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

The Site is defined as the features described below (general locations summarized on Figure 2) and the areal extent of contamination from those features and all suitable areas in very close proximity to the contamination necessary for response action implementation:

1. **Yellow Pine Pit (Figure 3)** – The Yellow Pine Pit (formerly known as "The Glory Hole") was actively mined during the 1930s through the 1950s for antimony, tungsten, gold and silver. The pit is located on Midas Gold patented land, and most of the waste rock dumps associated with the pit are adjacent to the pit; some of the waste rock dumps are located on USFS managed land. During active mining, the East Fork of the South Fork of the Salmon River (EFSFSR) was routed around the pit through the Bailey Tunnel but was allowed to return to its natural course through the pit after the Bailey Tunnel was abandoned in the mid-1950s. The EFSFSR now runs through the pit. The Yellow Pine Pit, and the majority of waste rock dumps associated with it, are within the footprint of Midas Gold's proposed PRO.

2. **Bradley Tailings Pile (Figure 4)** – The Bradley Tailings Pile, also known as the Historical Tailings and Spent Ore Disposal Area, is located on Midas Gold patented

ED_004715_00016246-00001

land. Approximately 3 million tons of mine tailings generated during the 1940s and 1950s are stored in this area, and they are overlain by approximately 6 million tons of spent heap leach ore placed in the 1980s and 1990s. The downstream end of the Tailings Pile is constrained by a structure known as the Keyway Dam, and a wetland exists downgradient of the Keyway Dam, which is also referred to as the Keyway Marsh. Meadow Creek is diverted around the south side of the Tailings Pile. The Bradley Tailings Pile is within the footprint of Midas Gold's proposed PRO.

3. **Hangar Flats Tailings Pile (Figure 5)** – The Hangar Flats Tailings Pile, also known as the Hecla Heap Leach Facility, is a reclaimed heap-leach facility which was built and operated in the 1990s to extract oxide gold and silver. The facility is located on Midas Gold controlled patented land, and is within the footprint of Midas Gold's proposed PRO.

4. **Bailey Tunnel (Figure 6)** – The Bailey Tunnel was constructed in the early 1940s to divert the EFSFSR around the Yellow Pine Pit and into Sugar Creek to facilitate open pit mining operations. The tunnel was no longer used after the mid-1950s, following cessation of open pit mining activities. The Bailey Tunnel is on Midas Gold patented land, and is within the footprint of Midas Gold's proposed PRO.

5. **DMEA Adit and Waste Rock Dump (Figure 7)** – The Defense Minerals Exploration Administration (DMEA) Adit and Waste Rock Dump are mining-related disturbances resulting from underground exploration activities during the 1950s. The adit and dump are located on USFS managed land, and are not within the footprint of the Midas Gold PRO.

6. **Bonanza Adit (Figure 8)** – The Bonanza Adit area is a mining-related disturbance in the Sugar Creek drainage resulting from underground exploration activities during the 1930s and 1940s. The Bonanza Adit area is located on USFS managed land, and is not within the footprint of the Midas Gold PRO.

7. **Cinnabar Tunnel (Figure 9)** – The Cinnabar Tunnel is a mining-related disturbance resulting from underground exploration activities during the late 1920s and early 1930s. The Tunnel is located on USFS managed land; the tunnel portal is within the footprint of the Midas Gold PRO.

8. **Meadow Creek Adit (Figure 10)** – The Meadow Creek Adit and associated waste rock dumps are mining-related disturbances that resulted from underground mining activities from the 1920s through the 1940s. The adit and waste rock dumps are located on Midas Gold controlled patented land, and are within the footprint of Midas Gold's proposed PRO.

This RI/FS SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language.

ED_004715_00016246-00002

This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h] [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h]commonly called the National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the "AOC." Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

Scope

The specific RI/FS activities to be conducted at the Site are set forth in seven separate tasks.

Task 1 – Scoping
Task 2 – Community Relations
Task 3 – Site Characterization
Task 4 – Treatability Studies
Task 5 – Feasibility Study
Task 6 – Detailed Analysis of Remedial Alternatives

Oversight

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code§§ 39-101 to 39-130; the Hazardous Waste Management Act of ldaho, Idaho Code§§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code§§ 39-3601 et seq. As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

ED_004715_00016246-00003

Schedule

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

Guidance

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

Roles and Responsibilities

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the AOC. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

Remedy Requirements

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

TASK 1 - SCOPING

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the

ED_004715_00016246-00004

amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by the Respondent as a function of the project planning process.

a. Site Background

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

Collect and analyze existing data and document the need for additional data

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA.

Conduct site visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

b. Project Planning

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include

ED_004715_00016246-00005

those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

ED_004715_00016246-00006

Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

c. *Scoping Deliverables*

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan will fully account for the timing and scope of mining and processing activities associated with the PRO. This could include a phased approach to focus on issues of most concern or requiring early action. The Work Plan shall be developed in

ED_004715_00016246-00007

conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP, and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

ED_004715_00016246-00008

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

Potential Target Analytes

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential

ED_004715_00016246-00009

performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

Chemicals/Analytes of Potential Concern for Surface Water

The preliminary ~~following~~ COPCs list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for ~~shall be included in the analyses for all~~ surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium (III)
- Chromium (VI)
- Cobalt
- Copper
- Hardness
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrogen, total Kjeldahl
- Phosphorus
- Potassium
- Selenium
- Silver
- Sodium
- Sulphate
- Thallium

ED_004715_00016246-00010

- Tungsten
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Uranium
- Vanadium
- Zinc

Field Analyses
- Conductivity
- Dissolved Oxygen
- Flow
- pH
- Temperature

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Chemicals/Analytes of Potential Concern for Sediments:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for sediment sampling stations.

Laboratory Analyses
- Antimony
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Tungsten
- Vanadium
- Zinc

ED_004715_00016246-00011

Chemicals/Analytes of Potential Concern for Soils/Waste Rock:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for soils/waste rock sampling.

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Uranium
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Vegetation:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for vegetation sampling stations.

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium

ED_004715_00016246-00012

- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Groundwater

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

<u>Laboratory Analyses</u>

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chloride
- Chromium III
- Chromium VI
- Cobalt
- Copper
- Hardness
- Iron
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrate/nitrite as N
- Nitrogen (TKN)
- Orthophosphate
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium

ED_004715_00016246-00013

- Total Dissolved Solids
- Total Suspended Solids
- Total Organic Carbon
- Tungsten
- Uranium
- Vanadium
- Zinc

Field Analyses

- Conductivity
- Dissolved Oxygen or ORP
- Ferric Iron
- Ferrous Iron
- Nitrite
- pH
- Temperature

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

TASK 2 - COMMUNITY RELATIONS

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of McCall, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

ED_004715_00016246-00014

TASK 3 - SITE CHARACTERIZATION

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

a. Field Investigation

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

<u>Implement and document field support activities</u>

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight

ED_004715_00016246-00015

tasks. The Respondent shall also notify the RPM upon completion of field support activities.

Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

Describe the nature and extent of contamination

The Respondent shall gather information to describe the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

ED_004715_00016246-00016

b. *Data Analyses*

Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

c. *Data Management Procedures*

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site

ED_004715_00016246-00017

characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See [HYPERLINK "http://www.epa.gov/storet/wqx.hmtl)" \h]

d. Site Characterization Deliverables

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI

ED_004715_00016246-00018

report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action, but will consider implementation of the PRO. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

Contaminant Identification – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).

Exposure Assessment – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

Toxicity Assessment – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity).

Risk Characterization – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

TASK 4 - TREATABILITY STUDIES

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

a. Determination of Candidate Technologies and of Need for Testing

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the

ED_004715_00016246-00019

range of technologies required for the development and analysis of alternatives (Task 5 and 6) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

b. *Treatability Testing and Deliverables*

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot

plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 5 - FEASIBILITY STUDY

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

a. Remedial Alternative Development

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the

ED_004715_00016246-00021

environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

Refine and document remedial action objectives

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment

ED_004715_00016246-00022

alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

TASK 6 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

a. Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative,

ED_004715_00016246-00023

the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

Compare alternatives against each other and document the comparison of alternatives

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

b. *Detailed Analysis Deliverables*

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

Feasibility Study report

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

ED_004715_00016246-00024

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA -330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008. "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

Attachments

Attachment A – Suggested RI/FS Work Plan Format

Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
   - Types and volumes of waste present
   - Potential pathways of contaminant migration/preliminary public health and environmental impacts
   - Preliminary identification of operable units
   - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
   - DQO needs
   - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
   - Staffing
   - Coordination
9. References

Appendices

ED_004715_00016246-00027

Attachment B – Suggested Format for SAP (FSP and QAPP)

FSP

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

QAPP

Title Page

Table of Contents

1. Project Description
2. Project Organization and Responsibilities
3. QA Objectives for Measurement
4. Sampling Procedures
5. Sample Custody
6. Calibration Procedures
7. Analytical Procedures
8. Data Reduction, Validation, and Reporting
9. Internal Quality Control
10. Performance and Systems Audits
11. Preventative Maintenance
12. Data Assessment Procedures
13. Corrective Actions
14. Quality Assurance Reports

ED_004715_00016246-00028

Attachment C – Suggested RI Report Format

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization
2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology
4. Nature and Extent of Contamination

ED_004715_00016246-00029

4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:

4.1.1 Sources (lagoons, sludges, tanks, etc.)

4.1.2 Soils and Vadose Zone

4.1.3 Ground Water

4.1.4 Surface Water and Sediments

4.1.5 Air

5. Contaminant Fate and Transport

5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)

5.2 Contaminant Persistence

5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest

5.3 Contaminant Migration

5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)

5.3.2 Discuss modeling methods and results, if applicable

6. Baseline Risk Assessment

6.1 Human Health Evaluation

6.1.1 Exposure Assessment

6.1.2 Toxicity Assessment

6.1.3 Risk Characterization

6.2 Environmental Evaluation

7. Summary and Conclusions

7.1 Summary

7.1.1 Nature and Extent of Contamination

7.1.2 Fate and Transport

7.1.3 Risk Assessment

7.2 Conclusions

7.2.1 Data Limitations and Recommendations for Future Work

7.2.2 Recommended Remedial Action Objectives

Appendices

A. Technical Memorandum on Field Activities (if available)

B. Analytical Data and QA/QC Evaluation Results

C. Risk Assessment Methods

Attachment D – Suggested Format for Feasibility Study Report

Executive Summary

1. Introduction
   - 1.1 Purpose and Organization Report
   - 1.2 Background Information (Summarized from RI Report)
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Nature and Extent of Contamination
     - 1.2.4 Contaminant Fate and Transport
     - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
   - 2.1 Introduction
   - 2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
     - Contaminants of interest
     - Allowable exposure based on risk assessment (including ARARs) Development of remediation goals
   - 2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
   - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:
     - 2.4.1 Identification and Screening of Technologies
     - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
   - 3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
   - 3.2 Screening of Alternatives (if conducted)
     - 3.2.1 Introduction
     - 3.2.2 Alternative 1
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.2 Alternative 2
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.3 Alternative 3

ED_004715_00016246-00031

3.2.3.1 Description
3.2.3.2 Evaluation
4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Evaluation
4.2.2 Alternative 2
4.2.2.1 Description
4.2.2.2 Evaluation
4.2.3 Alternative 3
4.2.3.1 Description
4.2.3.2 Evaluation
4.3 Comparative Analysis

ED_004715_00016246-00032

Attachment E – Stibnite Mine Remedial Investigation and Feasibility Study (RI/FS) Statement of Work (SOW) Schedule

RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

ED_004715_00016246-00033

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

[1]Documents may initially be released as "draft final" pending final resolution of issues.

ED_004715_00016246-00034

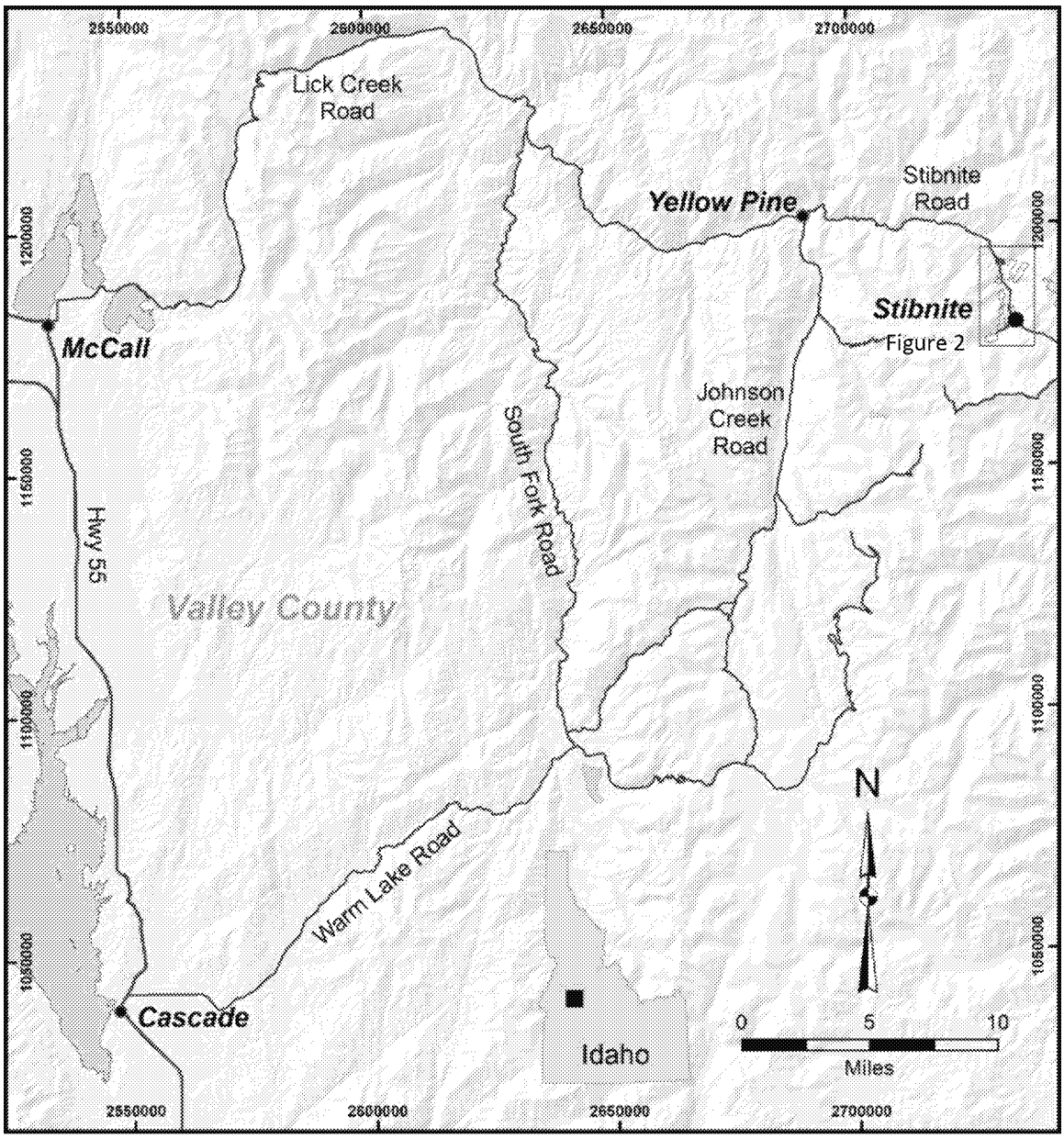


Figure 1 – Site Location

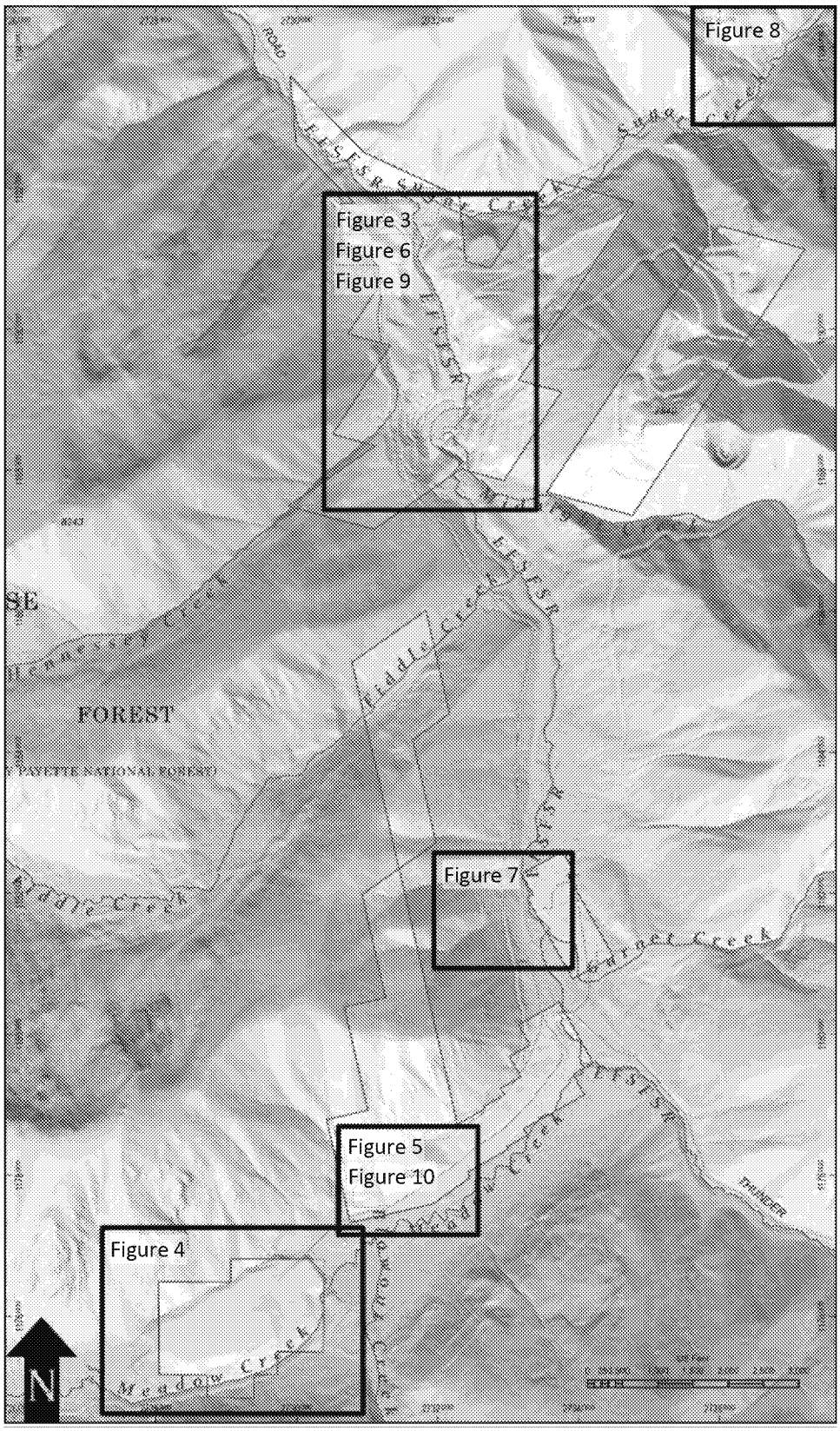


Figure 2 – Stibnite Mine Site

ED_004715_00016246-00036

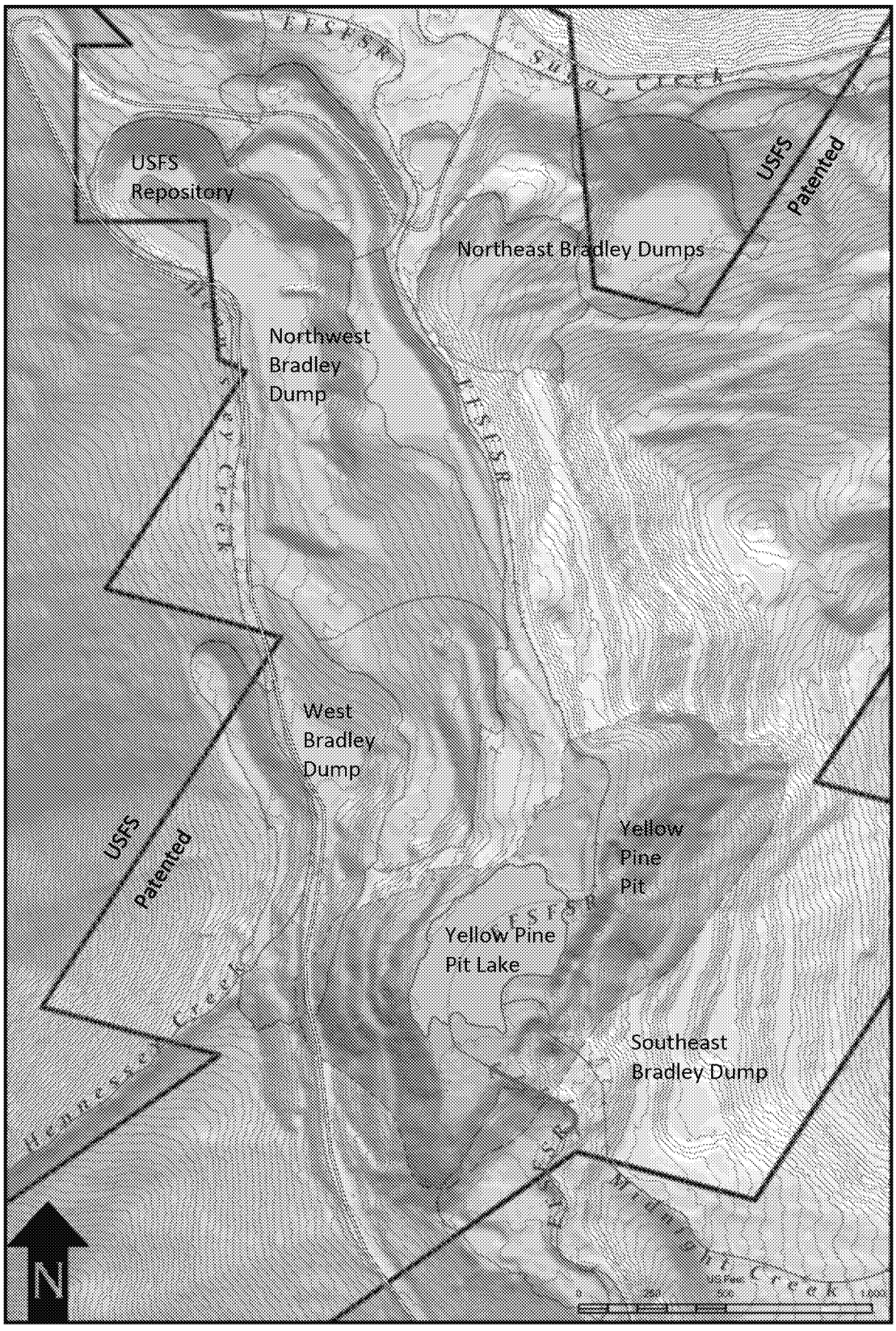


Figure 3 –Yellow Pine Pit

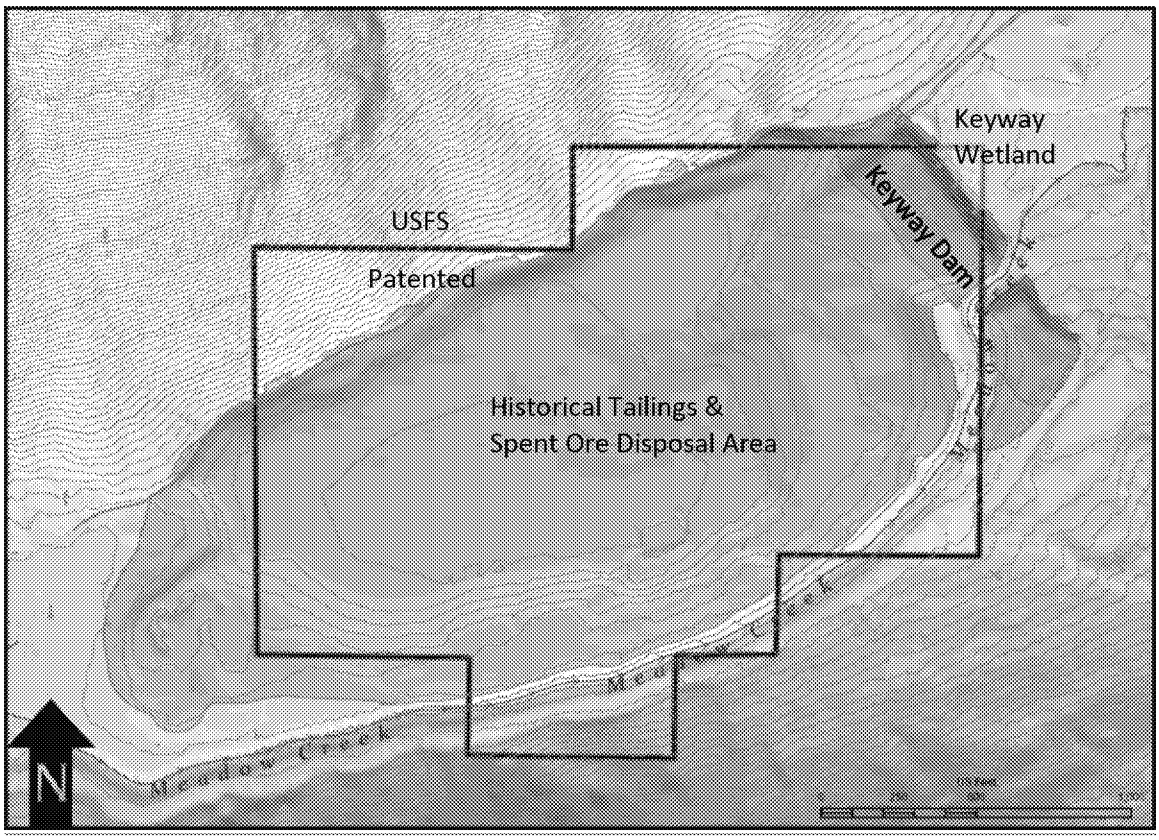


Figure 4 – Historical Tailings and Spent Ore Disposal Area

ED_004715_00016246-00038

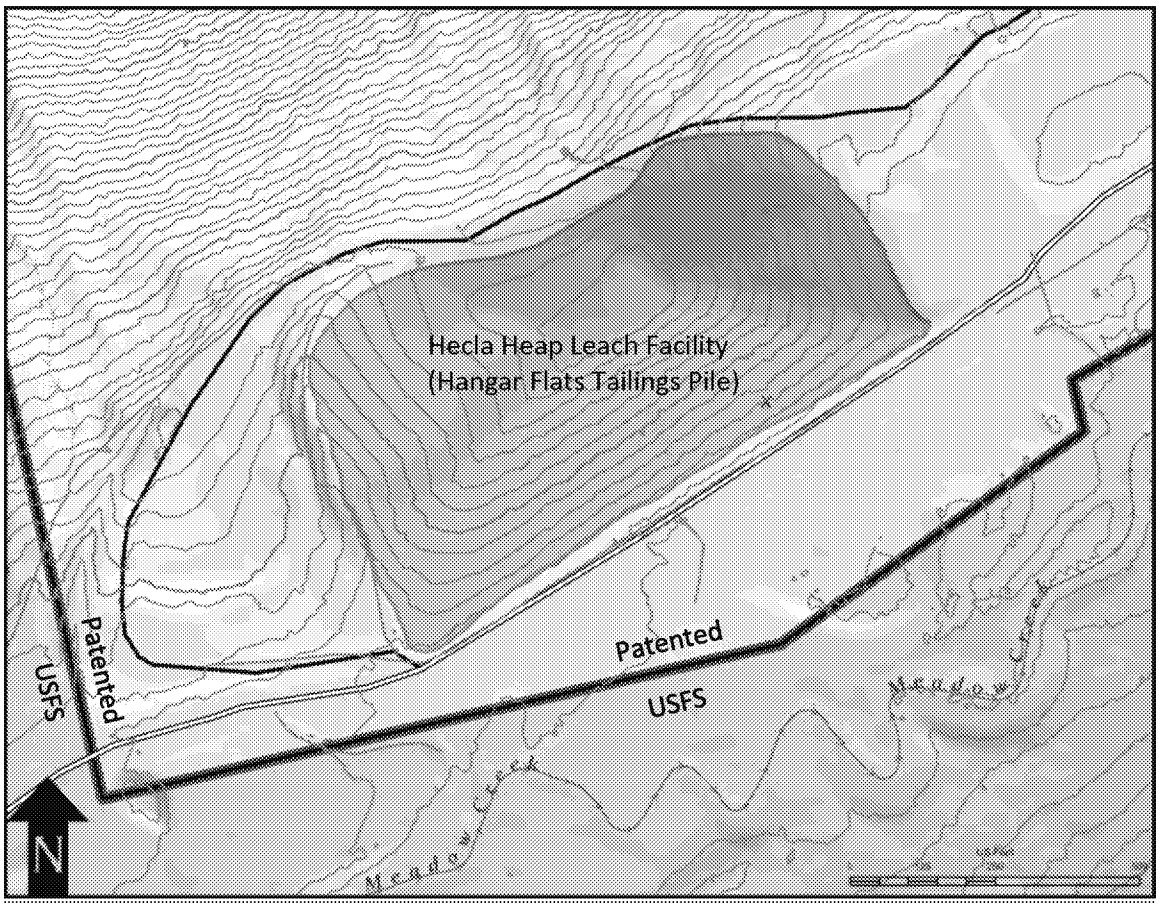


Figure 5 – Hecla Heap Leach Facility

ED_004715_00016246-00039

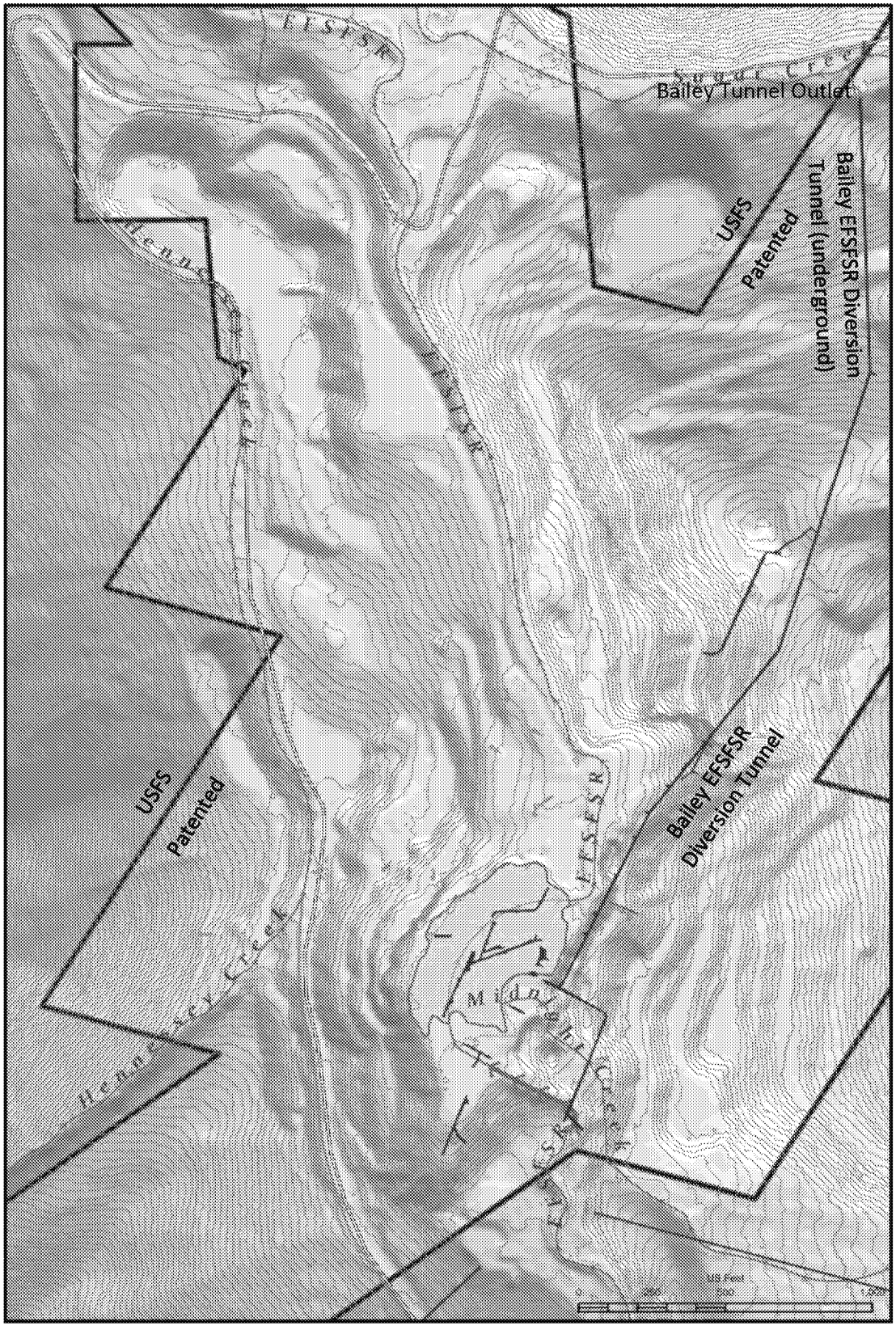


Figure 6 – Bailey Tunnel

ED_004715_00016246-00040

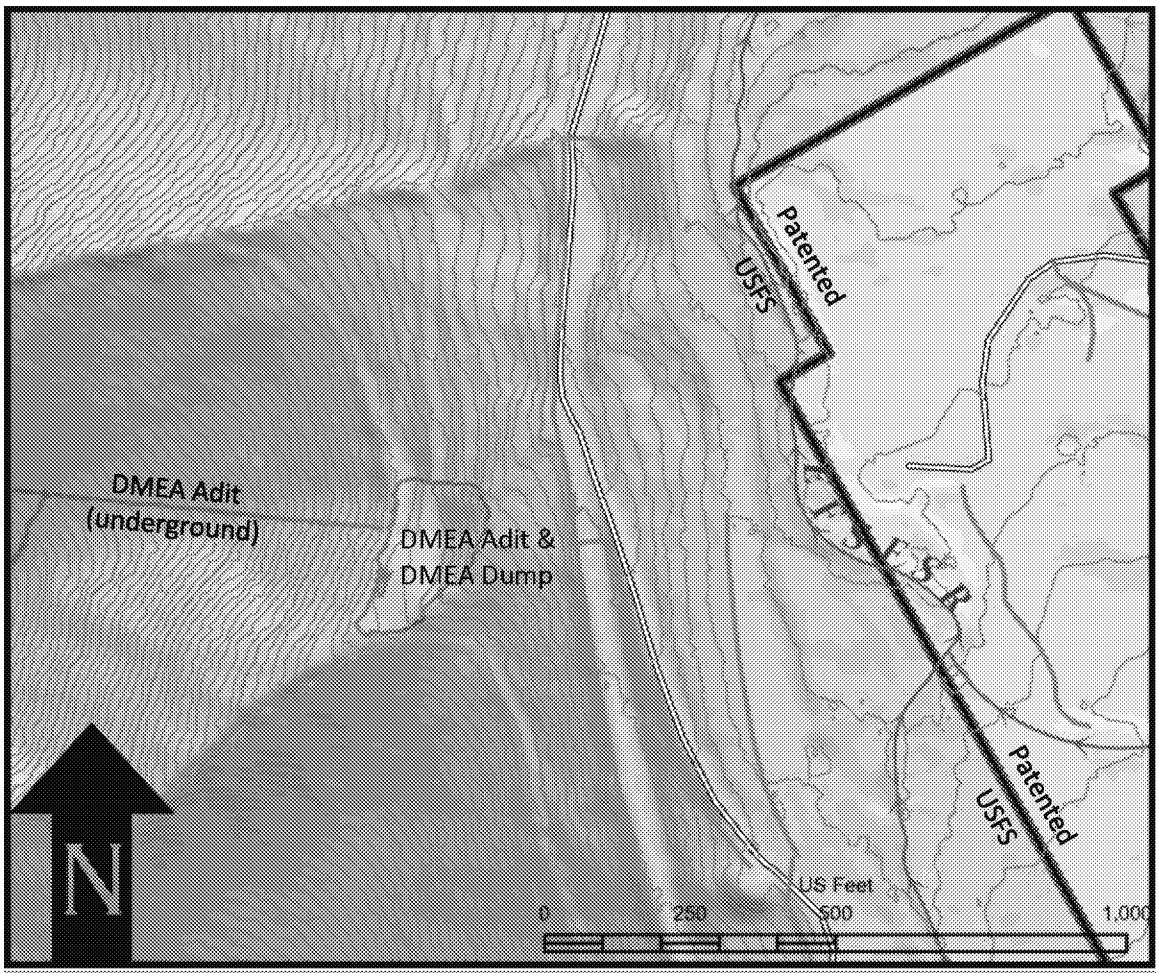


Figure 7 – Defense Minerals Exploration Administration Adit and Waste Rock Dump

ED_004715_00016246-00041

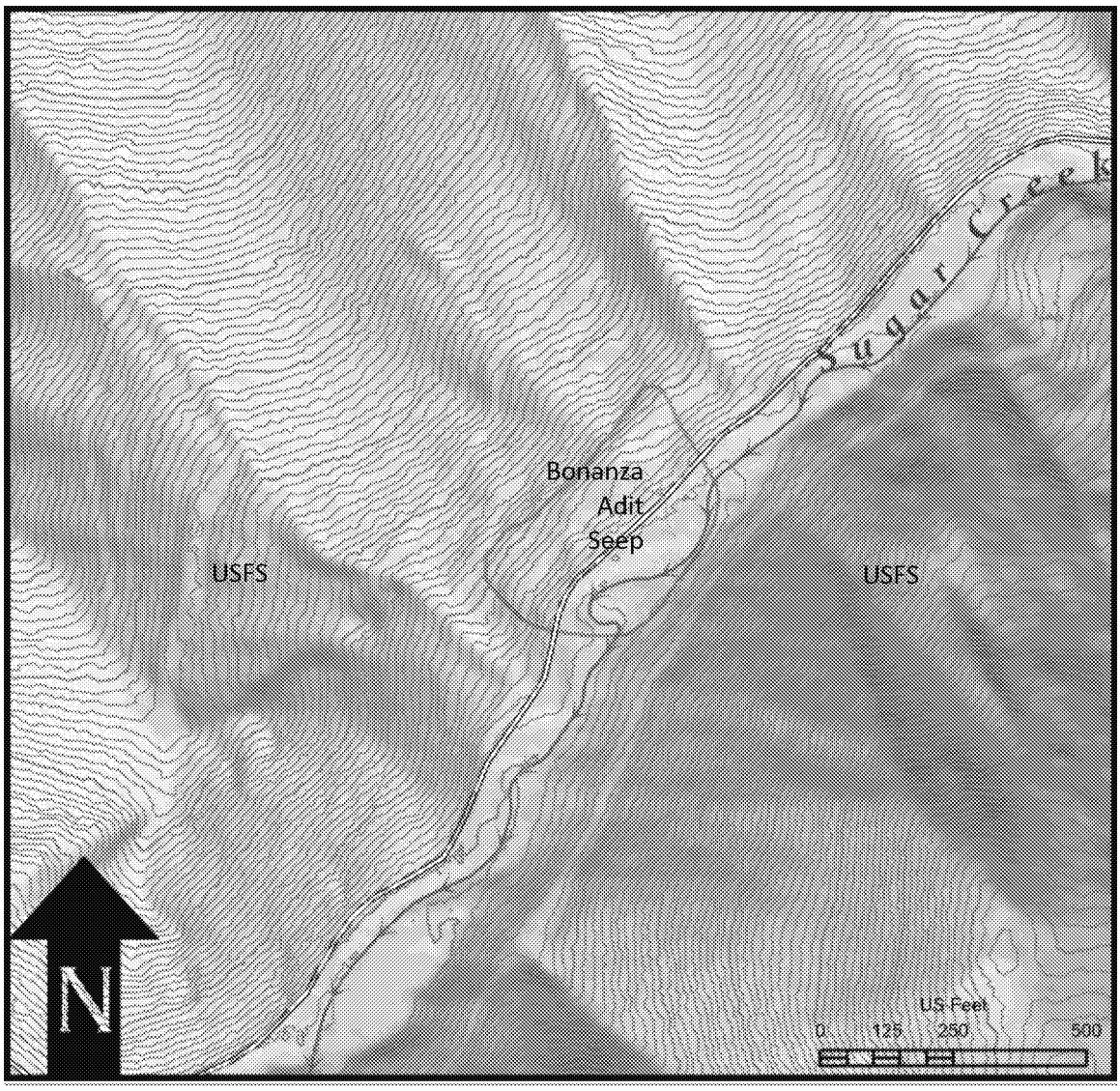


Figure 8 – Bonanza Adit

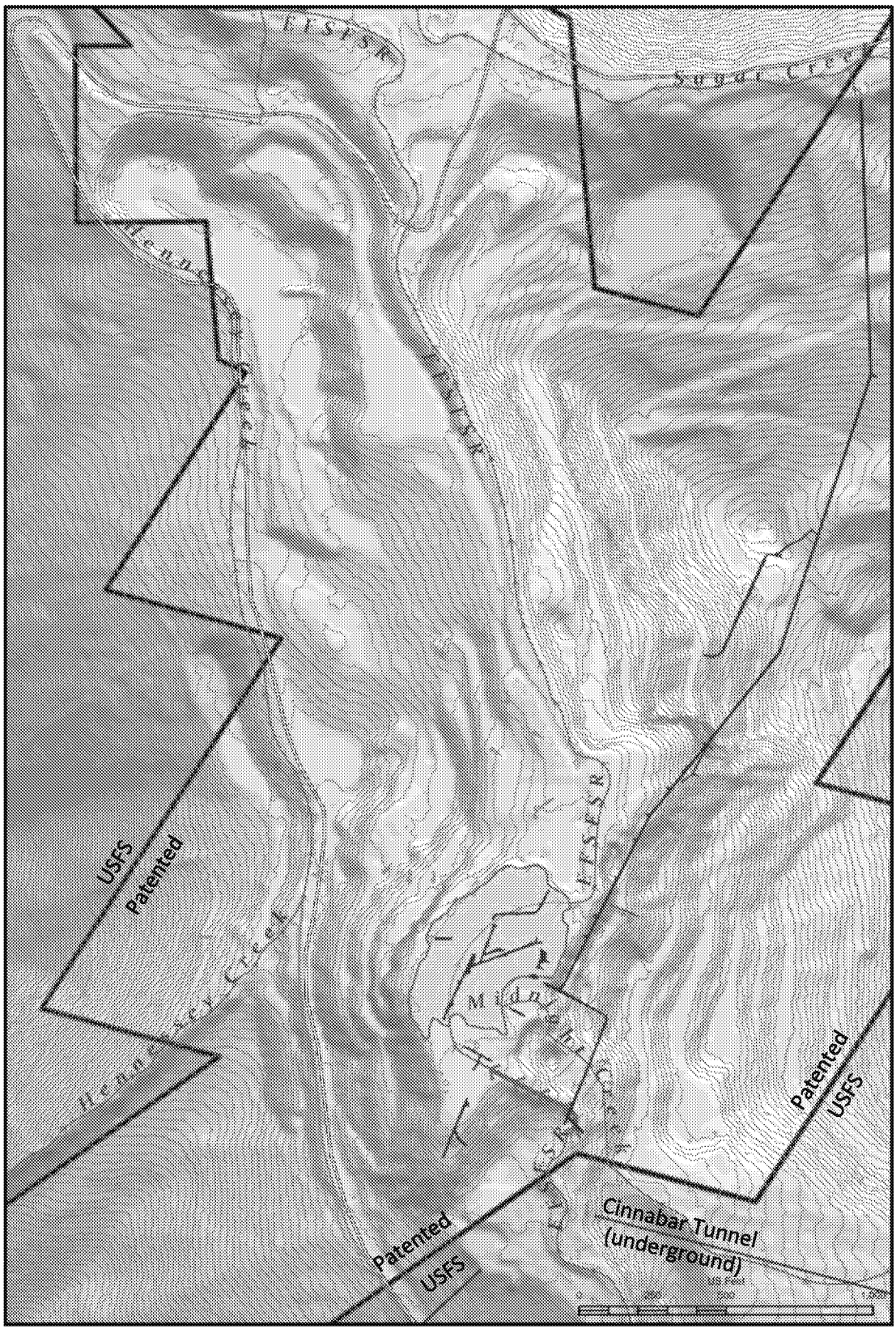


Figure 9 – Cinnabar Tunnel

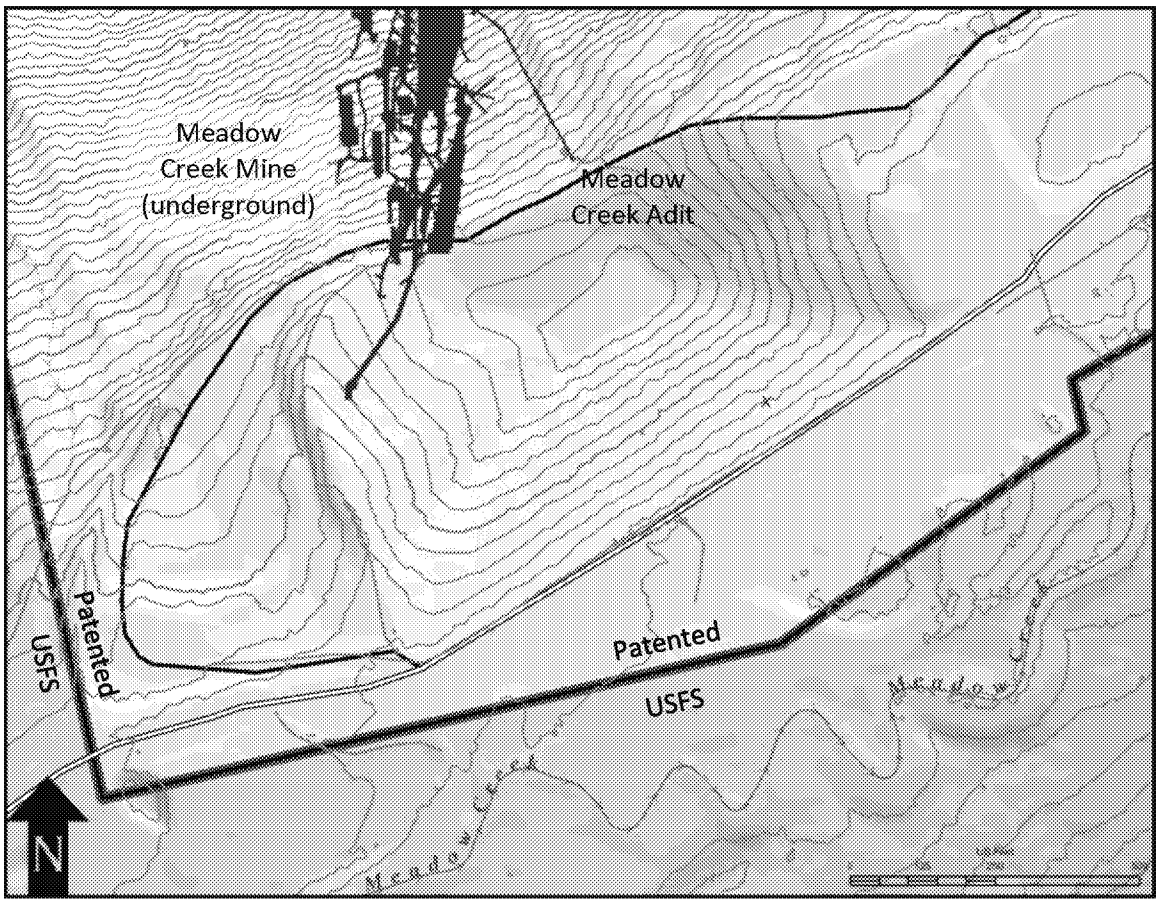


Figure 10 – Meadow Creek Adit

Message

From: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
Sent: 10/22/2019 4:19:06 AM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

I spoke with Mike Lopez this afternoon about the meeting. The Nez Perce Tribe is choosing to consult with the federal government agencies on a government to government basis throughout the negotiations, rather than to participate in the negotiations directly. The Tribe does not intend to join the negotiating parties in the meeting on November 1st. The Tribe will work closely with EPA and the Forest Service as the parties negotiate and would like to review drafts of documents as they are shared among the negotiating parties, and to provide input through its consultative relationship with EPA.

I will send an invite out to the parties tomorrow.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, October 21, 2019 5:01 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Thanks, Elizabeth. We can confirm that we will attend at that time on November 1. Has an invitation to attend been extended to the Nez Perce Tribe?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Monday, October 21, 2019 3:52 PM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Hello, Brad. I have been coordinating with IDEQ, the USFS, and the Shoshone Bannock Tribe on a date that will work for all of the parties. Friday, November 1st from 9:00 a.m. to 11:00 a.m. is currently the time that works for the EPA team, Lisa O'Hara (IDEQ), Gary Fremerman (USFS) and Jill Grant (Shoshone-Bannock). Jill is checking with the Shoshone Bannock Tribe to see if someone from the Tribe can participate on that date. Would the Midas team be available on Friday from 9:00 a.m. to 11:00 a.m. on the 1st? Given the short notice, I expect many of the participants will choose to participate by phone.

I would add the following items to the agenda items that you suggested:

- A presentation by Midas regarding the specific areas on which Midas holds mine claims and an overlay of the areas where Midas has conducted exploratory activities. I realize that Midas has provided the parties ownership information in the past, but there is still some clarification needed on this topic. It would be helpful if Midas could distribute maps at the meeting.
- A broad/high level discussion regarding how the RI/FS should be conducted given the need to understand current environmental conditions and environmental conditions post mining by Midas. Several of us have had questions regarding how an RI/FS would be conducted at an operating mine and it would be good to start that discussion.

I will attach the latest draft of the SOW to the meeting invitation once we work out the date with all of the parties. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, October 21, 2019 1:19 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: AOC meeting next week -- Stibnite Mine/Midas Gold

Settlement Communication
Protected from Disclosure By FRE 408

Elizabeth:

I am writing to confirm Midas Gold's agreement to postpone the meeting previously requested with EPA Regional Administrator Hladick in order to resume our AOC negotiations with the State of Idaho and the US Forest Service, in consultation with the Nez Perce and Shoshone Bannock Tribes. My understanding is that you will be trying to schedule that meeting for the week of October 29, 2019 (next week).

It would be helpful to develop and distribute an agenda for the meeting next week in order to make the best use of everyone's time. I expect the various parties will have differing needs, but some of them are likely to be shared by all participants. They include:

1. A schedule for conducting future meetings, including a target schedule for completing the AOC;
2. Copies of the SOW previously negotiated among EPA, the State, USFS and Midas;
3. An understanding as to which participants wish to be signatories to the AOC, and the weight to be given to the comments of participants who do not wish to be signatories;
4. Confidentiality, including the use of information obtained in negotiations in the collateral litigation brought by the Nez Perce Tribe against Midas.

v

Feel fre to give me a call if it would be useful. I am on a plane for the next two hours, but able to talk after 3:30 pm PST.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
Sent: 10/21/2019 10:51:59 PM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Hello, Brad. I have been coordinating with IDEQ, the USFS, and the Shoshone Bannock Tribe on a date that will work for all of the parties. Friday, November 1st from 9:00 a.m. to 11:00 a.m. is currently the time that works for the EPA team, Lisa O'Hara (IDEQ), Gary Fremerman (USFS) and Jill Grant (Shoshone-Bannock). Jill is checking with the Shoshone Bannock Tribe to see if someone from the Tribe can participate on that date. Would the Midas team be available on Friday from 9:00 a.m. to 11:00 a.m. on the 1st? Given the short notice, I expect many of the participants will choose to participate by phone.

I would add the following items to the agenda items that you suggested:

- A presentation by Midas regarding the specific areas on which Midas holds mine claims and an overlay of the areas where Midas has conducted exploratory activities. I realize that Midas has provided the parties ownership information in the past, but there is still some clarification needed on this topic. It would be helpful if Midas could distribute maps at the meeting.
- A broad/high level discussion regarding how the RI/FS should be conducted given the need to understand current environmental conditions and environmental conditions post mining by Midas. Several of us have had questions regarding how an RI/FS would be conducted at an operating mine and it would be good to start that discussion.

I will attach the latest draft of the SOW to the meeting invitation once we work out the date with all of the parties. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, October 21, 2019 1:19 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: AOC meeting next week -- Stibnite Mine/Midas Gold

Settlement Communication
Protected from Disclosure By FRE 408

Elizabeth:

I am writing to confirm Midas Gold's agreement to postpone the meeting previously requested with EPA Regional Administrator Hladick in order to resume our AOC negotiations with the State of Idaho and the US Forest Service, in consultation with the Nez Perce and Shoshone Bannock Tribes. My understanding is that you will be trying to schedule that meeting for the week of October 29, 2019 (next week).

It would be helpful to develop and distribute an agenda for the meeting next week in order to make the best use of everyone's time. I expect the various parties will have differing needs, but some of them are likely to be shared by all participants. They include:

1. A schedule for conducting future meetings, including a target schedule for completing the AOC;
2. Copies of the SOW previously negotiated among EPA, the State, USFS and Midas;
3. An understanding as to which participants wish to be signatories to the AOC, and the weight to be given to the comments of participants who do not wish to be signatories;
4. Confidentiality, including the use of information obtained in negotiations in the collateral litigation brought by the Nez Perce Tribe against Midas.

v

Feel fre to give me a call if it would be useful. I am on a plane for the next two hours, but able to talk after 3:30 pm PST.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Chris Dail [Dail@midasgoldinc.com]
Sent: 8/6/2019 3:19:16 PM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]
Subject: RE: USGS data

Kathy

The link below will take you to several five USGS reports and one powerpoint (unpublished) that outline their work on the site since 2011 that you indicated to John Meyer you'd like to have. The USGS gaging station data from their routine monitoring from 5 gaging stations is also on line on the National Water Quality Database site at https://www.waterqualitydata.us/portal/ and is updated regularly as their data is acquired and released after QAAP review.

The reports are large electronic files so I am attaching them via the Adobe cloud link.

The Etheridge report and data covers the results of hydrologic and geochemical baseline water quality sampling from 5-stations established within the district under a cooperative agreement in the Stibnite area.
The Holloway report and data covers information from a shorter time frame and focused on the Cinnabar area east of the project area.
The Adkins Powerpoint (unpublished data) outlines the results of a low flow synoptic the USGS completed from above the SODA and tailings complex to below the junction of the East Fork South Fork and Meadow Creek.

You can view "2011-09-11_USGS_Adkins_Meadow_Creek_Provisional_Synoptic.pdf" at:
https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A6060805b-1a75-4f7a-9f74-4e10b508a01a
You can view "2015_Etheridge_USGS_SIR20155166_appendixb.xlsx" at:
https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A3bf0f17d-92a1-4967-81ca-0aa28e5d2d60
You can view "2015_USGS_Etheridge_SIR-2015-5166_Occurrence and Transport of Selected Constituents in.pdf" at:
https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3Abc47eaed-b2a8-42bd-b8ae-d371d2c5314c
You can view "2017_Holloway_USGS_Proceedings_EarPlanSci_Mobilization-Hg-As_from_carbonate-hosted ore.pdf" at:
https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A3033df66-d102-4713-aef3-7d17e09fcb8f
You can view "2018_Holloway-et-al_USGS_Data_Release_YP-Cinnabar_solids_2015-2017.xlsx" at:
https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A4a6dfd44-8c97-4961-9475-dfe87b67c476
You can view "2017_Holloway-et-al_USGS_Data_Release_YP-Cinnabar_sediments_2014-2016.xlsx" at:
https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A44c93701-e179-4ab1-b082-0f62a3ee3c29

Please let me know if you have any questions or need additional information about the work performed as we are pretty familiar with all of it.

Christopher Dail
Manager, Exploration
Midas Gold Idaho, Inc.

MIDAS GOLD

MAX.TSX / MDRPF.OTCQX
13181 HWY 55, P.O. Box 429
Donnelly ID 83615
T: 208.901.3060
Direct: 509.795.3365
M: 509.939.2272
E: dail@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

Message

From: Austin Zinsser [zinsser@midasgoldinc.com]
Sent: 8/5/2019 6:51:20 PM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]
CC: John Meyer [JMeyer@midasgoldcorp.com]; L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: RE: Map
Attachments: ATT00001.txt

Kathy-
My understanding is that the Oberbilling estate owns the Cinnabar patented claims, and that one of Midas' subsidiary companies has an option agreement to purchase the land. Midas doesn't currently own the patented Cinnabar claims.
If you need additional info or clarification, Michael can provide you more specific information,
Hope that helps,
Austin

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Monday, August 5, 2019 12:43 PM
To: Austin Zinsser <zinsser@midasgoldinc.com>
Subject: FW: Map

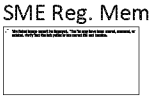
Cinnabar Mining District is marked at "other". What does it mean?

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

From: Austin Zinsser <zinsser@midasgoldinc.com>
Sent: Friday, July 26, 2019 10:12 AM
To: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Cc: John Meyer <JMeyer@midasgoldcorp.com>
Subject: RE: Map

Kathy-
Attached, please find the requested map as an image and as a powerpoint slide with labels. The image excludes the labels so you can annotate as you see fit.
Let me know if this works,
Thanks,
Austin

Austin Zinsser, M.Sc.
Sr. Resource Geologist
ID Licensed P.G. #1502
SME Reg. Member # 4194773RM



MAX.TSX / MDRPF.OTCQX

405 S. 8th St., Ste. 201
Boise, ID 83702
T: 208.901.3054
M: 970.708.0873

www.facebook.com/midasgoldidaho
@MidasIdaho
www.midasgoldidaho.com

From: John Meyer <JMeyer@midasgoldcorp.com>
Sent: Friday, July 26, 2019 8:49 AM
To: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Cc: Austin Zinsser <zinsser@midasgoldinc.com>
Subject: RE: Map

Got it Kathy.
Will get something to you to review soon.
John

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Friday, July 26, 2019 8:27 AM
To: John Meyer <JMeyer@midasgoldcorp.com>
Subject: RE: Map

No but thanks. It for a ppt I am trying to put together for an overview of the site.

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

From: John Meyer <JMeyer@midasgoldcorp.com>
Sent: Friday, July 26, 2019 7:24 AM
To: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Cc: Austin Zinsser <zinsser@midasgoldinc.com>
Subject: RE: Map

Kathy,
We will develop the map today, then send you a draft to review.
Do you want us to incorporate it into the latest draft of the SOW once you are happy with it?
Thanks,
John

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Thursday, July 25, 2019 6:14 PM
To: John Meyer <JMeyer@midasgoldcorp.com>
Subject: RE: Map

For sure map similar to Figure 2 that includes Cinnibar. I want them to be obvious so you can differentiate the 8 from the historic so if 1 map will work great. Just go with what looks best please.

Thanks

Kathy

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

From: John Meyer <JMeyer@midasgoldcorp.com>
Sent: Thursday, July 25, 2019 1:55 PM
To: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: RE: Map

Kathy,
Do you want a map similar to Figure 2 in the SOW that is expanded to include the Cinnabar area, or do you also want us to show the historical mining disturbances on it?
John

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Thursday, July 25, 2019 12:22 PM
To: John Meyer <JMeyer@midasgoldcorp.com>
Subject: Map

Can you send me a map that shows all 8 areas in one map and has each one identified and a map of the entire Stibnite and Cinnabar historical mining areas identified?

Thanks

Kathy

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

Message

From: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
Sent: 6/27/2019 12:53:38 AM
To: Bradley M. Marten [bmarten@martenlaw.com]; Lisa.O'Hara@deq.idaho.gov; gary.fremerman@usda.gov; Lisa.Carlson@deq.idaho.gov
CC: 'Andy Koulermos' [akoulermos@FormationEnv.com]; John Meyer [JMeyer@midasgoldcorp.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]; Merissa A. Moeller [mmoeller@martenlaw.com]
Subject: RE: July 1st Meeting at IDEQ

Thanks, Brad. Can you get an agenda to us tomorrow as well a description of what Midas plans to talk about and/or propose? Since the SOW will not be ready until July 5th, I'm wondering if Midas is going to propose something to us during the meeting, seek information on what our folks may have in mind for proposals, and/or raise other issues. As I said in our call, the meeting will be more productive if we know what to expect. Thanks very much.

Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Wednesday, June 26, 2019 2:51 PM
To: Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; gary.fremerman@usda.gov; Lisa.Carlson@deq.idaho.gov
Cc: 'Andy Koulermos' <akoulermos@FormationEnv.com>; John Meyer <JMeyer@midasgoldcorp.com>; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>; Merissa A. Moeller <mmoeller@martenlaw.com>
Subject: July 1st Meeting at IDEQ

Elizabeth, Lisas and Gary:

First, thank you for meeting with Terry Uhling and me yesterday in Boise. We thought it was very productive and look forward to working with you. We look forward to meeting again next Monday, July 1, 2019 at IDEQ's offices from 10:30 am-noon. We are prepared to spend more time together if we can solve the problem of lunch. Perhaps we can work on a plan to take a break, if folks are available and want to continue the conversation.

Midas has retained Andy Koulermos of Formation Environmental as its outside consultant. Some of you may know Andy from other work that he and his team have done in Idaho and elsewhere in the West on mining sites. Terry and I have known Andy and his colleagues for a long time, and we know that they will bring to the table both immense knowledge and the ability to listen. https://www.formationenvironmental.com/about/

For those unable to attend in person, as you requested, we have set up videoconferencing through a web based service called Zoom.

To join the Zoom meeting via computer video and audio please use:

https: Ex. 6 Personal Privacy (PP)

To join via audio only use:

Ex. 6 Personal Privacy (PP)

Meeting ID: Ex. 6 Personal Privacy (PP)

As I mentioned at yesterday's meeting, we would welcome the opportunity to show the Site to any of the technical team members from the agencies who can make it. Reaching the site is quickest by plane (otherwise it is a 10 hour round trip drive). If you are interested in flying to the Site on Tuesday, July 2, following our Monday meeting, please let me or John Meyer at Midas (copied) know by noon tomorrow (Thursday) if at all possible. Andy will be joining the tour. The Midas lawyers will stay at their desks.

Finally, recognizing that we have a heavy lift ahead, I would like to suggest we plan ahead and schedule weekly meetings every Monday in July, starting at 10 am MST in Boise, either at DEQ (if space is available) or at Midas's offices. That would be July 8, 15, 22 and 29. It may not be necessary to have every meeting, or for everyone to attend (certainly in person), but it would be good to reserve the time, if at all possible.

With regard to the meeting on July 1, as I mentioned on the call, we regard this as an information and listening exercise. Based on that, we hope to have a draft scope of work to you by July 5, 2019, for presentation on July 8. We appreciate that this is a tight turnaround, and would not expect decisions to be made on July 8, but believe we will make substantive progress, allowing for a better understanding of our proposal.

Please let me know if any of this causes any concern; if so, we will adjust. Thanks again for your time.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
Sent: 6/24/2019 5:30:01 AM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Uhling, Terry [Terry.Uhling@simplot.com]; Lisa.O'Hara@deq.idaho.gov; Michael Bogert [mbogert@midasgoldinc.com]; Cerise, Kathy [Cerise.Kathryn@epa.gov]; John C. Cruden [JCruden@bdlaw.com]; McCrum, Timothy [rmccrum@crowell.com]; gary.fremerman@usda.gov
Subject: RE: Stibnite Site

Hello, Brad.
Kathy will be traveling on Tuesday and will be in the field W, Th, and Friday. She is available to meet on Monday 7/1 or Tues 7/2. It would be best for Kathy's schedule if the meeting began at 9:00 on either of those days. In order to ensure a productive meeting, we would appreciate it if Midas could provide us with an agenda a few working days before the meeting. If Midas has a new proposal for investigatory work, please also provide us with the proposal a few working days before the meeting, so that we can be prepared to discuss it.

I have included Gary Fremerman on the email

- Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Sunday, June 23, 2019 10:12 AM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Uhling, Terry <Terry.Uhling@simplot.com>; Lisa.O'Hara@deq.idaho.gov; Michael Bogert <mbogert@midasgoldinc.com>; Cerise, Kathy <Cerise.Kathryn@epa.gov>; John C. Cruden <JCruden@bdlaw.com>; McCrum, Timothy <rmccrum@crowell.com>
Subject: Stibnite Site

Elizabeth:

Thanks for taking the time to speak with me on Friday afternoon about the Stibnite Site. Midas agrees that having Kathy participate in the meeting with IDEQ is extremely important, so that we have the benefit of her views as to how best to investigate known discharges at the Site exceeding water quality standards. Likewise, it is important that the Forest Service participate. The need to address these matters is immediate, and, to meet its BFPP obligations and address the issues raised by the Nez Perce tribe in their recent NOI, we must press forward.

We have tentatively scheduled to meet with IDEQ on Tuesday afternoon. You indicated that you and Kathy may be able to participate by phone on Tuesday or later in the week. I have copied Kathy here, and would appreciate your coordinating with her and with Gary Fremerman at the USDA about a Tuesday meeting. If Tuesday does not work due to schedules, we have the flexibility to meet later in the week, and I believe Lisa (copied) and IDEQ does as well. Let us know what works for you. We'll work around your schedule.

Please also let me know if you'd prefer that I reach out to Gary about the meeting, or whether you can do so. I met Gary last week in DC, but don't have his e-mail.

Thanks, Elizabeth.

From: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Date: Friday, June 21, 2019 at 4:16 PM
To: Bradley Marten <bmarten@martenlaw.com>
Subject: RE: Stibnite

I just spoke with Kathy Cerise. She was not aware of the meeting on Tuesday and will be on travel next week.

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, June 21, 2019 2:23 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Uhling, Terry <Terry.Uhling@simplot.com>; Michael Bogert <mbogert@midasgoldinc.com>; Lisa.O'Hara@deq.idaho.gov
Subject: Stibnite

Elizabeth:

Left you a message on your voice mail. Hoping to talk this afternoon about our recent meeting with the Forest Service in DC, and a planned meeting next week in Boise with IDEQ to address your comments on the work plan proposed by Midas to address arsenic releases at the Stibnite mine site. I can be best reached on my cell. 206-999-1808.

Thanks

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 5/21/2019 2:08:53 PM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Austin Zinsser [zinsser@midasgoldinc.com]; Chris Dail [Dail@midasgoldinc.com]
Subject: RE: Stibnite data

Great Kathy.
We will continue to assess what else may be useful for you.
John

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Tuesday, May 21, 2019 8:07 AM
To: John Meyer <JMeyer@midasgoldcorp.com>
Cc: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Subject: RE: Stibnite data

The report are on you share file this morning!

Thanks

Kathy

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

From: John Meyer <JMeyer@midasgoldcorp.com>
Sent: Monday, May 20, 2019 6:21 PM
To: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Cc: Chris Dail <Dail@midasgoldinc.com>; Merissa A. Moeller <mmoeller@martenlaw.com>; L. Michael Bogert <mbogert@midasgoldinc.com>
Subject: Re: Stibnite data

Kathy,
The reports should be uploaded shortly.
I will follow up with our team tomorrow morning to determine if there are any other historical reports that we have, that may contain useful ground or surface water data.
Regards,
John

From: "Cerise, Kathy" <Cerise.Kathryn@epa.gov>
Date: Monday, May 20, 2019 at 6:10 PM
To: John Meyer <JMeyer@midasgoldcorp.com>
Subject: RE: Stibnite data

John

Elizabeth did not have the reports as of today when I spoke with her. Yes I would appreciate the 1996-98 Woodward assessment! Does the Phase I and II contain the historical GW monitoring etc?

Thanks

Kathy

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

From: John Meyer <JMeyer@midasgoldcorp.com>
Sent: Monday, May 20, 2019 4:56 PM
To: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Cc: L. Michael Bogert <mbogert@midasgoldinc.com>; Chris Dail <Dail@midasgoldinc.com>; Merissa A. Moeller <mmoeller@martenlaw.com>
Subject: Stibnite data

Kathy,
It's my understanding that the Phase I and Phase II documents were sent to EPA (Elizabeth McKenna) last week through Merissa Moeller at Marten Law. Can you confirm that you received the reports?
We also have the 1996-1999 Woodward-Clyde site assessment in electronic format, and can send you that report (via the Marten Law site) if you do not have a copy and would like one.
Regards,
John

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Monday, May 20, 2019 2:30 PM
To: John Meyer <JMeyer@midasgoldcorp.com>
Subject: Stibnite data
Importance: High

Good Afternoon John

After speaking with our Site attorney, her understanding from Michael was that Midas had collected and assessed the historic Site data (groundwater, surface water, seeps, sediment, benthic and fish tissue) in order to complete your Phase I and Phase II. Please provide me with the data you utilized and provide the summary reports from USFS, IDEQ etc. You can just post them on the website I was provided if they are too big to email.

Thank you for your help,

Kathy

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 7/16/2019 1:58:34 AM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]
CC: 'Aaron.Scheff@deq.idaho.gov' [Aaron.Scheff@deq.idaho.gov]; Zamba, Kathy -FS [kathy.zamba@usda.gov]; Albert Crawshaw [Albert.Crawshaw@deq.idaho.gov]; Maley, Timothy [maley.timothy@epa.gov]; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Philip, Jeffrey [Philip.Jeff@epa.gov]; Terry T. Uhling [tuhling@martenlaw.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]; Merissa A. Moeller [mmoeller@martenlaw.com]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Lisa.Carlson@deq.idaho.gov; Laurel Sayer [lsayer@midasgoldinc.com]; Andy Koulermos [akoulermos@formationenv.com]; Jonathan E. Rackoff [rackoff@martenlaw.com]
Subject: RE: EPA response to Midas draft SOW

Thanks for forwarding Elizabeth's e-mail, Kathy. It makes a number of good points. We look forward to continuing to work with you, the USFS and the State this week toward that goal. Can you confirm your availability for a call on Wednesday, the 17th?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Monday, July 15, 2019 10:23 AM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: 'Aaron.Scheff@deq.idaho.gov' <Aaron.Scheff@deq.idaho.gov>; Zamba, Kathy -FS <kathy.zamba@usda.gov>; Albert Crawshaw <Albert.Crawshaw@deq.idaho.gov>; Maley, Timothy <maley.timothy@epa.gov>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Philip, Jeffrey <Philip.Jeff@epa.gov>
Subject: EPA response to Midas draft SOW

Brad,

Please see Elizabeth's response below. USFS has concurred. The State has not yet had the opportunity to review this language.

Thanks

Kathy

From: McKenna, Elizabeth
Sent: Saturday, July 13, 2019 4:13 PM

Hello, Brad. EPA has reviewed Midas' July 10th markup of EPA's July 3rd draft SOW for the Stibnite Mine Site. EPA is interested in pursuing conversations with Midas to come to an understanding of the scope of the remedial investigation and feasibility study (RI/FS). EPA is willing to consider narrowing the scope of the RI/FS to the eight areas identified in the Nez Perce's Clean Water Act Notice of Intent.

Both Midas and EPA have an interest in addressing the releases of hazardous substances at the Site. Midas' goal is to avoid CWA litigation over unpermitted discharges at the Site. To achieve that goal, it must evaluate potential response actions that would address those discharges. The purpose of the RI is to characterize the nature and extent of risks posed by hazardous substances for evaluating potential response actions. Midas' proposal to conduct only an RI, without a risk assessment and concurrent feasibility study would not achieve its own goal of developing a solution to the discharges and releases that could result in avoiding CWA litigation. A scope of work that includes an RI, baseline risk assessment, treatability studies, and evaluation of alternatives is necessary to meet Midas' objectives and to have a CERCLA compliant agreement.

The RI/FS Guidance outlines the tasks that must be performed during the RI/FS and the EPA's draft SOW incorporates these tasks. The determination of the nature and extent of surface and subsurface contamination must include an assessment of all potential source area(s) and contaminants of concern potentially affecting surficial soil, subsurface soil, surface water, sediment, air, groundwater, and subsurface structures. The RI/F Guidance also outlines a process in which the RI and FS are conducted concurrently such that the data collected during the RI influences the development of remedial alternatives in the FS, which in turn affects the scope and additional data needs related to treatability studies and reducing data gaps. We understand that Midas' planned mining and reclamation activities will need to be considered in designing an RI/FS.

EPA would like to work with Midas to develop an approach that meets the needs of all parties involved. We are available to meet next week to continue our discussions.

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 8/22/2019 12:26:50 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Cerise, Kathy [Cerise.Kathryn@epa.gov]; Alan Haslam [ahaslam@midasgoldinc.com]; Chris Dail [Dail@midasgoldinc.com]; 'Christopher H. Meyer' [chrismeyer@givenspursley.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]
Subject: Midas Aquifer Testing at Stibnite Mine Site
Attachments: 20190821_Stibnite_Gold_Project_Aq_Test_Summary.pdf

Importance: High

Elizabeth:

Midas Gold is planning two 21-day aquifer tests, one at the Hangar Flats pit location and one at the Yellow Pine pit location. The aquifer tests are being performed to evaluate the hydraulic effects of pumping on the alluvial and bedrock aquifers. This work is being conducted under the supervision of Idaho DEQ, pursuant to a Work Plan submitted to IDEQ on June 6. 2019 and incorporates IDEQ's responses to that Work Plan received on June 28, 2019 and July 9, 2019. Consistent with its status as a bona fide prospective purchaser under the 2002 Brownfield Amendments, Midas is providing this notice of the planned aquifer testing to EPA. If you or the Remedial Project Manager for the Site, Kathy Cerise, have any concerns about the testing, please let me know. Midas technical staff is touring the site with Kathy (copied here) tomorrow, and will use that opportunity to brief Kathy and respond to any questions she may have about the planned work. Thanks

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Stibnite Gold Project – Dewatering Investigation: Aquifer Testing 2019

Aquifer Test Plan Summary

Midas Gold is planning two 21-day aquifer tests, one at the Hangar Flats pit location and one at the Yellow Pine pit location. Aquifer tests are being performed to evaluate the hydraulic effects of pumping on the alluvial and bedrock aquifers. Primary objectives of the tests are to: refine estimates of required dewatering for the proposed Yellow Pine and Hangar Flats pits; refine estimates of aquifer properties; inform the potential site investigation; and refine previous estimates of dewatering water volumes. Estimated water production from the 21-day tests are:

- Hangar Flats pit area: 375 gallons/minute; 10,704,000 gallons or 32.85 acre-feet
- Yellow Pine pit area: 200 gallons/minute; 6,132,000 gallons or 18.82 acre-feet

Dewatering water will be managed by infiltrating into the shallow alluvial aquifer in an area sited distant from surface waters on native ground (i.e. no legacy materials). Dewatering water pumped from the Yellow Pine pit area will be piped approximately 2.5 miles to the infiltration area in the Hangar Flats vicinity. Hangar Flats pumped water will also discharge to the infiltration area, at a point approximately 375 feet down-gradient (northeast) from the pumping well. The infiltration area is a series of three infiltration basins.

Pumped water from Yellow Pine pit is anticipated to be slightly elevated in arsenic; pumped water from Hangar Flats pit area is anticipated to be elevated in antimony and arsenic. The shallow receiving aquifer water has antimony and arsenic concentrations about an order of magnitude higher than the pumped water; aquifer water quality improves downgradient (downstream). The parameter of primary concern is arsenic with respect to potential changes in the receiving aquifer and surface water.

Water Monitoring and Sampling

Surface water (upstream and downstream of basins), groundwater (downgradient of basins in 2 monitoring wells), and pumped water (2 locations) will be monitored during the tests (Table 1). Samples will be analyzed for the full suite of constituents (as defined in the current SGP sampling plans), contaminants of concern, expedited arsenic, and/or field tested for arsenic. Full suite samples will be collected at the start (all locations) and in pumped water at the end of the tests. Samples will be analyzed for contaminants of concern approximately weekly during the tests. Field testing for arsenic will be performed at a minimum of every 3 days during the tests and laboratory-analyzed expedited arsenic samples will be used to confirm the field results. The two monitoring wells and two surface water locations will be monitored for two weeks after the completion of the testing.

Table 1. Number and Type of Samples Anticipated to be Collected during the 2019 Aquifer Tests

Analysis	Full Suite Baseline Constituents	Contaminants of Concern[1]	Expedited Arsenic	Field Arsenic
Method	Lab	Lab	Lab	Field test kit
Yellow Pine Total Samples	8	15	6	14
Hangar Flats Total Samples	7	21	5	13

TOTAL	15	36	11	27

[1] *Arsenic, Antimony, Sulfate, Mercury, Manganese, Aluminum, Iron, Total Dissolved Solids, Thallium.*

Arsenic trigger values have been established for pumped water and one of the monitoring wells (MWH-A07) and 95/95 upper tolerance limits (UTLs) have been calculated for surface water locations (Table 2). Exceedances of the trigger concentrations will result in more frequent monitoring, implementation of contingencies, and potentially a shutdown of the test. The other monitoring well will be newly-installed; arsenic concentration trends for that well will be monitored and conveyed to the Idaho Department of Environmental Quality. UTLs will provide comparison points to assess whether surface water has been impacted by the tests.

Table 2. Arsenic Trigger Concentrations and Upper Tolerance Limits

	Aquifer Test Pumped Water	Monitoring Well MWH-A07	Upgradient Surface Water Location YP-T-22	Downgradient Surface Water Location YP-SR-10
Trigger Concentration	1.5 mg/L	1.0 mg/L	--	--
Upper Tolerance Limit			0.061 mg/L	0.042 mg/L

Notes:

mg/L = milligrams per liter

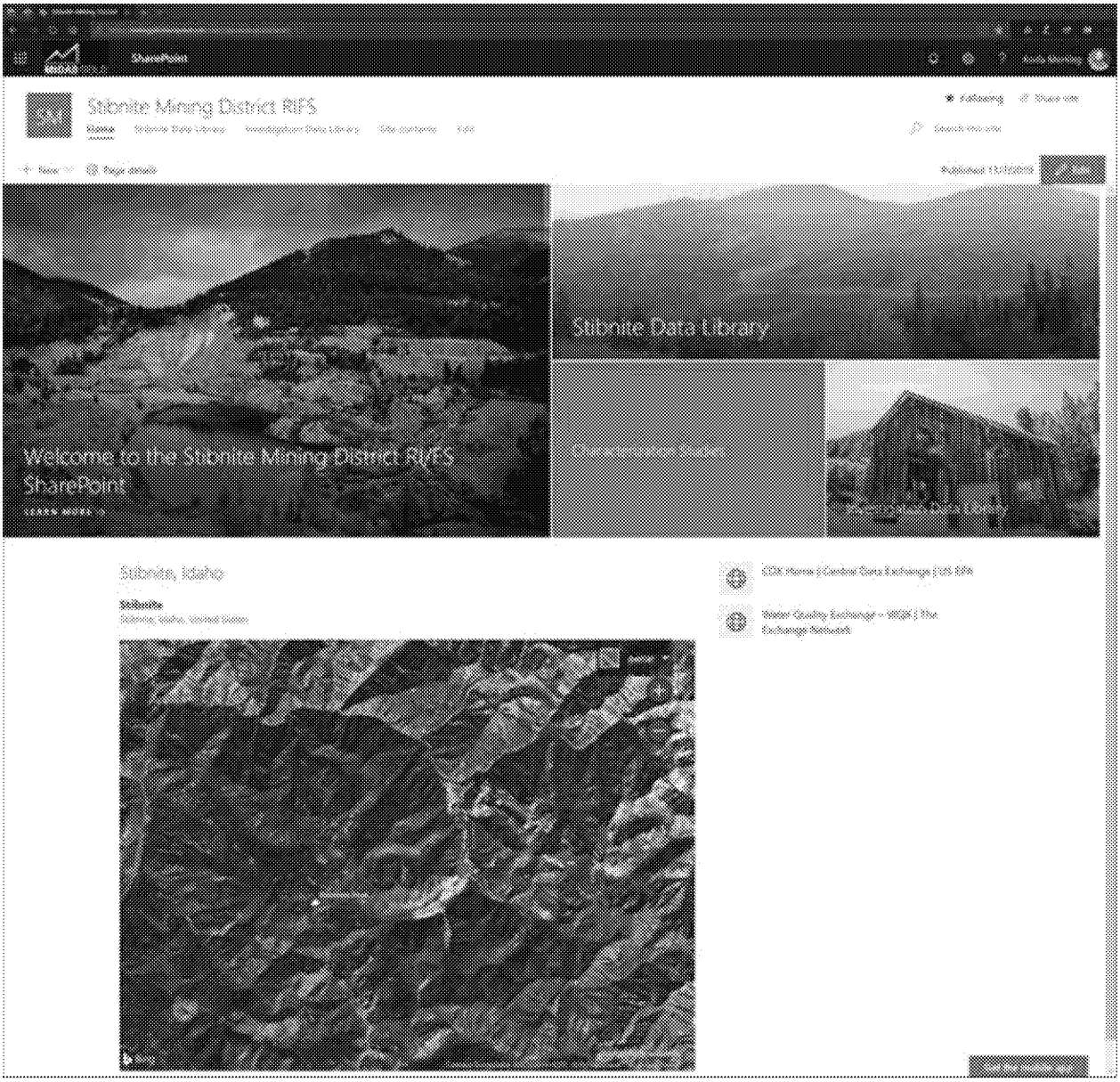
Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 11/7/2019 10:50:58 PM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Bradley Marten (martenlaw) [bmarten@martenlaw.com]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Koda Merkley [kmerkley@midasgoldinc.com]
Subject: Stibnite Mining District AOC RI/FS SharePoint Site
Attachments: ATT00001.txt

Kathy,

Pursuant to our commitment during our Seattle meeting on November 1, we have established a Microsoft SharePoint site to facilitate information sharing and collaboration associated with the Stibnite Mining District Administrative Order on Consent (AOC) Remedial Investigation Feasibility Study (RI/FS). Koda Merkley (Midas Gold Geologist) will be the Administrator of the site, and you will receive an email from Koda later today that provides instructions on how to access the site.

Koda has organized the SharePoint site to mirror the RI/FS tasks list detailed in the draft AOC Statement of Work (SOW) dated July 25, 2019. A screen capture of the site home page is provided below for your information.



We anticipate that the site will include data such as: historical reports, data, and photographs; Stibnite Gold Project permitting documents and supporting data; and, figures and data provided to EPA concurrent to developing the draft AOC SOW.

Before access to the site is granted to other AOC participants, and before we begin to upload files to the site, we would appreciate if you could confirm that you can access the site, and that the structure of the site is consistent with your expectations and third-party contractor requirements. We expect that future structural changes to the site will be required, and will make changes accordingly, as we progress through the RI/FS process. Navigation of the site is relatively self-explanatory, but if you have any difficulty, questions, or comments, please contact me or Koda.

I have copied Elizabeth Mckenna, Brad Marten, and Michael Bogert on this email, to keep them appraised of our progress in setting up the SharePoint site.

Regards,

John

John Meyer, P.Eng.
Vice President, Development

MAX.TSX / MDRPF.OTCQX
405 South 8th Street, Suite 201
Boise, Idaho 83702

T: 208.901.3063
M: 208.608.3543
E: meyer@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/1/2019 4:23:25 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Jill Grant [jgrant@jillgrantlaw.com]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Andy Koulermos [akoulermos@FormationEnv.com]; John Meyer [JMeyer@midasgoldcorp.com]; Cerise, Kathy [Cerise.Kathryn@epa.gov]; Aaron.Scheff@deq.idaho.gov; Laurel Sayer [lsayer@midasgoldinc.com]; Michael Bogert [mbogert@midasgoldinc.com]
Subject: Agenda items for November 1, 2019 AOC meeting/Stibnite Mine
Attachments: 2019-10-29_CMD_MGII_Land_Status_MGII_Exploration_Areas.jpg

Elizabeth:

Laurel Sayer, John Meyer, and I are looking forward to speaking with you and your colleagues at EPA, the U.S. Forest Service, the State of Idaho and the Shoshone Bannock Tribe tomorrow. Michael Bogert and Andy Koulermous will be joining the meeting by phone. Laurel, John and I will arrive by 8:45 to get through security and be settled in by our start time of 9 am PST.

The agenda you distributed to the participants on October 24, 2019 is an excellent starting point to guide our discussions. We have a couple of proposed additions below.

1. It would be helpful to discuss how minutes of our meetings will be kept. Oftentimes folks come out of meetings like these with different understandings of what was agreed to, what deliverables are expected and by what dates. To avoid any misunderstandings, we suggest having a discussion and reaching agreement on preparation, circulation and approval of meeting minutes to keep us all on track;
2. It is in the mutual interest of all parties to conduct as much of the work agreed to as possible during the 2020 field season, respecting the constraints posed by the weather. The first step under the SOW we have been negotiating is a scoping process, including collection and analysis of existing data, development of a RI/FS work plan, a sampling and analysis plan, initial list of target analytes, and a preliminary list of potential ARARs, among other tasks. See July 25, 2019 draft SOW, at pp. 4-14. This initial work will take about four months. The field season at the Stibnite Mine runs from May through October. With that in mind, we propose to target the end of this year to complete the AOC/SOW. This gives us two months to complete our negotiations, and will allow the Midas team to begin implementing the SOW at the first of the year. Considering that the SOW has been reviewed by all participants except for the Shoshone Bannock Tribe, and that we anticipate using EPA model agreements for the AOC, we believe this schedule is reasonable and achievable, and we will commit the Company's resources to accomplishing it. We would like to discuss regular weekly calls to achieve that goal;
3. We would also like to have a discussion of the model EPA proposes to use as a template for the AOC, how we can collaborate on obtaining review and comment from all parties, and when we might see a first draft;
4. The Nez Perce Tribe has elected not to accept your invitation to participate in the AOC/SOW negotiations, but rather wishes to consult privately with EPA. Given the delays EPA experienced last summer in obtaining a response from the Nez Perce to your initial offer of consultation, and their interest in pursuing a lawsuit against Midas rather than a collaborative effort at investigating conditions at the Site, we have a well-founded concern (particularly from what we saw in their filing this past Wednesday) that the Tribe will make an effort to frustrate our mutual interest in completing the AOC and getting out into the field next spring. We would like to discuss with you and the other parties how EPA will provide the Nez Perce with the opportunity to consult, but not the opportunity to interfere, with our progress in conducting the RI/FS work.

Attached you will find the maps you requested of the specific areas on which Midas holds mine claims as well as the areas where Midas has conducted exploratory activities. John Meyer will be prepared to answer any questions you may have after reviewing the maps.

We look forward to a productive meeting and will see you in the morning.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 10/7/2019 8:23:25 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Cerise, Kathy [Cerise.Kathryn@epa.gov]; Chris Dail [Dail@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]; Alan Haslam [ahaslam@midasgoldinc.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]; Lisa.O'Hara@deq.idaho.gov
Subject: FW: Midas Aquifer Testing at Stibnite Mine Site
Attachments: DEQ Stibnite Gold Project Aquifer Tests WQ Monitoring Plan Approval Letter 09-25-2019.pdf; 20190821_Stibnite_Gold_Project_Aq_Test_Summary.pdf

Importance: High

Elizabeth:

On August 21, 2019, I forwarded a work plan for aquifer testing at the Hanger Flats and Yellow Pine pit locations at the Stibnite site on behalf of Midas Gold, consistent with its status as a bona fide prospective purchaser under the 2002 Brownfield Amendments (set out below). I asked whether you or EPA Project Manager Kathy Cerise had any concerns with the work proposed. Having heard none, I am writing to let you know that IDEQ approved the work plan on September 25, 2019 and that the work will proceed this fall. If you have any questions or concerns, please let me know immediately. I'll be in the office all week. Thank you.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

The information contained in this email is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended receipient you must not use, disclose, disseminate, copy or print its contents. If you receive this email in error, please notify the sender by reply e-mail and delete and destroy this message.

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Wednesday, August 21, 2019 6:27 PM
To: 'Elizabeth McKenna' <mckenna.elizabeth@epamail.epa.gov>
Cc: Cerise, Kathy <Cerise.Kathryn@epa.gov>; Alan Haslam <ahaslam@midasgoldinc.com>; Chris Dail <Dail@midasgoldinc.com>; 'Christopher H. Meyer' <chrismeyer@givenspursley.com>; L. Michael Bogert <mbogert@midasgoldinc.com>
Subject: Midas Aquifer Testing at Stibnite Mine Site
Importance: High

Elizabeth:

Midas Gold is planning two 21-day aquifer tests, one at the Hangar Flats pit location and one at the Yellow Pine pit location. The aquifer tests are being performed to evaluate the hydraulic effects of pumping on the alluvial and bedrock aquifers. This work is being conducted under the supervision of Idaho DEQ, pursuant to a Work Plan submitted to IDEQ

on June 6. 2019 and incorporates IDEQ's responses to that Work Plan received on June 28, 2019 and July 9, 2019. Consistent with its status as a bona fide prospective purchaser under the 2002 Brownfield Amendments, Midas is providing this notice of the planned aquifer testing to EPA. If you or the Remedial Project Manager for the Site, Kathy Cerise, have any concerns about the testing, please let me know. Midas technical staff is touring the site with Kathy (copied here) tomorrow, and will use that opportunity to brief Kathy and respond to any questions she may have about the planned work. Thanks

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Stibnite Gold Project – Dewatering Investigation: Aquifer Testing 2019

Aquifer Test Plan Summary

Midas Gold is planning two 21-day aquifer tests, one at the Hangar Flats pit location and one at the Yellow Pine pit location. Aquifer tests are being performed to evaluate the hydraulic effects of pumping on the alluvial and bedrock aquifers. Primary objectives of the tests are to: refine estimates of required dewatering for the proposed Yellow Pine and Hangar Flats pits; refine estimates of aquifer properties; inform the potential site investigation; and refine previous estimates of dewatering water volumes. Estimated water production from the 21-day tests are:

- Hangar Flats pit area: 375 gallons/minute; 10,704,000 gallons or 32.85 acre-feet
- Yellow Pine pit area: 200 gallons/minute; 6,132,000 gallons or 18.82 acre-feet

Dewatering water will be managed by infiltrating into the shallow alluvial aquifer in an area sited distant from surface waters on native ground (i.e. no legacy materials). Dewatering water pumped from the Yellow Pine pit area will be piped approximately 2.5 miles to the infiltration area in the Hangar Flats vicinity. Hangar Flats pumped water will also discharge to the infiltration area, at a point approximately 375 feet down-gradient (northeast) from the pumping well. The infiltration area is a series of three infiltration basins.

Pumped water from Yellow Pine pit is anticipated to be slightly elevated in arsenic; pumped water from Hangar Flats pit area is anticipated to be elevated in antimony and arsenic. The shallow receiving aquifer water has antimony and arsenic concentrations about an order of magnitude higher than the pumped water; aquifer water quality improves downgradient (downstream). The parameter of primary concern is arsenic with respect to potential changes in the receiving aquifer and surface water.

Water Monitoring and Sampling

Surface water (upstream and downstream of basins), groundwater (downgradient of basins in 2 monitoring wells), and pumped water (2 locations) will be monitored during the tests (Table 1). Samples will be analyzed for the full suite of constituents (as defined in the current SGP sampling plans), contaminants of concern, expedited arsenic, and/or field tested for arsenic. Full suite samples will be collected at the start (all locations) and in pumped water at the end of the tests. Samples will be analyzed for contaminants of concern approximately weekly during the tests. Field testing for arsenic will be performed at a minimum of every 3 days during the tests and laboratory-analyzed expedited arsenic samples will be used to confirm the field results. The two monitoring wells and two surface water locations will be monitored for two weeks after the completion of the testing.

Table 1. Number and Type of Samples Anticipated to be Collected during the 2019 Aquifer Tests

Analysis	Full Suite Baseline Constituents	Contaminants of Concern[1]	Expedited Arsenic	Field Arsenic
Method	Lab	Lab	Lab	Field test kit
Yellow Pine Total Samples	8	15	6	14
Hangar Flats Total Samples	7	21	5	13

TOTAL	15	36	11	27

[1] *Arsenic, Antimony, Sulfate, Mercury, Manganese, Aluminum, Iron, Total Dissolved Solids, Thallium.*

Arsenic trigger values have been established for pumped water and one of the monitoring wells (MWH-A07) and 95/95 upper tolerance limits (UTLs) have been calculated for surface water locations (Table 2). Exceedances of the trigger concentrations will result in more frequent monitoring, implementation of contingencies, and potentially a shutdown of the test. The other monitoring well will be newly-installed; arsenic concentration trends for that well will be monitored and conveyed to the Idaho Department of Environmental Quality. UTLs will provide comparison points to assess whether surface water has been impacted by the tests.

Table 2. Arsenic Trigger Concentrations and Upper Tolerance Limits

	Aquifer Test Pumped Water	Monitoring Well MWH-A07	Upgradient Surface Water Location YP-T-22	Downgradient Surface Water Location YP-SR-10
Trigger Concentration	1.5 mg/L	1.0 mg/L	--	--
Upper Tolerance Limit			0.061 mg/L	0.042 mg/L

Notes:

mg/L = milligrams per liter

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1445 North Orchard • Boise, ID 83706 • (208) 373-0550

Brad Little, Governor
John H. Tippets, Director

September 25, 2019

Alan Haslam
Midas Gold
405 S. 8th Street #201
Boise, Idaho 83702

RE: Approval of Stibnite Gold Project (SGP) Aquifer Tests Water Quality Monitoring Plan

Dear Mr. Haslam:

The Idaho Department of Environmental Quality (DEQ) appreciates the submittal of the revised 2019 Aquifer Test Groundwater and Surface Water Monitoring Plan provided to DEQ via a secured sharepoint site on September 17, 2019, from Brown and Caldwell. Under the Idaho Ground Water Quality Rule, IDAPA 58.01.11.301.02.a, activities with the potential to degrade any general resource aquifer, such as the aquifers at the SGP site, shall be managed in a manner which maintains or improves existing ground water quality through the use of best management practices and best practical methods to the maximum extent practical except when a point of compliance is set. Additionally, IDAPA 58.01.11.400.01 prohibits the release of contaminants into the environment in a manner that, among other things, is not in accordance with applicable best management practices.

DEQ has determined the above referenced monitoring plan adequately addresses DEQ concerns and utilizes practices and methods which satisfy the requirements of the Idaho Ground Water Quality Rule (IDAPA 58.01.11) and the Idaho Water Quality Standards (IDAPA 58.01.02). Therefore, the above referenced plan is approved by DEQ. However, this approval does not authorize any discharge to surface water. Also note that any revisions to the approved monitoring plan must be submitted to DEQ for approval prior to implementation.

Please contact me with any questions or concerns at Aaron.Scheff@deq.idaho.gov or 208.373.0420.

Sincerely,

Aaron Scheff
Boise Regional Office Administrator

AMS:tg

cc: Jerri Henry, DEQ Water Quality Division Deputy Administrator
Ed Hagan, DEQ Ground Water Bureau Chief
Brady Johnson, Hydrogeologist
Adam McMahon, Hydrogeologist

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/16/2019 8:22:48 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Jill Grant [jgrant@jillgrantlaw.com]
CC: Cerise, Kathy [Cerise.Kathryn@epa.gov]; John Meyer [JMeyer@midasgoldcorp.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]
Subject: Stibnite Mine SOW/AOC

Thanks, Elizabeth. I believe you may have the maps, but John Meyer will in any event be sending them in advance of Monday's Zoom call.

I believe we have comments now from all Participants. I have send responses to Jill and Lisa on the Tribal and State comments and circulated them to you and Gary. I have read Gary's comments, which primarily have to do with issues of decision-making authority among government agencies, and are not directly relevant to the issues we will be discussing Monday. We are most interested in Kathy's comments on the technical issues raised (primarily by the Tribe). If we can have a good discussion of the technical issues outstanding (which seem to be fairly limited), then we can work toward a pre-final draft SOW, subject to your review of the Nez Perce comments. I understand the Nez Perce have committed to provide their comments on November 26, that they will provide those to EPA, which will distribute them to the AOC/SOW Participants.

Thanks for staying up late last night distribute the draft AOC, which we received after 2 am. My understanding is that the AOC will not be the subject of our Monday call, but (after you get some sleep) perhaps we can discuss a time toward the end of the coming week to review them.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Friday, November 15, 2019 6:18 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: RE: Stibnite Mine

In my last email I erroneously said that the Nez Perce will provide comments by the 19th. I meant to say that the Nez Perce will provide comments by November 26th. I apologize for raising expectations for an earlier response.

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07

Seattle, WA 98101
(206) 553-0016

From: McKenna, Elizabeth
Sent: Friday, November 15, 2019 2:36 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: Stibnite Mine

I heard back from the Mike Lopez. I shared the parties' comments on the SOW with Mike. The Nez Perce will provide comments to EPA by November 19th. EPA will provide its comments and revisions that reflect our review of all of the Parties' comments after we receive the Nez Perce's comments. Given that we will not have the Nez Perce Tribe's comments or an updated draft SOW by Monday, please let me know what topics the parties would like to focus on in our meeting.

Also, we have not yet received a map from Midas showing the areas in which Midas owns claims, has other ownership interests, and has conducted exploratory drilling. This relevant to establishing the scope of the RI/FS.

I will sending a draft AOC to the parties soon.

- Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Austin Zinsser [zinsser@midasgoldinc.com]
Sent: 6/11/2019 10:00:58 PM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]
CC: John Meyer [JMeyer@midasgoldcorp.com]; L. Michael Bogert [mbogert@midasgoldinc.com]; Bradley M. Marten [bmarten@martenlaw.com]; Merissa A. Moeller [mmoeller@martenlaw.com]
Subject: Stibnite Site Characterization Data Geodatabase

Kathy,
Hope you are well. As I mentioned previously, we've been working to electronically capture the environmental data from the 1998 Woodward-Clyde Stibnite Site Characterization Report. We have incorporated the majority of the surface, groundwater and soil sampling data into a GIS geodatabase including lab analyses and sample locations. If you think any of this data can be of use, we can provide the geodatabase, export spreadsheets of the data or generate any maps you may need.
Please let us know if you think this would be of use and we can upload it to the sharefile site,
Thanks,
Austin

Austin Zinsser, M.Sc.
Sr. Resource Geologist
ID Licensed P.G. #1502
SME Reg. Member # 4194773RM

MIDAS

MAX.TSX / MDRPF.OTCQX
405 S. 8th St., Ste. 201
Boise, ID 83702
T: 208.901.3054
M: 970.708.0873

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/15/2019 11:38:57 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Jill Grant [jgrant@jillgrantlaw.com]
CC: Cerise, Kathy [Cerise.Kathryn@epa.gov]; 'Michael Bogert' [mbogert@midasgoldinc.com]; 'Andy Koulermos' [akoulermos@FormationEnv.com]; John Meyer [JMeyer@midasgoldcorp.com]
Subject: RE: Stibnite Mine

Elizabeth:

Thanks for your e-mail. As planned, we will utilize the Monday call to review the comments submitted to date on the SOW. We have received comments from the Shoshone Bannock Tribe and the State of Idaho. We are prepared to discuss them as a group among the AOC Participants. We would hope that EPA will also be prepared to do the same. I will send out a short summary of the Midas comments this evening or over the weekend. They are not extensive. I have already discussed our thoughts on the Tribe's comments with Jill.

Talk to you on Monday.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Friday, November 15, 2019 2:36 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: Stibnite Mine

I heard back from the Mike Lopez. I shared the parties' comments on the SOW with Mike. The Nez Perce will provide comments to EPA by November 19th. EPA will provide its comments and revisions that reflect our review of all of the Parties' comments after we receive the Nez Perce's comments. Given that we will not have the Nez Perce Tribe's comments or an updated draft SOW by Monday, please let me know what topics the parties would like to focus on in our meeting.

Also, we have not yet received a map from Midas showing the areas in which Midas owns claims, has other ownership interests, and has conducted exploratory drilling. This relevant to establishing the scope of the RI/FS.

I will sending a draft AOC to the parties soon.

- Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 7/19/2019 11:18:03 PM
To: Cerise, Kathy [Cerise.Kathryn@epa.gov]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Bradley M. Marten [bmarten@martenlaw.com]; L. Michael Bogert [mbogert@midasgoldinc.com]; Andy Koulermos [akoulermos@formationenv.com]
Subject: Revised SOW
Attachments: ATT00001.txt; 2019-07-19 Draft Stibnite SOW Rev 5.docx

Kathy and Elizabeth,

The attached file provides a revised draft of the Stibnite AOC Statement of Work (SOW) for your review.

We have tracked our proposed changes relative to your original draft, so hopefully our proposed changes are clear, and that they reflect our discussions from this past Wednesday.

I have not copied personnel with any of the other agencies (USFS and/or IDEQ) on this email, as I assumed you would either distribute the document, or I can if you wish.

If you have any questions or comments that require clarification before our next meeting you can contact me anytime.

Have a great weekend.

John

John Meyer
Vice President, Development

MAX.TSX / MDRPF.OTCQX
405 South 8th Street, Suite 201
Boise, Idaho 83702

T: 208.901.3063
M: 208.608.3543
E: meyer@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

Appendix 1

STATEMENT OF WORK FOR THE STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY Valley County ID near Yellow Pine, ID

Purpose

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Stibnite Mine Site ("Site") located in northwest Idaho approximately 14 miles from the town of Yellow Pine (see Figure 1). The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of Work that will be carried out by Midas Gold Idaho, Inc. ~~Corporation~~ ("Midas Gold" or "Respondent") as it implements the RI/FS at the Site.

In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS must be consistent with the PRO and the subsequent restoration. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

The Site is defined as the features described below (general locations summarized on Figure 2) and the areal extent of contamination from those features and all suitable areas in very close proximity to the contamination necessary for response action implementation:

1. **Yellow Pine Pit (Figure 3)** – The Yellow Pine Pit (formerly known as "The Glory Hole") was actively mined during the 1930s through the 1950s for antimony, tungsten, gold and silver. The pit is located on Midas Gold patented land, and most of the waste rock dumps associated with the pit are adjacent to the pit; some of the waste rock dumps are located on USFS managed land. During active mining, the East Fork of the South Fork of the Salmon River (EFSFSR) was routed around the pit through the Bailey Tunnel but was allowed to return to its natural course through the pit after the Bailey Tunnel was abandoned in the mid-1950s. The EFSFSR now runs through the pit. The Yellow Pine Pit, and the majority of waste rock dumps associated with it, are within the footprint of Midas Gold's proposed PRO.

2. **Bradley Tailings Pile (Figure 4)** – The Bradley Tailings Pile, also known as the Historical Tailings and Spent Ore Disposal Area, is located on Midas Gold patented

ED_004715_00016665-00001

land. Approximately 3 million tons of mine tailings generated during the 1940s and 1950s are stored in this area, and they are overlain by approximately 6 million tons of spent heap leach ore placed in the 1980s and 1990s. The downstream end of the Tailings Pile is constrained by a structure known as the Keyway Dam, and a wetland exists downgradient of the Keyway Dam, which is also referred to as the Keyway Marsh. Meadow Creek is diverted around the south side of the Tailings Pile. The Bradley Tailings Pile is within the footprint of Midas Gold's proposed PRO.

3. **Hangar Flats Tailings Pile (Figure 5)** – The Hangar Flats Tailings Pile, also known as the Hecla Heap Leach Facility, is a reclaimed heap-leach facility which was built and operated in the 1990s to extract oxide gold and silver. The facility is located on Midas Gold controlled patented land, and is within the footprint of Midas Gold's proposed PRO.

4. **Bailey Tunnel (Figure 6)** – The Bailey Tunnel was constructed in the early 1940s to divert the EFSFSR around the Yellow Pine Pit and into Sugar Creek to facilitate open pit mining operations. The tunnel was no longer used after the mid-1950s, following cessation of open pit mining activities. The Bailey Tunnel is on Midas Gold patented land, and is within the footprint of Midas Gold's proposed PRO.

5. **DMEA Adit and Waste Rock Dump (Figure 7)** – The Defense Minerals Exploration Administration (DMEA) Adit and Waste Rock Dump are mining-related disturbances resulting from underground exploration activities during the 1950s. The adit and dump are located on USFS managed land, and are not within the footprint of the Midas Gold PRO.

6. **Bonanza Adit (Figure 8)** – The Bonanza Adit area is a mining-related disturbance in the Sugar Creek drainage resulting from underground exploration activities during the 1930s and 1940s. The Bonanza Adit area is located on USFS managed land, and is not within the footprint of the Midas Gold PRO.

7. **Cinnabar Tunnel (Figure 9)** – The Cinnabar Tunnel is a mining-related disturbance resulting from underground exploration activities during the late 1920s and early 1930s. The Tunnel is located on USFS managed land; the tunnel portal is within the footprint of the Midas Gold PRO.

8. **Meadow Creek Adit (Figure 10)** – The Meadow Creek Adit and associated waste rock dumps are mining-related disturbances that resulted from underground mining activities from the 1920s through the 1940s. The adit and waste rock dumps are located on Midas Gold controlled patented land, and are within the footprint of Midas Gold's proposed PRO.

This RI/FS SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language.

ED_004715_00016665-00002

This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h] [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h]commonly called the National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the "AOC." Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

Scope

The specific RI/FS activities to be conducted at the Site are set forth in seven separate tasks.

Task 1 – Scoping
Task 2 – Community Relations
Task 3 – Site Characterization
Task 4 – Treatability Studies
Task 5 – Feasibility Study
Task 6 – Detailed Analysis of Remedial Alternatives

Oversight

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code§§ 39-101 to 39-130; the Hazardous Waste Management Act of ldaho, Idaho Code§§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code§§ 39-3601 et seq. As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

ED_004715_00016665-00003

Schedule

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

Guidance

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

Roles and Responsibilities

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the AOC. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

Remedy Requirements

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

TASK 1 - SCOPING

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the

ED_004715_00016665-00004

amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by the Respondent as a function of the project planning process.

a. Site Background

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

Collect and analyze existing data and document the need for additional data

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA.

Conduct site visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

b. Project Planning

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include

ED_004715_00016665-00005

those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

ED_004715_00016665-00006

Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

c. *Scoping Deliverables*

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan will fully account for the timing and scope of mining and processing activities associated with the PRO. This could include a phased approach to focus on issues of most concern or requiring early action. The Work Plan shall be developed in

ED_004715_00016665-00007

conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP, and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

Potential Target Analytes

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential

ED_004715_00016665-00009

performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

Chemicals/Analytes of Potential Concern for Surface Water

The preliminary ~~following~~ COPCs list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for ~~shall be included in the analyses for all~~ surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium (III)
- Chromium (VI)
- Cobalt
- Copper
- Hardness
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrogen, total Kjeldahl
- Phosphorus
- Potassium
- Selenium
- Silver
- Sodium
- Sulphate
- Thallium

ED_004715_00016665-00010

- Tungsten
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Uranium
- Vanadium
- Zinc

Field Analyses
- Conductivity
- Dissolved Oxygen
- Flow
- pH
- Temperature

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Chemicals/Analytes of Potential Concern for Sediments:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for sediment sampling stations.

Laboratory Analyses
- Antimony
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Tungsten
- Vanadium
- Zinc

ED_004715_00016665-00011

Chemicals/Analytes of Potential Concern for Soils/Waste Rock:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for soils/waste rock sampling.

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Uranium
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Vegetation:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for vegetation sampling stations.

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium

ED_004715_00016665-00012

- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Groundwater

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

<u>Laboratory Analyses</u>

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chloride
- Chromium III
- Chromium VI
- Cobalt
- Copper
- Hardness
- Iron
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrate/nitrite as N
- Nitrogen (TKN)
- Orthophosphate
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium

ED_004715_00016665-00013

- Total Dissolved Solids
- Total Suspended Solids
- Total Organic Carbon
- Tungsten
- Uranium
- Vanadium
- Zinc

Field Analyses

- Conductivity
- Dissolved Oxygen or ORP
- Ferric Iron
- Ferrous Iron
- Nitrite
- pH
- Temperature

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

TASK 2 - COMMUNITY RELATIONS

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of McCall, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

ED_004715_00016665-00014

TASK 3 - SITE CHARACTERIZATION

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

a. Field Investigation

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

<u>Implement and document field support activities</u>

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight

ED_004715_00016665-00015

tasks. The Respondent shall also notify the RPM upon completion of field support activities.

Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

Describe the nature and extent of contamination

The Respondent shall gather information to describe the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

ED_004715_00016665-00016

b. *Data Analyses*

Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

c. *Data Management Procedures*

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site

ED_004715_00016665-00017

characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See [HYPERLINK "http://www.epa.gov/storet/wqx.hmtl)" \h]

d. *Site Characterization Deliverables*

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI

ED_004715_00016665-00018

report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action, but will consider implementation of the PRO. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

Contaminant Identification – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).

Exposure Assessment – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

Toxicity Assessment – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity).

Risk Characterization – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

TASK 4 - TREATABILITY STUDIES

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

a. Determination of Candidate Technologies and of Need for Testing

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the

ED_004715_00016665-00019

range of technologies required for the development and analysis of alternatives (Task 5 and 6) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

b. *Treatability Testing and Deliverables*

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot

plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 5 - FEASIBILITY STUDY

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

a. Remedial Alternative Development

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the

ED_004715_00016665-00021

environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

Refine and document remedial action objectives

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment

ED_004715_00016665-00022

alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

TASK 6 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

a. Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative,

ED_004715_00016665-00023

the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

Compare alternatives against each other and document the comparison of alternatives

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

b. *Detailed Analysis Deliverables*

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

Feasibility Study report

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

ED_004715_00016665-00024

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA -330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008. "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

Attachments

Attachment A – Suggested RI/FS Work Plan Format

Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
   - Types and volumes of waste present
   - Potential pathways of contaminant migration/preliminary public health and environmental impacts
   - Preliminary identification of operable units
   - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
   - DQO needs
   - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
   - Staffing
   - Coordination
9. References

Appendices

ED_004715_00016665-00027

Attachment B – Suggested Format for SAP (FSP and QAPP)

FSP

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

QAPP

Title Page

Table of Contents

1. Project Description
2. Project Organization and Responsibilities
3. QA Objectives for Measurement
4. Sampling Procedures
5. Sample Custody
6. Calibration Procedures
7. Analytical Procedures
8. Data Reduction, Validation, and Reporting
9. Internal Quality Control
10. Performance and Systems Audits
11. Preventative Maintenance
12. Data Assessment Procedures
13. Corrective Actions
14. Quality Assurance Reports

ED_004715_00016665-00028

Attachment C – Suggested RI Report Format

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization
2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology
4. Nature and Extent of Contamination

ED_004715_00016665-00029

4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:

4.1.1 Sources (lagoons, sludges, tanks, etc.)

4.1.2 Soils and Vadose Zone

4.1.3 Ground Water

4.1.4 Surface Water and Sediments

4.1.5 Air

5. Contaminant Fate and Transport

5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)

5.2 Contaminant Persistence

5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest

5.3 Contaminant Migration

5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)

5.3.2 Discuss modeling methods and results, if applicable

6. Baseline Risk Assessment

6.1 Human Health Evaluation

6.1.1 Exposure Assessment

6.1.2 Toxicity Assessment

6.1.3 Risk Characterization

6.2 Environmental Evaluation

7. Summary and Conclusions

7.1 Summary

7.1.1 Nature and Extent of Contamination

7.1.2 Fate and Transport

7.1.3 Risk Assessment

7.2 Conclusions

7.2.1 Data Limitations and Recommendations for Future Work

7.2.2 Recommended Remedial Action Objectives

Appendices

A. Technical Memorandum on Field Activities (if available)

B. Analytical Data and QA/QC Evaluation Results

C. Risk Assessment Methods

Attachment D – Suggested Format for Feasibility Study Report

Executive Summary

1. Introduction
   - 1.1 Purpose and Organization Report
   - 1.2 Background Information (Summarized from RI Report)
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Nature and Extent of Contamination
     - 1.2.4 Contaminant Fate and Transport
     - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
   - 2.1 Introduction
   - 2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
     - Contaminants of interest
     - Allowable exposure based on risk assessment (including ARARs) Development of remediation goals
   - 2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
   - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:
     - 2.4.1 Identification and Screening of Technologies
     - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
   - 3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
   - 3.2 Screening of Alternatives (if conducted)
     - 3.2.1 Introduction
     - 3.2.2 Alternative 1
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.2 Alternative 2
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.3 Alternative 3

ED_004715_00016665-00031

3.2.3.1 Description
3.2.3.2 Evaluation

4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Evaluation
4.2.2 Alternative 2
4.2.2.1 Description
4.2.2.2 Evaluation
4.2.3 Alternative 3
4.2.3.1 Description
4.2.3.2 Evaluation
4.3 Comparative Analysis

ED_004715_00016665-00032

Attachment E – Stibnite Mine Remedial Investigation and Feasibility Study (RI/FS) Statement of Work (SOW) Schedule

RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

ED_004715_00016665-00033

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

[1]Documents may initially be released as "draft final" pending final resolution of issues.

ED_004715_00016665-00034

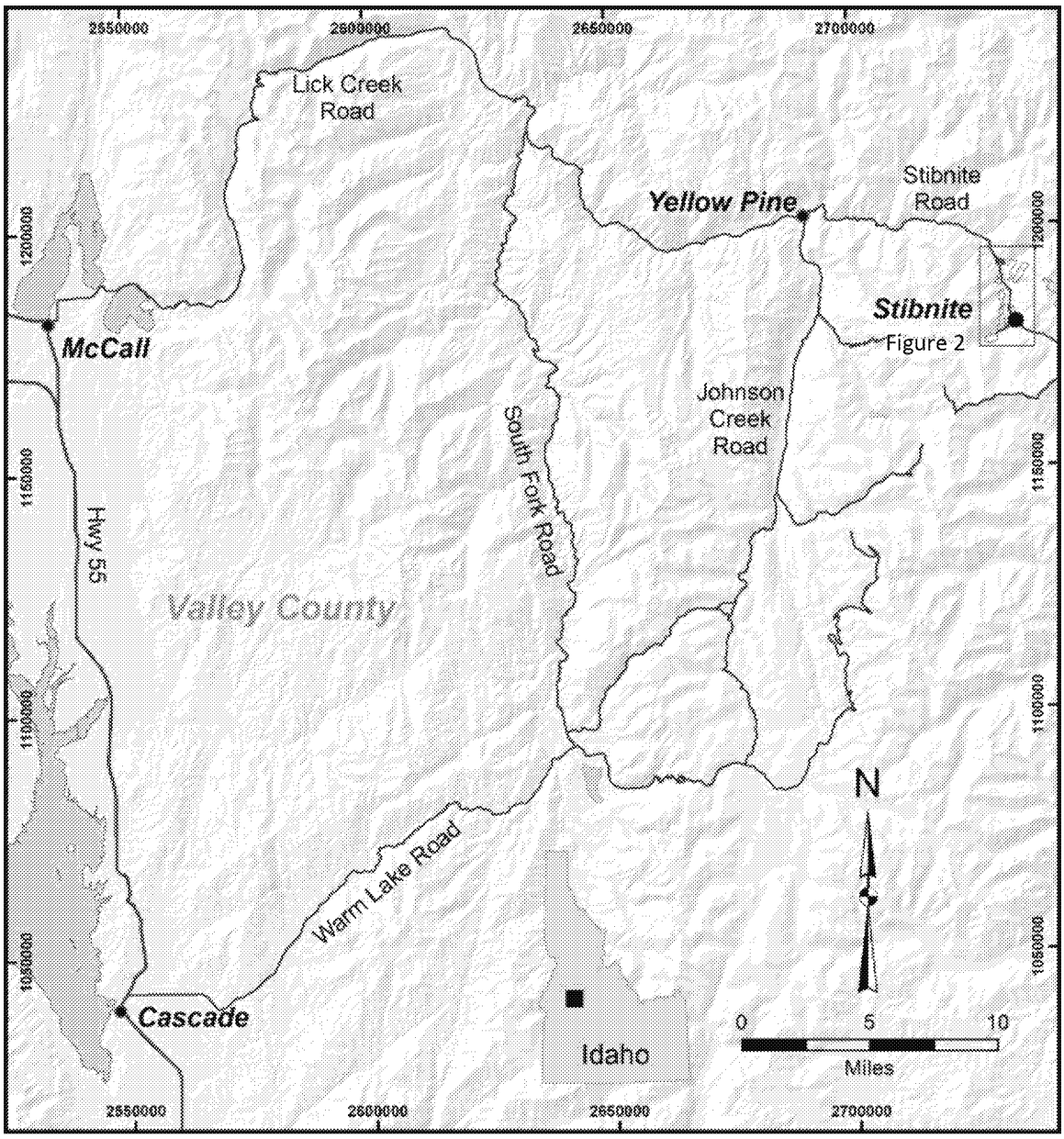


Figure 1 – Site Location

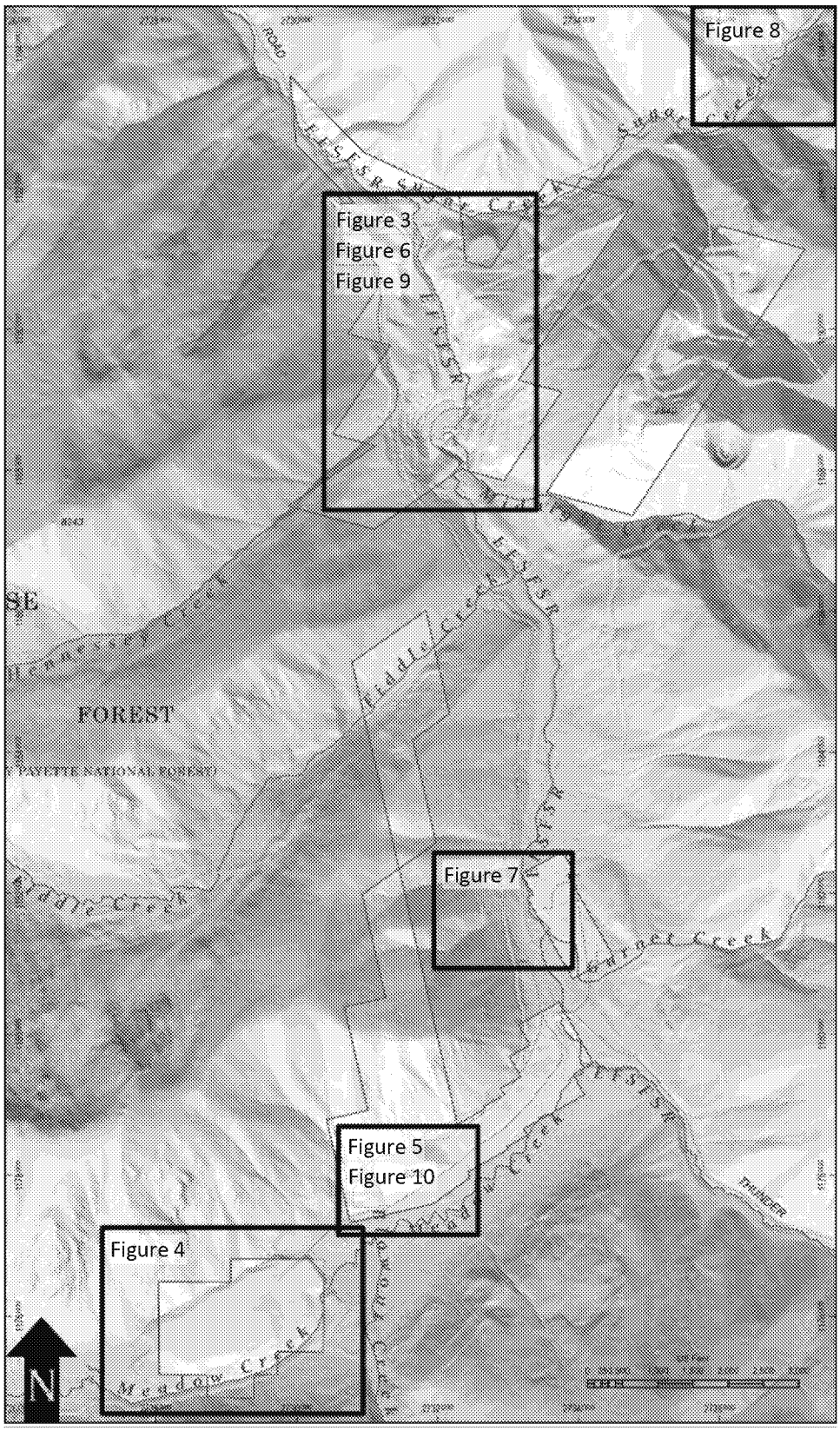


Figure 2 – Stibnite Mine Site

ED_004715_00016665-00036

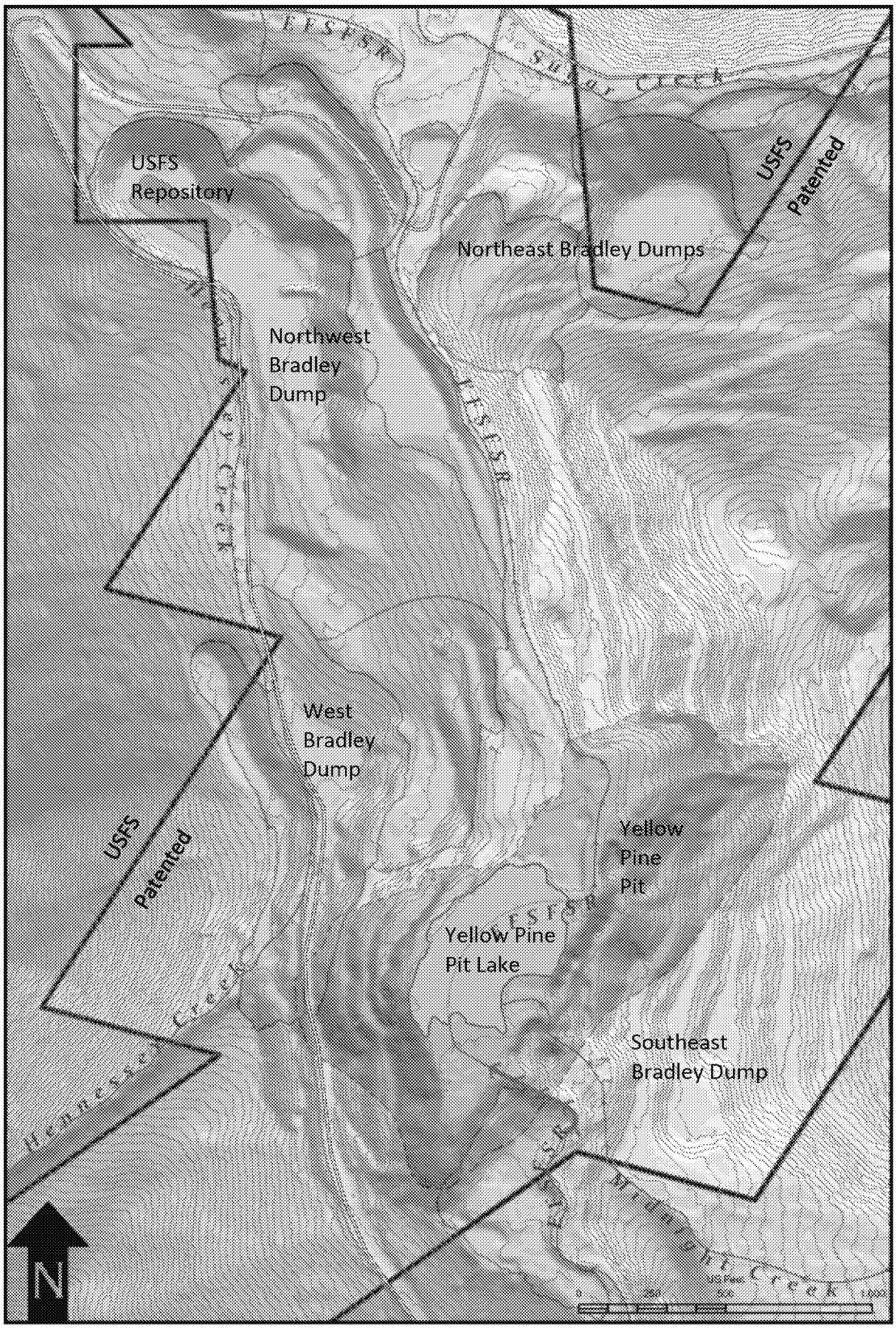


Figure 3 –Yellow Pine Pit

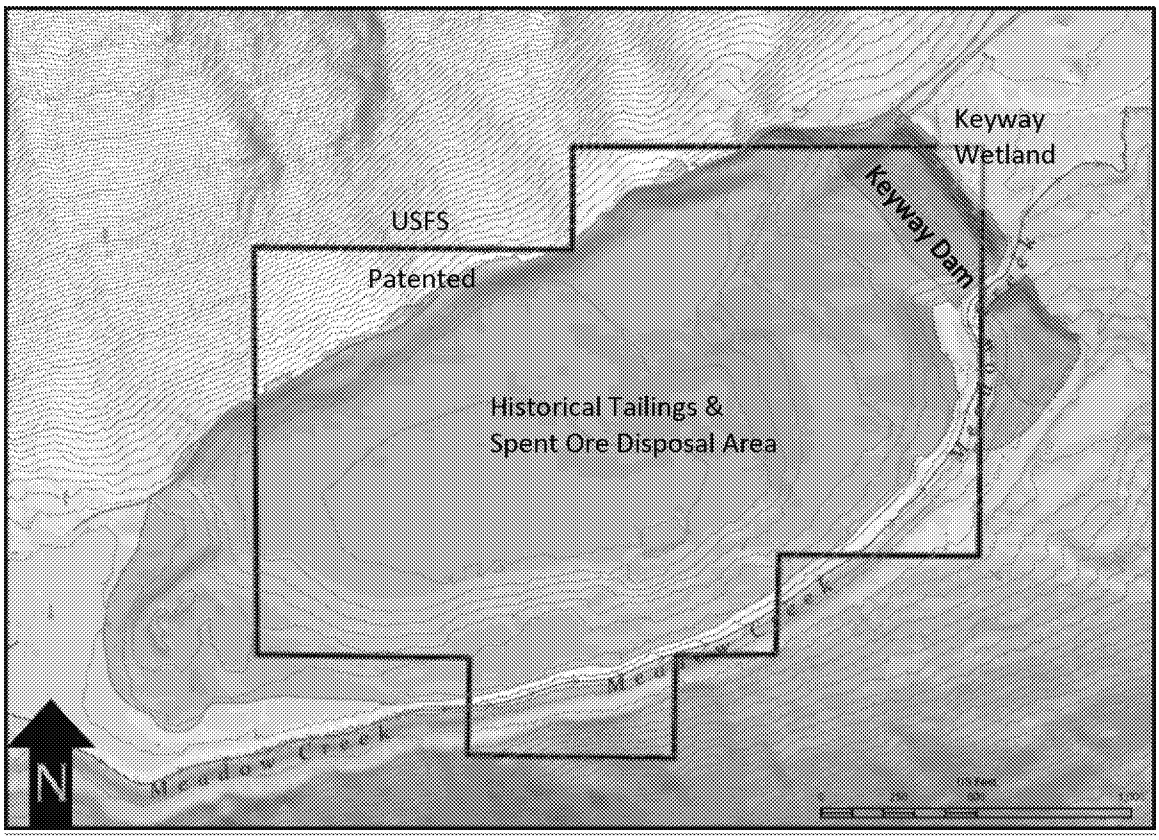


Figure 4 – Historical Tailings and Spent Ore Disposal Area

ED_004715_00016665-00038

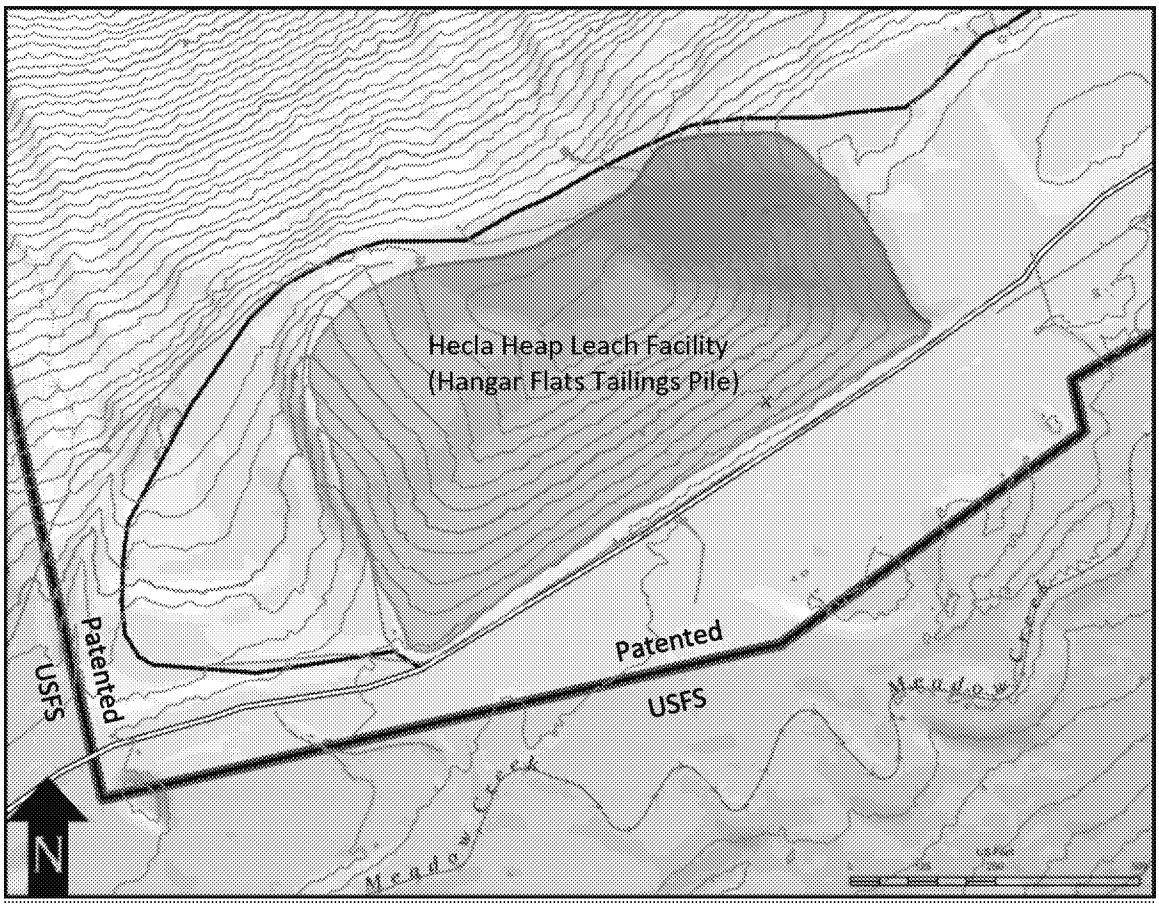


Figure 5 – Hecla Heap Leach Facility

ED_004715_00016665-00039

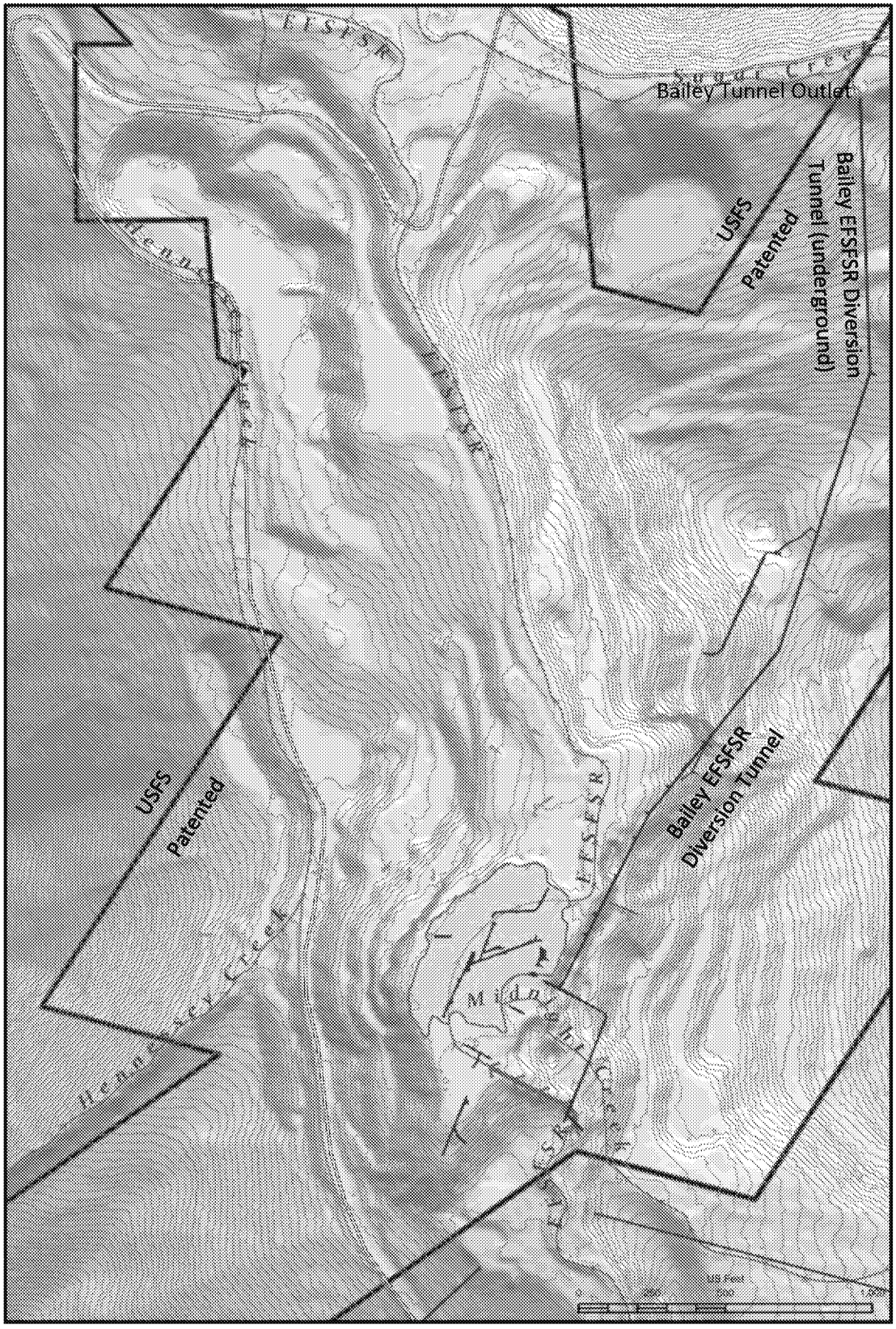


Figure 6 – Bailey Tunnel

ED_004715_00016665-00040

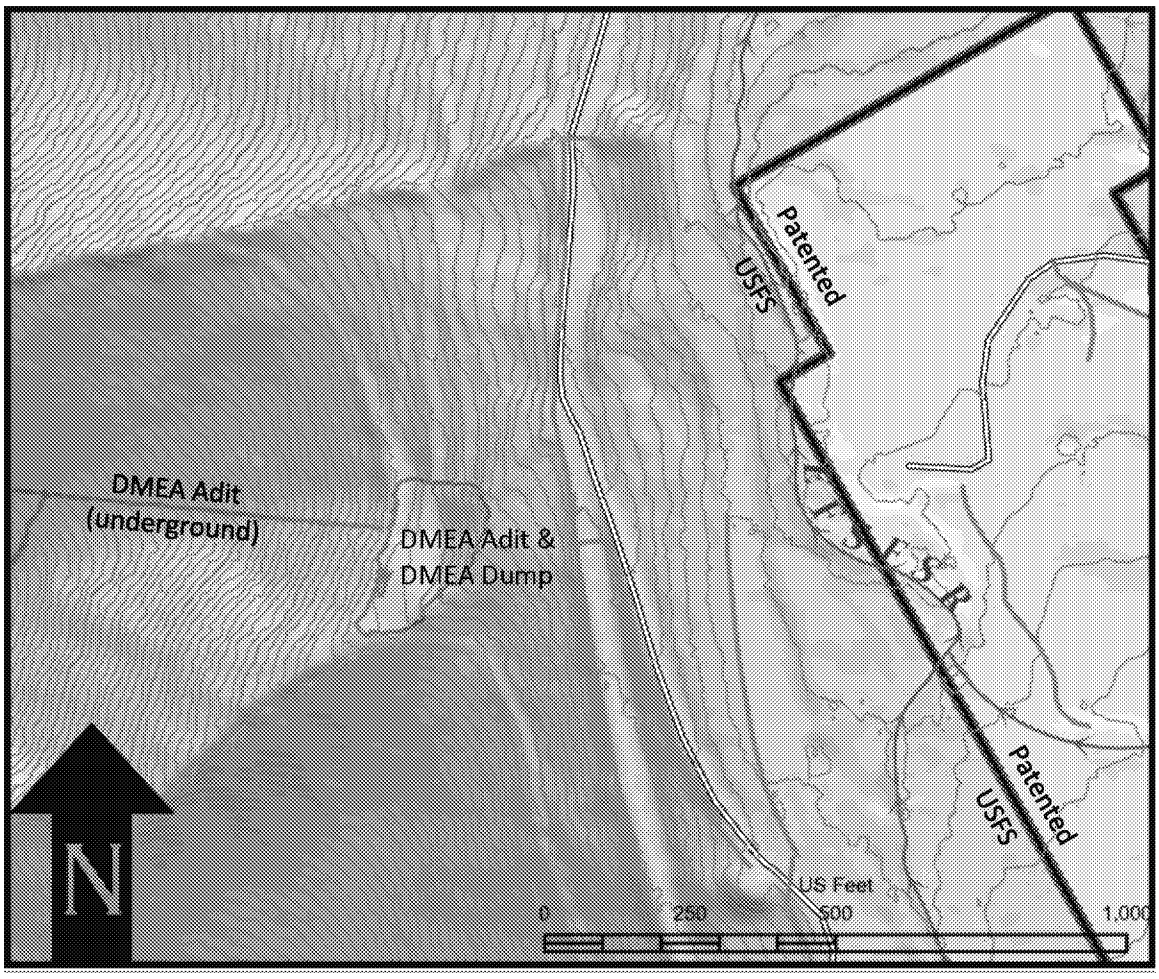


Figure 7 – Defense Minerals Exploration Administration Adit and Waste Rock Dump

ED_004715_00016665-00041

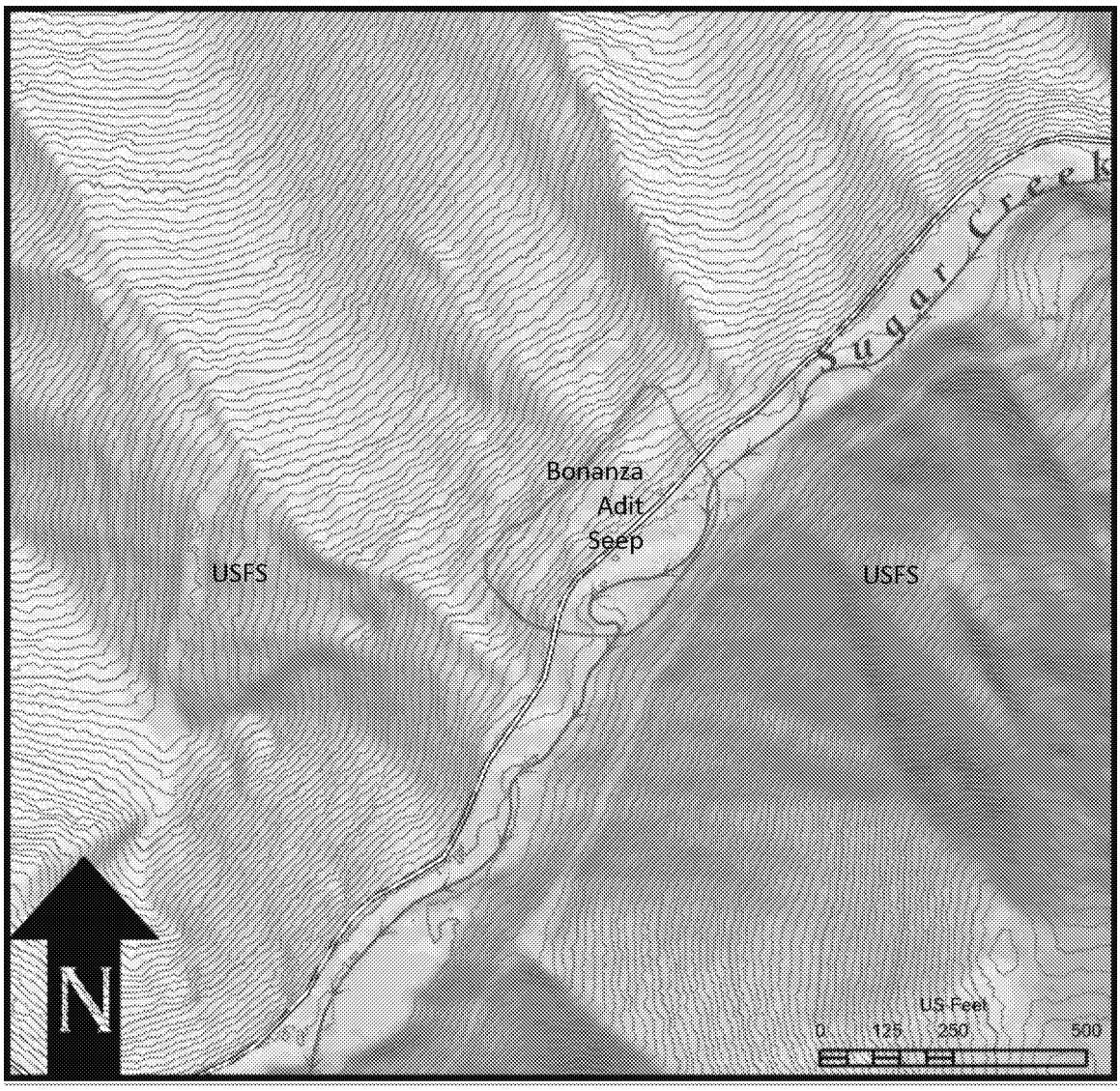


Figure 8 – Bonanza Adit

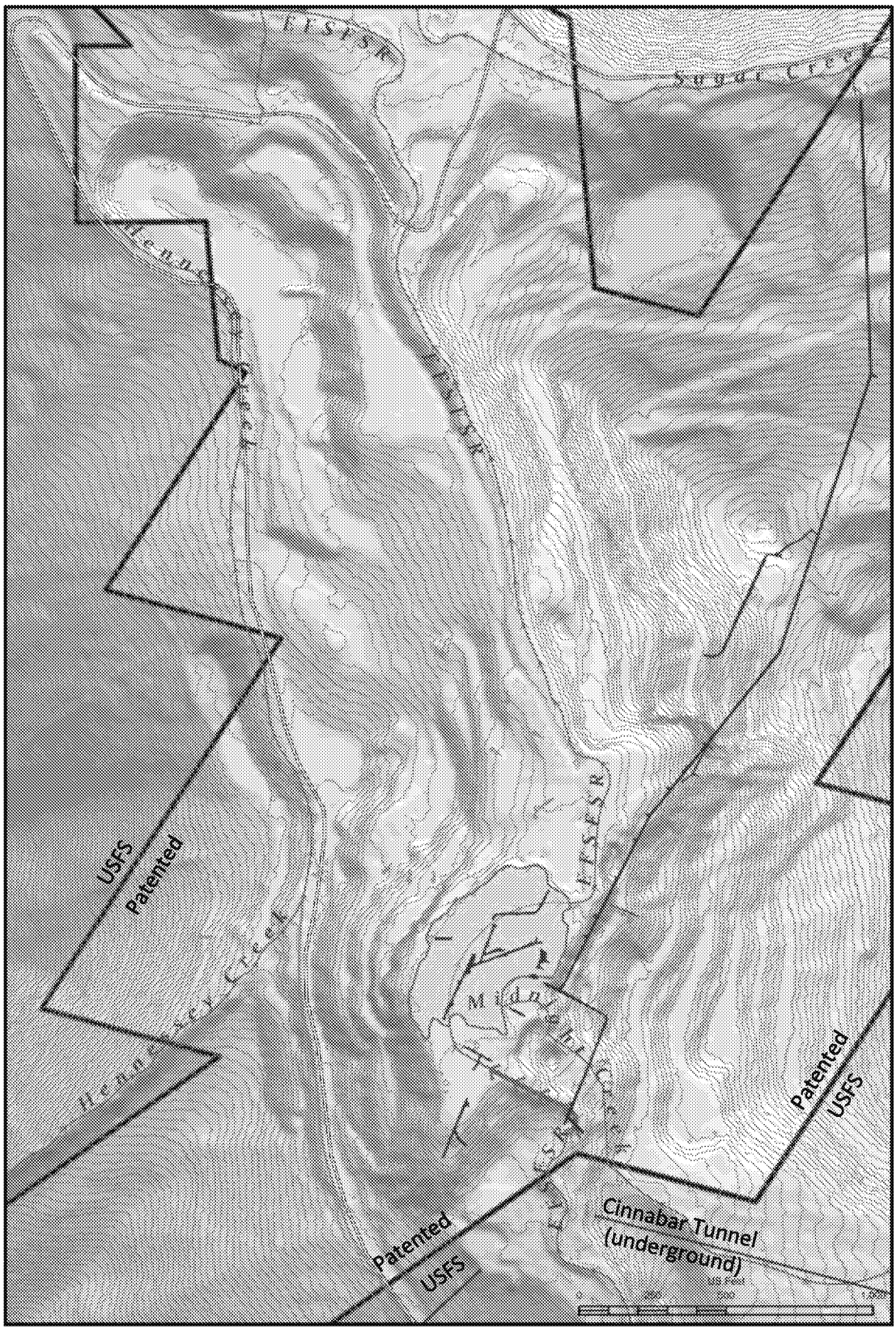


Figure 9 – Cinnabar Tunnel

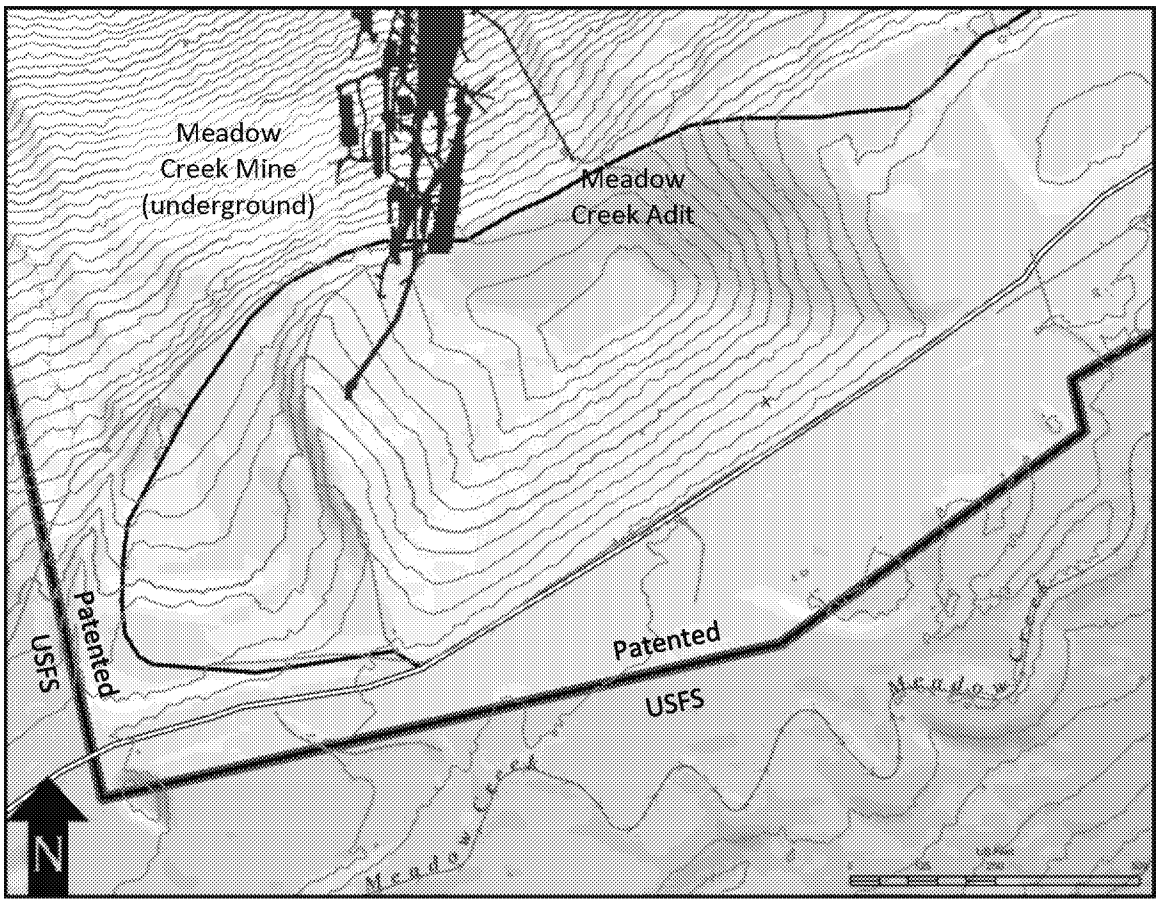


Figure 10 – Meadow Creek Adit

Message

From: Laurel Sayer [lsayer@midasgoldinc.com]
Sent: 11/26/2019 9:30:38 PM
To: Hladick.christopher@epamail.epa.gov
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Jolene Stevens [jstevens@midasgoldcorp.com]
Subject: Stibnite Gold Project, Idaho
Attachments: 2019-11-26 MG-Hladick Letter_Final.pdf

Dear Administrator Hladick,
Please see my attached letter providing an update to the Stibnite Gold Project and referencing some concerns.
Thank you for your time and efforts working with Midas Gold on our Project .
Wishing you a Happy Thanksgiving.

Laurel Sayer
President & CEO
Midas Gold Idaho

JOIN US TODAY. WWW.SUPPORTSTIBNITE.COM

MIDAS GOLD IDAHO
405 S 8th St. Boise, ID 83702
T: 208.901.3050
M: 208.521.2987
E: lsayer@midasgoldinc.com

MAX.TSX / MDRPF.OTCQX
www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this email is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended receipient you must not use, disclose, disseminate, copy or print its contents. If you receive this email in error, please notify the sender by reply e-mail and delete and destroy this message.

405 S. 8th Street #201
Boise, ID USA 83702
info@midasgoldidaho.com

MAX.TSX
MDRPF.OTCQX

www.midasgoldidaho.com

November 26, 2019

Mr. Christopher W. Hladick
Regional Administrator
U.S. EPA, Region 10
1200 Sixth Avenue
Mail Code RA-210
Seattle, WA 98101

Via: USPS and Email Hladick.christopher@epamail.epa.gov

Re: Stibnite Gold Project, Valley County, Idaho

Dear Mr. Hladick:

This follows up on my recent meeting request to discuss several important matters pertaining to the Stibnite Gold Project in Idaho.

First, after I made my request to visit, a working meeting was scheduled on November 1, 2019 by EPA Region X staff that included participation by the State of Idaho, the Shoshone-Bannock Tribes and Midas Gold representatives to discuss our ongoing negotiations over a proposed CERCLA administrative order on consent ("AOC"). After almost 20 months of working with EPA on this approach under CERCLA, I personally attended that working session and am pleased that the parties agreed to several milestones that will advance the AOC negotiations, including a schedule for completion of a final statement of work and AOC within the next few weeks. We believe we now have near agreement on a statement of work and have received a copy of the draft AOC. Although we will clearly be seeking some changes to the draft AOC, we believe it is a positive step forward that we now have a draft to review and comment on.

Second, it is our understanding that the current Remedial Program Manager ("RPM") assigned to the Stibnite site is being reassigned and a new RPM, Helen Bottcher, will now assume this critical position. We fully acknowledge and defer to your authority and ability to move RPMs where they are most needed, but we ask that this change in a key personnel position not delay achieving a final AOC. I am understanding we will be scheduling another AOC technical meeting that will take place shortly and expect any transition issues with the new RPM will be resolved.

As you know, the Forest Service has committed to completing a Draft Environmental Impact Statement in January and we want to keep the AOC negotiations on track. In addition, we have

ED_004715_00050918-00001

advised Federal and State agencies of the ongoing arsenic and antimony releases at the site which also mean completing the AOC is exceptionally important.

In closing, the attached letter from Governor Little to the Administrator requests that this process be addressed with, in his words, "expediency." Consistent with Governor Little's direct appeal to the Administrator, and as an important mining and restoration project in Idaho and Region X, we also appreciate your personal attention to the Stibnite Gold Project.

I look forward to rescheduling our meeting at a mutually convenient time to account for the progress of this important CERCLA collaborative effort.

Sincerely,
MIDAS GOLD IDAHO, INC.

Laurel Sayer
President and CEO

Attachments
Idaho Governor Little's letter to Administrator Wheeler

cc:
Senator Mike Crapo
Senator James E. Risch
Congressman Mike Simpson
Congressman Russ Fulcher
The Honorable James Hubbard, Undersecretary
The Honorable John Tippets, IDEQ

ED_004715_00050918-00002

Governor Brad Little
State Capitol :: Boise, Idaho 83720
(208) 334-2100 :: gov.idaho.gov

October 29, 2019

The Honorable Andrew Wheeler
Administrator, U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington D.C., 20004

Re: Stibnite Gold Project, Valley County, Idaho

Dear Administrator Wheeler,

I am writing to bring to your attention to an important matter related to our water quality in the State of Idaho. The U.S. Environmental Protection Agency (EPA) has an opportunity to facilitate environmental restoration at a long-standing legacy mining site known as the Stibnite Mine.

Elevated arsenic and antimony in ground and surface water sampling locations across the Stibnite site have been reported to the Idaho Department of Environmental Quality and indicate that levels of both metals are beyond what is considered safe for human consumption.

The cause for the degraded water quality is likely tied to the history of the location where mining activity first started 120 years ago. After decades of mining with little thought to reclamation, the site was left in trouble. Now, I am looking for solutions. Currently, a private entity – Midas Gold Idaho – is working to provide resources and technical ability to hopefully resolve the problems we are left with.

I understand that your team at EPA has been discussing the matter since last year and that a draft action plan is under consideration. I ask that you please see that this process is addressed with expediency.

I am hopeful that we can work together to improve and maintain Idaho's precious natural resources. Please feel free to reach out to me or my staff anytime.

Sincerely,

Brad Little
Governor of Idaho

cc: Director John Tippets, Idaho Department of Environmental Quality
Idaho Congressional Delegation

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 3/6/2019 2:10:06 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Werntz, James [Werntz.James@epa.gov]; Hood, Lynne [Hood.Lynne@epa.gov]; L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: Stibnite Gold Project

Just you and me. No one else from the Stibnite team. You are welcome to bring anyone else you like.

See you at 2 pm. Thanks for doing this.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Tuesday, March 5, 2019 9:40 AM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: Werntz, James <Werntz.James@epa.gov>; Hood, Lynne <Hood.Lynne@epa.gov>
Subject: RE: Stibnite Gold Project

2:00 still works for me. I'm happy to walk down the hill to your office. I am assuming the meeting does not include technical folks, is that correct? See you tomorrow.

- Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Tuesday, March 05, 2019 8:34 AM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Werntz, James <Werntz.James@epa.gov>; Hood, Lynne <Hood.Lynne@epa.gov>
Subject: RE: Stibnite Gold Project

Elizabeth:

Thanks for your quick response and willingness to meet. Would 2 pm tomorrow (Wednesday) still work? If so, would you prefer meeting at EPA or walking downtown to our office? We are 4 blocks straight down the hill at Second and Seneca (1191 Second Ave).

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Friday, March 1, 2019 10:17 AM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: Werntz, James <Werntz.James@epa.gov>; Hood, Lynne <Hood.Lynne@epa.gov>
Subject: RE: Stibnite Gold Project

Hello, Brad. It has been a very long time since we've worked together! I'd be happy to share my thoughts on the project with you. The most immediate issue currently is the transfer of certain information that EPA has requested from Midas. As you know, I've been talking with Michael Bogart about Site for the past several months. I left a message with Michael last week regarding transfer of information and I'd be happy to talk to you about that as well as broader issues. Can you talk or meet next week? I'd be interested to know more about the roles of each of the three firms retained by Midas so that I know who I should communicate with on different issues. I'll propose a few open times that I have on my calendar next week, but feel free to suggest others that might work better for you.

Tuesday, March 4th between 12:00 and 3:00
Wednesday, March 5th between 1:00 and 4:00
Thursday, March 6th between 10:00 and 1:00

- Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Thursday, February 28, 2019 5:31 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Werntz, James <Werntz.James@epa.gov>; Hood, Lynne <Hood.Lynne@epa.gov>
Subject: Stibnite Gold Project

Elizabeth:

Attached is a letter discussing recent water quality sampling results at the Stibnite Gold Project in Idaho. A copy has also been placed in the mail. Our firm has been retained along with two others to work with Midas Gold Idaho, Inc. and Midas Gold Corp. on the project.

It has been some time since we have worked together and I am looking forward to working with you again. I would like to answer any questions you may have about the project and to learn more about your perspective. Please let me know if you have the time for a call or coffee to catch up. Thanks -- Brad

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 6/28/2019 10:00:37 PM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: 'Michael Bogert' [mbogert@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]; Terry T. Uhling [tuhling@martenlaw.com]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; gary.fremerman@usda.gov; Andy Koulermos [akoulermos@formationenv.com]
Subject: RE: Midas -- Monday meeting at IDEQ

Kathy Cerise, Tim Maley and I will be participating by conference call. I believe Gary Fremerman will be participating by conference call. Gary – will anyone else from the from the Forest Service be participating? If so, will they be participating by phone? Lisa, who can we expect to participate from IDEQ?

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, June 28, 2019 2:20 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: 'Michael Bogert' <mbogert@midasgoldinc.com>; John Meyer <JMeyer@midasgoldcorp.com>; Terry T. Uhling <tuhling@martenlaw.com>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; gary.fremerman@usda.gov; Andy Koulermos <akoulermos@formationenv.com>
Subject: Midas -- Monday meeting at IDEQ

Elizabeth:

Just left you an e-mail asking if you could let me know who from the three agencies will be participating in our meeting on Monday, and whether in person or by conference call.

I believe you have the call in number from an earlier e-mail but please let me know if you need me to circulate it again. You also have our attendance list. There may be one additional lawyer from my firm – Merissa Moeller, who you met in Seattle at an earlier meeting and who is working with Terry Uhling and me on this project. Merissa's attendance is uncertain, because of a Monday hearing in Bend that may or may not be going forward.

Thanks – see you Monday (in person or by conference call – please advise) at IDEQ at 10:30 am.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 5/2/2019 6:27:26 PM
To: Merissa A. Moeller [mmoeller@martenlaw.com]; Lisa.Carlson@deq.idaho.gov
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]; Bradley M. Marten [bmarten@martenlaw.com]
Subject: RE: Midas Gold - Draft VCO / AOC

Thank you, Merissa. Am I correct in assuming that this will be a large portion of the discussion tomorrow during Midas' meeting at EPA HQ?

Regards,

Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Merissa A. Moeller <mmoeller@martenlaw.com>
Sent: Tuesday, April 30, 2019 12:19 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Lisa.Carlson@deq.idaho.gov
Cc: L. Michael Bogert <mbogert@midasgoldinc.com>; Laurel Sayer <lsayer@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>; Bradley M. Marten <bmarten@martenlaw.com>
Subject: Midas Gold - Draft VCO / AOC

Elizabeth and Lisa –

On behalf of Midas Gold, I am transmitting the attached draft Voluntary Consent Order / Administrative Order on Consent. This draft is intended to frame initial discussions regarding Midas's proposal for limited investigation into historical mining contamination at the Stibnite Mining District. We look forward to your comments.

Sincerely,

Merissa A. Moeller

D - 503 . 241 . 2647
T - 503 . 243 . 2200
E - mmoeller@martenlaw.com

Bio - LinkedIn
martenlaw.com
1050 SW Sixth Ave, Suite 2150
Portland, OR 97204

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 6/27/2019 12:53:38 AM
To: Bradley M. Marten [bmarten@martenlaw.com]; Lisa.O'Hara@deq.idaho.gov; gary.fremerman@usda.gov; Lisa.Carlson@deq.idaho.gov
CC: 'Andy Koulermos' [akoulermos@FormationEnv.com]; John Meyer [JMeyer@midasgoldcorp.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]; Merissa A. Moeller [mmoeller@martenlaw.com]
BCC: Cerise, Kathy [Cerise.Kathryn@epa.gov]
Subject: RE: July 1st Meeting at IDEQ

Thanks, Brad. Can you get an agenda to us tomorrow as well a description of what Midas plans to talk about and/or propose? Since the SOW will not be ready until July 5th, I'm wondering if Midas is going to propose something to us during the meeting, seek information on what our folks may have in mind for proposals, and/or raise other issues. As I said in our call, the meeting will be more productive if we know what to expect. Thanks very much.

Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Wednesday, June 26, 2019 2:51 PM
To: Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; gary.fremerman@usda.gov; Lisa.Carlson@deq.idaho.gov
Cc: 'Andy Koulermos' <akoulermos@FormationEnv.com>; John Meyer <JMeyer@midasgoldcorp.com>; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>; Merissa A. Moeller <mmoeller@martenlaw.com>
Subject: July 1st Meeting at IDEQ

Elizabeth, Lisas and Gary:

First, thank you for meeting with Terry Uhling and me yesterday in Boise. We thought it was very productive and look forward to working with you. We look forward to meeting again next Monday, July 1, 2019 at IDEQ's offices from 10:30 am-noon. We are prepared to spend more time together if we can solve the problem of lunch. Perhaps we can work on a plan to take a break, if folks are available and want to continue the conversation.

Midas has retained Andy Koulermos of Formation Environmental as its outside consultant. Some of you may know Andy from other work that he and his team have done in Idaho and elsewhere in the West on mining sites. Terry and I have known Andy and his colleagues for a long time, and we know that they will bring to the table both immense knowledge and the ability to listen. https://www.formationenvironmental.com/about/

For those unable to attend in person, as you requested, we have set up videoconferencing through a web based service called Zoom.

To join the Zoom meeting via computer video and audio please use:

https://zoom.us (b) (6)

To join via audio only use:
(b) (6)
Meeting ID: (b) (6)

As I mentioned at yesterday's meeting, we would welcome the opportunity to show the Site to any of the technical team members from the agencies who can make it. Reaching the site is quickest by plane (otherwise it is a 10 hour round trip drive). If you are interested in flying to the Site on Tuesday, July 2, following our Monday meeting, please let me or John Meyer at Midas (copied) know by noon tomorrow (Thursday) if at all possible. Andy will be joining the tour. The Midas lawyers will stay at their desks.

Finally, recognizing that we have a heavy lift ahead, I would like to suggest we plan ahead and schedule weekly meetings every Monday in July, starting at 10 am MST in Boise, either at DEQ (if space is available) or at Midas's offices. That would be July 8, 15, 22 and 29. It may not be necessary to have every meeting, or for everyone to attend (certainly in person), but it would be good to reserve the time, if at all possible.

With regard to the meeting on July 1, as I mentioned on the call, we regard this as an information and listening exercise. Based on that, we hope to have a draft scope of work to you by July 5, 2019, for presentation on July 8. We appreciate that this is a tight turnaround, and would not expect decisions to be made on July 8, but believe we will make substantive progress, allowing for a better understanding of our proposal.

Please let me know if any of this causes any concern; if so, we will adjust. Thanks again for your time.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/9/2019 12:42:06 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: 'Michael Bogert' [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]
Subject: Stibnite Mine -- Summary of November 1, 2019 Meeting with AOC Participants
Attachments: 2019-11-07 Stibnite Mine Summary Memo.PDF

Elizabeth:

Attached is the draft summary of the action items agreed to at our meeting last Friday with the State of Idaho, USFS, and the Shoshone Bannock Tribe. Please let me know if you have any comments; and, if not, please distribute to the participants in the meeting (or I would be happy to). Thanks

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

MARTEN LAW

MEMORANDUM

TO:	Elizabeth McKenna
FROM:	Bradley Marten
COPY:	Kathy Cerise, Timothy Maley, Marc Stifelman, Lisa O'Hara, Lisa Carlson, Michael Bogert, Michael MacCurdy, Gary Fremerman, Terry Uhling, Kathy Zamba, Jill Grant, Kelly Wright, Nicholas Pino, Aaron Scheff, Kay Morrison, Susan Hanson, Laurel Sayer, John Meyers
DATE:	November 7, 2019
SUBJECT:	Stibnite Mine CERCLA AOC -- Summary of Tasks Agreed to at November 1, 2019 Meeting

---

This memo summarizes the tasks agreed to at a meeting held at EPA Region X on Friday, November 1, 2019 regarding an Agreed CERCLA Order on Consent ("AOC") and Statement of Work ("SOW") for the Stibnite Mine in Idaho. Present were the following representatives of EPA, the US Forest Service ("USFS"), the Idaho Department of Fish and Wildlife ("DEQ"), the Shoshone-Bannock Tribes (the Tribes") and Midas Gold (hereafter, the "AOC Participants")

- Elizabeth McKenna (EPA)
- Kathy Cerise (EPA)
- Timothy Maley (EPA)
- Marc Stifelman (EPA)
- Lisa O'Hara (IDEQ)
- Lisa Carlson (IDEQ)
- Michael Bogert (Midas)
- Michael MacCurdy (IDEQ)
- Gary Fremerman (USFS)
- Kathy Zamba (USFS)
- Jill Grant (Tribes)
- Kelly Wright (Tribes)

- Nicholas Pino (USDA)
- Aaron Scheff (IDEQ)
- Kay Morrison (EPA)
- Susan Hanson (Tribes)
- Laurel Sayer (Midas)
- John Meyers (Midas)
- Bradley Marten (Midas)

1. The AOC Participants agreed not to assert a settlement or other privilege that would bar disclosure of their negotiations (other than the attorney-client privilege) and that their discussions will not be treated as confidential;

2. The Shoshone-Bannock Tribes, DEQ and USFS asked Midas to fund their participation in the AOC negotiations, using November 1, 2019 as a start date. Midas agreed to consider the request and to propose a Funding and Participation Agreement;

3. The Tribes agreed to provide its comments on the SOW by Tuesday, November 12, 2019, and to meet with the AOC Participants to discuss their comments on Monday, November 18, 2019 at 10 am PST. Midas will circulate a meeting invite and will arrange video conferencing through the Zoom videoconferencing service.

4. EPA agreed to provide a first draft of the AOC by Friday, November 15, 2019, and to meet with the AOC Participants to discuss their comments on Friday, November 22, 2019 at 10 am PST. Midas will circulate a meeting invite and will arrange video conferencing through the Zoom videoconferencing service. Midas Gold's attorney, Brad Marten, agreed to work with EPA's attorney, Elizabeth McKenna, and counsel for the other AOC Participants, to formulate a first draft. The AOC Participants agreed to use EPA model documents in drafting the AOC;

5. Midas agreed to add labelling to the site map it presented at the meeting;

6. EPA noted that it hopes to have an oversight contractor "on-board" within a month and is working through the contracting process;

7. EPA agreed to inform the Nez Perce Tribe of the deadlines agreed to among the AOC Participants and to communicate the AOC Participants' expectation that they will meet the same comment deadlines;

8. Midas agreed to establish a SharePoint Site to make available to the AOC Participants all documents generated by, and necessary to inform, the AOC process. Once the Site is established and operational, all AOC Participants will have access to the SharePoint site, in addition to the Nez Perce Tribe;

9. EPA asked Midas whether it wishes to maintain its claim of confidentiality for the Phase 1 and Phase 2 reports under the Confidential Business Information ("CBI") exception to the Freedom of Information Act. Midas committed to respond to the request.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 10/22/2019 4:19:06 AM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]
BCC: Cerise, Kathy [Cerise.Kathryn@epa.gov]; Pirzadeh, Michelle [Pirzadeh.Michelle@epa.gov]
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

I spoke with Mike Lopez this afternoon about the meeting. The Nez Perce Tribe is choosing to consult with the federal government agencies on a government to government basis throughout the negotiations, rather than to participate in the negotiations directly. The Tribe does not intend to join the negotiating parties in the meeting on November 1st. The Tribe will work closely with EPA and the Forest Service as the parties negotiate and would like to review drafts of documents as they are shared among the negotiating parties, and to provide input through its consultative relationship with EPA.

I will send an invite out to the parties tomorrow.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, October 21, 2019 5:01 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Thanks, Elizabeth. We can confirm that we will attend at that time on November 1. Has an invitation to attend been extended to the Nez Perce Tribe?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Monday, October 21, 2019 3:52 PM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Hello, Brad. I have been coordinating with IDEQ, the USFS, and the Shoshone Bannock Tribe on a date that will work for all of the parties. Friday, November 1st from 9:00 a.m. to 11:00 a.m. is currently the time that works for the EPA team, Lisa O'Hara (IDEQ), Gary Fremerman (USFS) and Jill Grant (Shoshone-Bannock). Jill is checking with the Shoshone Bannock Tribe to see if someone from the Tribe can participate on that date. Would the Midas team be available on Friday from 9:00 a.m. to 11:00 a.m. on the 1st? Given the short notice, I expect many of the participants will choose to participate by phone.

I would add the following items to the agenda items that you suggested:

- A presentation by Midas regarding the specific areas on which Midas holds mine claims and an overlay of the areas where Midas has conducted exploratory activities. I realize that Midas has provided the parties ownership information in the past, but there is still some clarification needed on this topic. It would be helpful if Midas could distribute maps at the meeting.
- A broad/high level discussion regarding how the RI/FS should be conducted given the need to understand current environmental conditions and environmental conditions post mining by Midas. Several of us have had questions regarding how an RI/FS would be conducted at an operating mine and it would be good to start that discussion.

I will attach the latest draft of the SOW to the meeting invitation once we work out the date with all of the parties. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, October 21, 2019 1:19 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: AOC meeting next week -- Stibnite Mine/Midas Gold

Settlement Communication
Protected from Disclosure By FRE 408

Elizabeth:

I am writing to confirm Midas Gold's agreement to postpone the meeting previously requested with EPA Regional Administrator Hladick in order to resume our AOC negotiations with the State of Idaho and the US Forest Service, in consultation with the Nez Perce and Shoshone Bannock Tribes. My understanding is that you will be trying to schedule that meeting for the week of October 29, 2019 (next week).

It would be helpful to develop and distribute an agenda for the meeting next week in order to make the best use of everyone's time. I expect the various parties will have differing needs, but some of them are likely to be shared by all participants. They include:

1. A schedule for conducting future meetings, including a target schedule for completing the AOC;
2. Copies of the SOW previously negotiated among EPA, the State, USFS and Midas;
3. An understanding as to which participants wish to be signatories to the AOC, and the weight to be given to the comments of participants who do not wish to be signatories;
4. Confidentiality, including the use of information obtained in negotiations in the collateral litigation brought by the Nez Perce Tribe against Midas.

v

Feel fre to give me a call if it would be useful. I am on a plane for the next two hours, but able to talk after 3:30 pm PST.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 10/22/2019 12:00:54 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Thanks, Elizabeth. We can confirm that we will attend at that time on November 1. Has an invitation to attend been extended to the Nez Perce Tribe?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Monday, October 21, 2019 3:52 PM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Hello, Brad. I have been coordinating with IDEQ, the USFS, and the Shoshone Bannock Tribe on a date that will work for all of the parties. Friday, November 1st from 9:00 a.m. to 11:00 a.m. is currently the time that works for the EPA team, Lisa O'Hara (IDEQ), Gary Fremerman (USFS) and Jill Grant (Shoshone-Bannock). Jill is checking with the Shoshone Bannock Tribe to see if someone from the Tribe can participate on that date. Would the Midas team be available on Friday from 9:00 a.m. to 11:00 a.m. on the 1st? Given the short notice, I expect many of the participants will choose to participate by phone.

I would add the following items to the agenda items that you suggested:

- A presentation by Midas regarding the specific areas on which Midas holds mine claims and an overlay of the areas where Midas has conducted exploratory activities. I realize that Midas has provided the parties ownership information in the past, but there is still some clarification needed on this topic. It would be helpful if Midas could distribute maps at the meeting.
- A broad/high level discussion regarding how the RI/FS should be conducted given the need to understand current environmental conditions and environmental conditions post mining by Midas. Several of us have had questions regarding how an RI/FS would be conducted at an operating mine and it would be good to start that discussion.

I will attach the latest draft of the SOW to the meeting invitation once we work out the date with all of the parties. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, October 21, 2019 1:19 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: AOC meeting next week -- Stibnite Mine/Midas Gold

Settlement Communication
Protected from Disclosure By FRE 408

Elizabeth:

I am writing to confirm Midas Gold's agreement to postpone the meeting previously requested with EPA Regional Administrator Hladick in order to resume our AOC negotiations with the State of Idaho and the US Forest Service, in consultation with the Nez Perce and Shoshone Bannock Tribes. My understanding is that you will be trying to schedule that meeting for the week of October 29, 2019 (next week).

It would be helpful to develop and distribute an agenda for the meeting next week in order to make the best use of everyone's time. I expect the various parties will have differing needs, but some of them are likely to be shared by all participants. They include:

1. A schedule for conducting future meetings, including a target schedule for completing the AOC;
2. Copies of the SOW previously negotiated among EPA, the State, USFS and Midas;
3. An understanding as to which participants wish to be signatories to the AOC, and the weight to be given to the comments of participants who do not wish to be signatories;
4. Confidentiality, including the use of information obtained in negotiations in the collateral litigation brought by the Nez Perce Tribe against Midas.

v

Feel fre to give me a call if it would be useful. I am on a plane for the next two hours, but able to talk after 3:30 pm PST.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 10/21/2019 10:51:59 PM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]
BCC: Pirzadeh, Michelle [Pirzadeh.Michelle@epa.gov]; Cerise, Kathy [Cerise.Kathryn@epa.gov]
Subject: RE: AOC meeting next week -- Stibnite Mine/Midas Gold

Hello, Brad. I have been coordinating with IDEQ, the USFS, and the Shoshone Bannock Tribe on a date that will work for all of the parties. Friday, November 1st from 9:00 a.m. to 11:00 a.m. is currently the time that works for the EPA team, Lisa O'Hara (IDEQ), Gary Fremerman (USFS) and Jill Grant (Shoshone-Bannock). Jill is checking with the Shoshone Bannock Tribe to see if someone from the Tribe can participate on that date. Would the Midas team be available on Friday from 9:00 a.m. to 11:00 a.m. on the 1st? Given the short notice, I expect many of the participants will choose to participate by phone.

I would add the following items to the agenda items that you suggested:

- A presentation by Midas regarding the specific areas on which Midas holds mine claims and an overlay of the areas where Midas has conducted exploratory activities. I realize that Midas has provided the parties ownership information in the past, but there is still some clarification needed on this topic. It would be helpful if Midas could distribute maps at the meeting.
- A broad/high level discussion regarding how the RI/FS should be conducted given the need to understand current environmental conditions and environmental conditions post mining by Midas. Several of us have had questions regarding how an RI/FS would be conducted at an operating mine and it would be good to start that discussion.

I will attach the latest draft of the SOW to the meeting invitation once we work out the date with all of the parties. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, October 21, 2019 1:19 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: AOC meeting next week -- Stibnite Mine/Midas Gold

Settlement Communication

Protected from Disclosure By FRE 408

Elizabeth:

I am writing to confirm Midas Gold's agreement to postpone the meeting previously requested with EPA Regional Administrator Hladick in order to resume our AOC negotiations with the State of Idaho and the US Forest Service, in consultation with the Nez Perce and Shoshone Bannock Tribes. My understanding is that you will be trying to schedule that meeting for the week of October 29, 2019 (next week).

It would be helpful to develop and distribute an agenda for the meeting next week in order to make the best use of everyone's time. I expect the various parties will have differing needs, but some of them are likely to be shared by all participants. They include:

1. A schedule for conducting future meetings, including a target schedule for completing the AOC;
2. Copies of the SOW previously negotiated among EPA, the State, USFS and Midas;
3. An understanding as to which participants wish to be signatories to the AOC, and the weight to be given to the comments of participants who do not wish to be signatories;
4. Confidentiality, including the use of information obtained in negotiations in the collateral litigation brought by the Nez Perce Tribe against Midas.

v

Feel fre to give me a call if it would be useful. I am on a plane for the next two hours, but able to talk after 3:30 pm PST.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 10/21/2019 8:18:31 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]
Subject: AOC meeting next week -- Stibnite Mine/Midas Gold

Settlement Communication
Protected from Disclosure By FRE 408

Elizabeth:

I am writing to confirm Midas Gold's agreement to postpone the meeting previously requested with EPA Regional Administrator Hladick in order to resume our AOC negotiations with the State of Idaho and the US Forest Service, in consultation with the Nez Perce and Shoshone Bannock Tribes. My understanding is that you will be trying to schedule that meeting for the week of October 29, 2019 (next week).

It would be helpful to develop and distribute an agenda for the meeting next week in order to make the best use of everyone's time. I expect the various parties will have differing needs, but some of them are likely to be shared by all participants. They include:

1. A schedule for conducting future meetings, including a target schedule for completing the AOC;
2. Copies of the SOW previously negotiated among EPA, the State, USFS and Midas;
3. An understanding as to which participants wish to be signatories to the AOC, and the weight to be given to the comments of participants who do not wish to be signatories;
4. Confidentiality, including the use of information obtained in negotiations in the collateral litigation brought by the Nez Perce Tribe against Midas.

Feel fre to give me a call if it would be useful. I am on a plane for the next two hours, but able to talk after 3:30 pm PST.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not

intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/16/2019 7:51:38 PM
To: Jill Grant [jgrant@jillgrantlaw.com]; Lisa.O'Hara@deq.idaho.gov
CC: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; 'Michael Bogert' [mbogert@midasgoldinc.com]; 'Andy Koulermos' [akoulermos@FormationEnv.com]; John Meyer [JMeyer@midasgoldcorp.com]
Subject: Response to Tribal and State Comments on SOW for Stibnite Mine -- in preparation for Monday, Nov 18 call

Jill and Lisa:

Thanks for your comments on the Statement of Work we have been working on with you, EPA and the US Forest Service. In advance of our call on Monday, I am providing these preliminary responses, in order to expedite our call. I anticipate that we can complete the call in an hour or less.

- Shoshone Bannock Tribe comments:

    - Scope

    The scope of the RI/FS investigation are the eight areas identified in the "Purpose" section, pp. 1-2. Midas Gold and EPA recognize that implementation of the PRO, once approved, may broaden the scope and EPA (Kathy Cerise) has proposed language to reflect this, to be added to the second paragraph of the Purpose section, which would read as follows:

    > *In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider potential mining activities in the PRO, any modifications and subsequent remediation.. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.*

    We believe that EPA's proposed language addresses your comment. With respect to the request for "some time to review the PRO in its entirety," Midas Gold of course has no objection and is happy to facilitate your review.

    - Role of the Tribe in Review Process

    In several places, the comments include clarification as to the role of the Tribe (and presumably the other Participants) in reviewing documents submitted under the SOW. The Tribe is correct in concluding that all documents will be submitted for review by the Participants. We understand this to be the understanding of all Participants, and will ask to confirm this on Monday.

    - Human Health Risk Assessment

    The Tribe has asked to confirm that the human health risk assessment will include "a tribal scenario." Midas Gold has no objection.

    - Uranium and Daughter Products

    We will defer to EPA on this comment

    - Vegetation Results

Seems fine to include these, but we defer to EPA.

- State Comments

  We read these as largely consistent with the Tribe's comment on its role in the review process, and have the same understanding as above, to be confirmed on Monday.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/16/2019 8:22:48 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Jill Grant [jgrant@jillgrantlaw.com]
CC: Cerise, Kathy [Cerise.Kathryn@epa.gov]; John Meyer [JMeyer@midasgoldcorp.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]
Subject: Stibnite Mine SOW/AOC

Thanks, Elizabeth. I believe you may have the maps, but John Meyer will in any event be sending them in advance of Monday's Zoom call.

I believe we have comments now from all Participants. I have send responses to Jill and Lisa on the Tribal and State comments and circulated them to you and Gary. I have read Gary's comments, which primarily have to do with issues of decision-making authority among government agencies, and are not directly relevant to the issues we will be discussing Monday. We are most interested in Kathy's comments on the technical issues raised (primarily by the Tribe). If we can have a good discussion of the technical issues outstanding (which seem to be fairly limited), then we can work toward a pre-final draft SOW, subject to your review of the Nez Perce comments. I understand the Nez Perce have committed to provide their comments on November 26, that they will provide those to EPA, which will distribute them to the AOC/SOW Participants.

Thanks for staying up late last night distribute the draft AOC, which we received after 2 am. My understanding is that the AOC will not be the subject of our Monday call, but (after you get some sleep) perhaps we can discuss a time toward the end of the coming week to review them.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Friday, November 15, 2019 6:18 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: RE: Stibnite Mine

In my last email I erroneously said that the Nez Perce will provide comments by the 19th. I meant to say that the Nez Perce will provide comments by November 26th. I apologize for raising expectations for an earlier response.

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07

Seattle, WA 98101
(206) 553-0016

From: McKenna, Elizabeth
Sent: Friday, November 15, 2019 2:36 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: Stibnite Mine

I heard back from the Mike Lopez. I shared the parties' comments on the SOW with Mike. The Nez Perce will provide comments to EPA by November 19th. EPA will provide its comments and revisions that reflect our review of all of the Parties' comments after we receive the Nez Perce's comments. Given that we will not have the Nez Perce Tribe's comments or an updated draft SOW by Monday, please let me know what topics the parties would like to focus on in our meeting.

Also, we have not yet received a map from Midas showing the areas in which Midas owns claims, has other ownership interests, and has conducted exploratory drilling. This relevant to establishing the scope of the RI/FS.

I will sending a draft AOC to the parties soon.

- Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/17/2019 10:07:11 PM
To: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Jill Grant [jgrant@jillgrantlaw.com]
CC: Michael Bogert [mbogert@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]; Laurel Sayer [lsayer@midasgoldinc.com]; Jonathan E. Rackoff [rackoff@martenlaw.com]
Subject: Agenda for Nov 18 call
Attachments: StibniteSOW[3].docx; 2019-07-25 Draft Stibnite SOW (2) + state comments 11 12 19.docx; 2019-11-13 SBT Comments on Draft SOW for Stibnite Mine RIFS.docx

Elizabeth, Jill, Gary and Lisa:

My thought for the call tomorrow at 10 am is to go through the comments filed by the Shoshone Bannock Tribe, the State of Idaho and the US Forest Service one by one, and to get any comments from EPA and from Midas out on the table and resolved. We should also set up a call to review any additional comments, if any, received from the Nez Perce Tribe. My understanding is that they have been promised, but not before Nov. 26th, which is essentially the end of the short Thanksgiving holiday week. Perhaps we can set a call for Monday, December 2 with the goal of finalizing the SOW. Please advise of your availability, at 10 am PST.

Midas will be prepared to have an attorney call next week to discuss the AOC Elizabeth circulated late Friday night. Please let me know your availability Thanksgiving week and we will coordinate schedules.

For ease of reference, I attach the three sets of comments received (as revised or updated), and Midas's comments (sent Saturday, Nov. 16) below. The attachments are from the Forest Service (titled "Stibnite SOW"), the State (titled 2019-07-25 Draft)" and the Shoshone Bannock Tribe (titled 2019-11-13 SBT Comments").

Talk to you tomorrow.

Jill and Lisa:

Thanks for your comments on the Statement of Work we have been working on with you, EPA and the US Forest Service. In advance of our call on Monday, I am providing these preliminary responses, in order to expedite our call. I anticipate that we can complete the call in an hour or less.

- Shoshone Bannock Tribe comments:
    - Scope

  The scope of the RI/FS investigation are the eight areas identified in the "Purpose" section, pp. 1-2. Midas Gold and EPA recognize that implementation of the PRO, once approved, may broaden the scope and EPA (Kathy Cerise) has proposed language to reflect this, to be added to the second paragraph of the Purpose section, which would read as follows:

  > *In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider potential mining activities in the PRO, any modifications and subsequent remediation..*

This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

We believe that EPA's proposed language addresses your comment. With respect to the request for "some time to review the PRO in its entirety," Midas Gold of course has no objection and is happy to facilitate your review.

- Role of the Tribe in Review Process

In several places, the comments include clarification as to the role of the Tribe (and presumably the other Participants) in reviewing documents submitted under the SOW. The Tribe is correct in concluding that all documents will be submitted for review by the Participants. We understand this to be the understanding of all Participants, and will ask to confirm this on Monday.

- Human Health Risk Assessment

The Tribe has asked to confirm that the human health risk assessment will include "a tribal scenario." Midas Gold has no objection.

- Uranium and Daughter Products

We will defer to EPA on this comment

- Vegetation Results

Seems fine to include these, but we defer to EPA.

- State Comments

We read these as largely consistent with the Tribe's comment on its role in the review process, and have the same understanding as above, to be confirmed on Monday.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Appendix 1

STATEMENT OF WORK FOR THE
STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY
Valley County ID near Yellow Pine, ID

Purpose

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Stibnite Mine Site ("Site") located in northwest Idaho approximately 14 miles from the town of Yellow Pine (see Figure 1). The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of Work that will be carried out by Midas Gold Idaho, Inc. ("Midas Gold" or "Respondent") as it implements the RI/FS at the Site.

In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider potential mining acitivies in the PRO, any modifications and subsequent remediation ~~must be consistent with the PRO and the subsequent restoration~~. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

The Site is defined as the ~~features~~ areas described below (general locations summarized on Figure 2) and the areal extent of contamination from those features and all suitable areas in ~~very~~ close proximity to the contamination necessary for response action implementation:

1. **Yellow Pine Pit (Figure 3)** – The Yellow Pine Pit (formerly known as "The Glory Hole") was actively mined during the 1930s through the 1950s for antimony, tungsten, gold and silver. The pit is located on Midas Gold patented land, and most of the waste rock dumps associated with the pit are adjacent to the pit; some of the waste rock dumps are located on USFS managed land. During active mining, the East Fork of the South Fork of the Salmon River (EFSFSR) was routed around the pit through the Bailey Tunnel but was allowed to return to its natural course through the pit after the Bailey Tunnel was abandoned in the mid-1950s. The EFSFSR now runs through the pit, but does not currently support fish passage to the headwaters. The Yellow Pine Pit, and the majority of waste rock dumps associated with it, are within the footprint of Midas Gold's proposed PRO.

Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Strikethrough

ED_004715_00093899-00001

2. **Bradley Tailings Pile (Figure 4)** – The Bradley Tailings Pile, also known as the Historical Tailings and Spent Ore Disposal Area, is located on Midas Gold patented land. Approximately 3 million tons of mine tailings generated during the 1940s and 1950s are stored in this area, and they are overlain by approximately 6 million tons of spent heap leach ore placed in the 1980s and 1990s. The downstream end of the Tailings Pile is constrained by a structure known as the Keyway Dam, and a wetland exists downgradient of the Keyway Dam, which is also referred to as the Keyway Marsh. Meadow Creek is diverted around the south side of the Tailings Pile. The Bradley Tailings Pile is within the footprint of Midas Gold's proposed PRO.

3. **Hangar Flats Tailings Pile (Figure 5)** – The Hangar Flats Tailings Pile, also known as the Hecla Heap Leach Facility, is a reclaimed heap-leach facility which was built and operated in the 1990s to extract oxide gold and silver. The facility is located on Midas Gold controlled patented land, and is within the footprint of Midas Gold's proposed PRO.

4. **Bailey Tunnel (Figure 6)** – The Bailey Tunnel was constructed in the early 1940s to divert the EFSFSR around the Yellow Pine Pit and into Sugar Creek to facilitate open pit mining operations. The tunnel was no longer used after the mid-1950s, following cessation of open pit mining activities. The Bailey Tunnel is on Midas Gold patented land, and is within the footprint of Midas Gold's proposed PRO.

5. **DMEA Adit and Waste Rock Dump (Figure 7)** – The Defense Minerals Exploration Administration (DMEA) Adit and Waste Rock Dump are mining-related disturbances resulting from underground exploration activities during the 1950s. The adit and dump are located on USFS managed land, and are not within the footprint of the Midas Gold PRO.

6. **Bonanza Adit (Figure 8)** – The Bonanza Adit area is a mining-related disturbance in the Sugar Creek drainage resulting from underground exploration activities during the 1930s and 1940s. The Bonanza Adit area is located on USFS managed land, and is not within the footprint of the Midas Gold PRO.

7. **Cinnabar Tunnel (Figure 9)** – The Cinnabar Tunnel is a mining-related disturbance resulting from underground exploration activities during the late 1920s and early 1930s. The Tunnel is located on USFS managed land; the tunnel portal is within the footprint of the Midas Gold PRO.

8. **Meadow Creek Adit (Figure 10)** – The Meadow Creek Adit and associated waste rock dumps are mining-related disturbances that resulted from underground mining activities from the 1920s through the 1940s. The adit and waste rock dumps are located on Midas Gold controlled patented land, and are within the footprint of Midas Gold's proposed PRO.

ED_004715_00093899-00002

This RI/FS SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language. This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h] [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h]commonly called the National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the "AOC." Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

Scope

The specific RI/FS activities to be conducted at the Site are set forth in ~~seven~~ six separate tasks.

Task 1 – Scoping
Task 2 – Community Relations
Task 3 – Site Characterization
Task 4 – Treatability Studies
Task 5 – Feasibility Study
Task 6 – Detailed Analysis of Remedial Alternatives

Oversight

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code§§ 39-101 to 39-130; the Hazardous Waste Management Act of Idaho, Idaho Code§§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code§§ 39-3601 et seq. As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Commented [LO1]: Although EPA is lead agency, there are several reference to "EPA's review and approval" that should also include the support agencies' role in review/comment for submittals. Instead of EPA, use of "Agencies approval" or "for Agencies' review and approval" to include DEQ, Forest Service and Shoshone-Bannock Tribes. Perhaps language in the Introduction section could be added to clarify EPA as lead agency with DEQ, Forest Service & and Shoshone Bannock as support agencies.

Commented [LO2]: Same as comment 1

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must

ED_004715_00093899-00003

document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

Schedule

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

Guidance

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

Roles and Responsibilities

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the AOC. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

Commented [LO3]: Will support agencies be asked/required to concur in selection of a remedy?

Remedy Requirements

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

ED_004715_00093899-00004

TASK 1 - SCOPING

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

Commented [LO4]: Same as comment 1

The following activities shall be performed by the Respondent as a function of the project planning process.

a. Site Background

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

Collect and analyze existing data and document the need for additional data

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA. Guidance on systematic planning using the data quality objectives process (EPA QA/G-4). Washington, D.C.: 121. [HYPERLINK "http://www.epa.gov/quality/qs-docs/g4-final.pdf"], U.S. EPA (2006)

Commented [LO5]: Same as comment 1

ED_004715_00093899-00005

Conduct site visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

b. *Project Planning*

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

ED_004715_00093899-00006

Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

Commented [LO6]: Same as comment 1

Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

ED_004715_00093899-00007

c. *Scoping Deliverables*

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan will ~~fully~~ ~~account~~ take in to consideration for the timing and scope of potential mining and processing activities associated with the PRO. This could include a phased approach to focus on issues of most concern or requiring early action. The Work Plan shall be developed in conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Commented [LO7]: Same as comment 1

Formatted: Strikethrough

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support

ED_004715_00093899-00008

Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP, and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision) and specifically should contain the twenty-four elements specified in Table 11 – List of QA Project Plan Elements, EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for

ED_004715_00093899-00009

the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

Potential Target Analytes

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

Chemicals/Analytes of Potential Concern for Surface Water

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium (III)
- Chromium (VI)
- Cobalt

ED_004715_00093899-00010

- Copper
- Hardness
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrogen, total Kjeldahl
- Phosphorus
- Potassium
- Selenium
- Silver
- Sodium
- Sulphate
- Thallium
- Tungsten
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Uranium
- Vanadium
- Zinc

Field Analyses
- Conductivity
- Dissolved Oxygen
- Flow
- pH
- Temperature

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Commented [LO8]: Same as comment 1

Chemicals/Analytes of Potential Concern for Sediments:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for sediment sampling stations.

Laboratory Analyses
- Antimony

ED_004715_00093899-00011

- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Soils/Waste Rock:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for soils/waste rock sampling.

Laboratory Analyses
- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Uranium
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Vegetation:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for vegetation sampling stations.

ED_004715_00093899-00012

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Groundwater

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chloride
- Chromium III
- Chromium VI
- Cobalt
- Copper
- Hardness
- Iron

ED_004715_00093899-00013

- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrate/nitrite as N
- Nitrogen (TKN)
- Orthophosphate
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium
- Total Dissolved Solids
- Total Suspended Solids
- Total Organic Carbon
- Tungsten
- Uranium
- Vanadium
- Zinc

Field Analyses

- Conductivity
- Dissolved Oxygen or ORP
- Ferric Iron
- Ferrous Iron
- Nitrite
- pH
- Temperature

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

ED_004715_00093899-00014

TASK 2 - COMMUNITY RELATIONS

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of McCall, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

Commented [LO9]: Only EPA or Support Agencies too?

TASK 3 - SITE CHARACTERIZATION

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

Commented [LO10]: Notification to Support Agencies also.

ED_004715_00093899-00015

a. *Field Investigation*

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

Implement and document field support activities

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. The Respondent shall also notify the RPM upon completion of field support activities.

Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

ED_004715_00093899-00016

~~Describe~~ Delineate the nature and extent of contamination

The Respondent shall gather information to ~~describe~~ delineate the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

b. *Data Analyses*

Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

c. *Data Management Procedures*

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

ED_004715_00093899-00017

Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See [HYPERLINK "http://www.epa.gov/storet/wqx.hmtl)" \h]

d. Site Characterization Deliverables

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall

ED_004715_00093899-00018

document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

Commented [LO11]: Same as comment 1

Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action, but will consider implementation of the PRO. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

Contaminant Identification – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).

Exposure Assessment – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

Toxicity Assessment – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity). EPA has prepared chemical screening tables with updated toxicity values and Preliminary Remediation Goals for various land uses available from: [HYPERLINK "https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables"]

ED_004715_00093899-00019

Risk Characterization – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

TASK 4 - TREATABILITY STUDIES

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

a. Determination of Candidate Technologies and of Need for Testing

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the range of technologies required for the development and analysis of alternatives (Task 5 and 6) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

Commented [LO12]: Same as comment 1

Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit

ED_004715_00093899-00020

to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

Commented [LO13]: Same as comment 1

b. *Treatability Testing and Deliverables*

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate

ED_004715_00093899-00021

full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 5 - FEASIBILITY STUDY

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

a. Remedial Alternative Development

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

<u>Refine and document remedial action objectives</u>

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

ED_004715_00093899-00022

Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

ED_004715_00093899-00023

TASK 6 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

a. Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative, the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

Compare alternatives against each other and document the comparison of alternatives

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

Commented [LO14]: Will there be consultation with the Support Agencies?

b. Detailed Analysis Deliverables

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

ED_004715_00093899-00024

Feasibility Study report

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

Commented [LO15]: This is the first reference to Support Agencies in the draft SOW. Should Support Agencies be defined? Does the FS report need approval in addition to review and comment?

ED_004715_00093899-00025

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA -330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

ED_004715_00093899-00026

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008. "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

Attachments

Attachment A – Suggested RI/FS Work Plan Format

Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
   - Types and volumes of waste present
   - Potential pathways of contaminant migration/preliminary public health and environmental impacts
   - Preliminary identification of operable units
   - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
   - DQO needs
   - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
   - Staffing
   - Coordination
9. References

Appendices

ED_004715_00093899-00028

Attachment B – Suggested Format for SAP (FSP and QAPP)

FSP

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

QAPP

Project Management
A1 Title and Approval Sheet
A2 Table of Contents
A2 Distribution List
A4 Project/Task Organization
A5 Problem Definition/Background
A6 Project/Task Description
A7 Quality Objectives and Criteria
A8 Special Training/Certifications
A9 Documentation and Records

Data Generation and Acquisition

B1 Sampling Process Design (Experimental Design)
B2 Sampling Methods
B3 Sample Handling and Custody
B4 Analytical Methods
B5 Quality Control
B6 Instrument/Equipment Testing, Inspection, and Maintenance
B7 Instrument/Equipment Calibration and Frequency
B8 Inspection/Acceptance of Supplies and Consumables
B9 Non-direct Measurements
B10 Data Management

Assessment and Oversight
C1 Assessments and Response Actions
C2 Reports to Management

Data Validation and Usability
D1 Data Review, Verification, and Validation
D2 Verification and Validation Methods
D3 Reconciliation with User Requirements

ED_004715_00093899-00029

~~Title Page~~

~~Table of Contents~~

~~1. Project Description~~

~~2. Project Organization and Responsibilities~~

~~3. QA Objectives for Measurement~~

~~4. Sampling Procedures~~

~~5. Sample Custody~~

~~6. Calibration Procedures~~

~~7. Analytical Procedures~~

~~8. Data Reduction, Validation, and Reporting~~

~~9. Internal Quality Control~~

~~10. Performance and Systems Audits~~

~~11. Preventative Maintenance~~

~~12. Data Assessment Procedures~~

~~13. Corrective Actions~~

~~14. Quality Assurance Reports~~

Attachment C – Suggested RI Report Format

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization
2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology
4. Nature and Extent of Contamination

ED_004715_00093899-00031

4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:

4.1.1 Sources (lagoons, sludges, tanks, etc.)

4.1.2 Soils and Vadose Zone

4.1.3 Ground Water

4.1.4 Surface Water and Sediments

4.1.5 Air

5. Contaminant Fate and Transport

5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)

5.2 Contaminant Persistence

5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest

5.3 Contaminant Migration

5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)

5.3.2 Discuss modeling methods and results, if applicable

6. Baseline Risk Assessment

6.1 Human Health Evaluation

6.1.1 Exposure Assessment

6.1.2 Toxicity Assessment

6.1.3 Risk Characterization

6.2 Environmental Evaluation

7. Summary and Conclusions

7.1 Summary

7.1.1 Nature and Extent of Contamination

7.1.2 Fate and Transport

7.1.3 Risk Assessment

7.2 Conclusions

7.2.1 Data Limitations and Recommendations for Future Work

7.2.2 Recommended Remedial Action Objectives

Appendices

A. Technical Memorandum on Field Activities (if available)

B. Analytical Data and QA/QC Evaluation Results

C. Risk Assessment Methods

ED_004715_00093899-00032

Attachment D – Suggested Format for Feasibility Study Report

Executive Summary

1. Introduction
   - 1.1 Purpose and Organization Report
   - 1.2 Background Information (Summarized from RI Report)
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Nature and Extent of Contamination
     - 1.2.4 Contaminant Fate and Transport
     - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
   - 2.1 Introduction
   - 2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
     - Contaminants of interest
     - Allowable exposure based on risk assessment (including ARARs) Development of remediation goals
   - 2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
   - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:
     - 2.4.1 Identification and Screening of Technologies
     - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
   - 3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
   - 3.2 Screening of Alternatives (if conducted)
     - 3.2.1 Introduction
     - 3.2.2 Alternative 1
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.2 Alternative 2
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation

ED_004715_00093899-00033

3.2.3 Alternative 3
3.2.3.1 Description
3.2.3.2 Evaluation

4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Evaluation
4.2.2 Alternative 2
4.2.2.1 Description
4.2.2.2 Evaluation
4.2.3 Alternative 3
4.2.3.1 Description
4.2.3.2 Evaluation
4.3 Comparative Analysis

ED_004715_00093899-00034

Attachment E – Stibnite Mine Remedial Investigation and Feasibility Study (RI/FS) Statement of Work (SOW) Schedule

RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

ED_004715_00093899-00035

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

[1]Documents may initially be released as "draft final" pending final resolution of issues.

ED_004715_00093899-00036

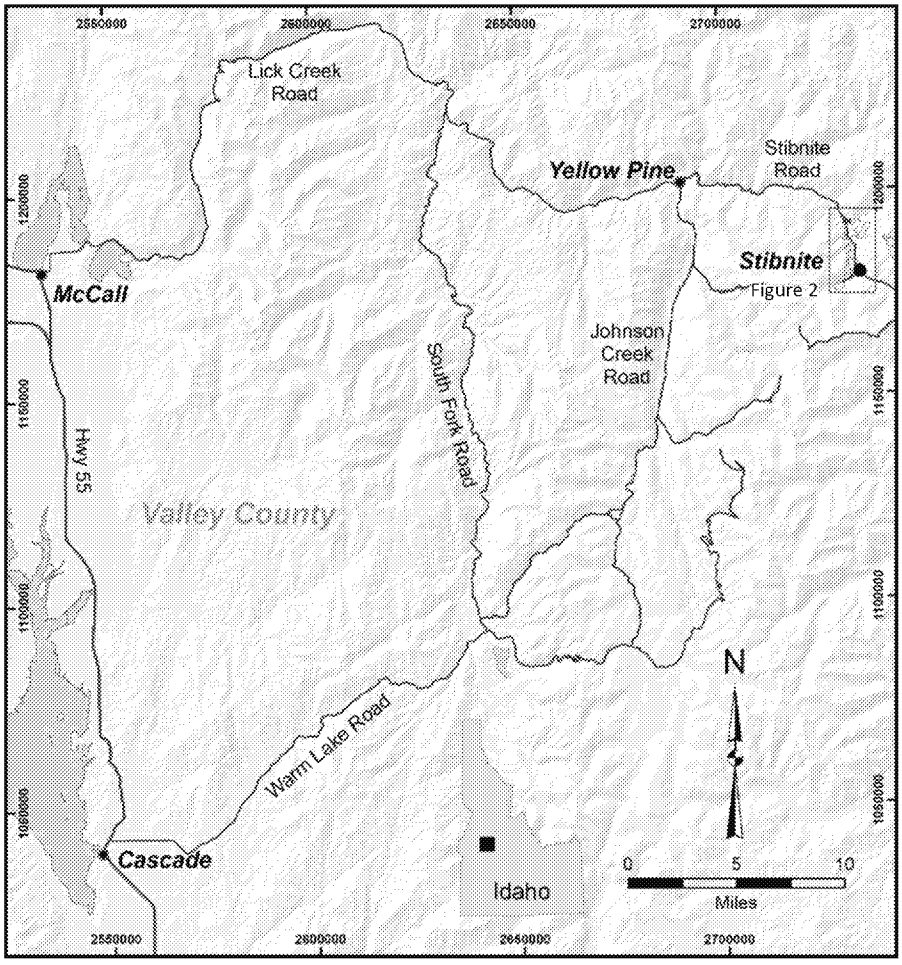


Figure 1 – Site Location

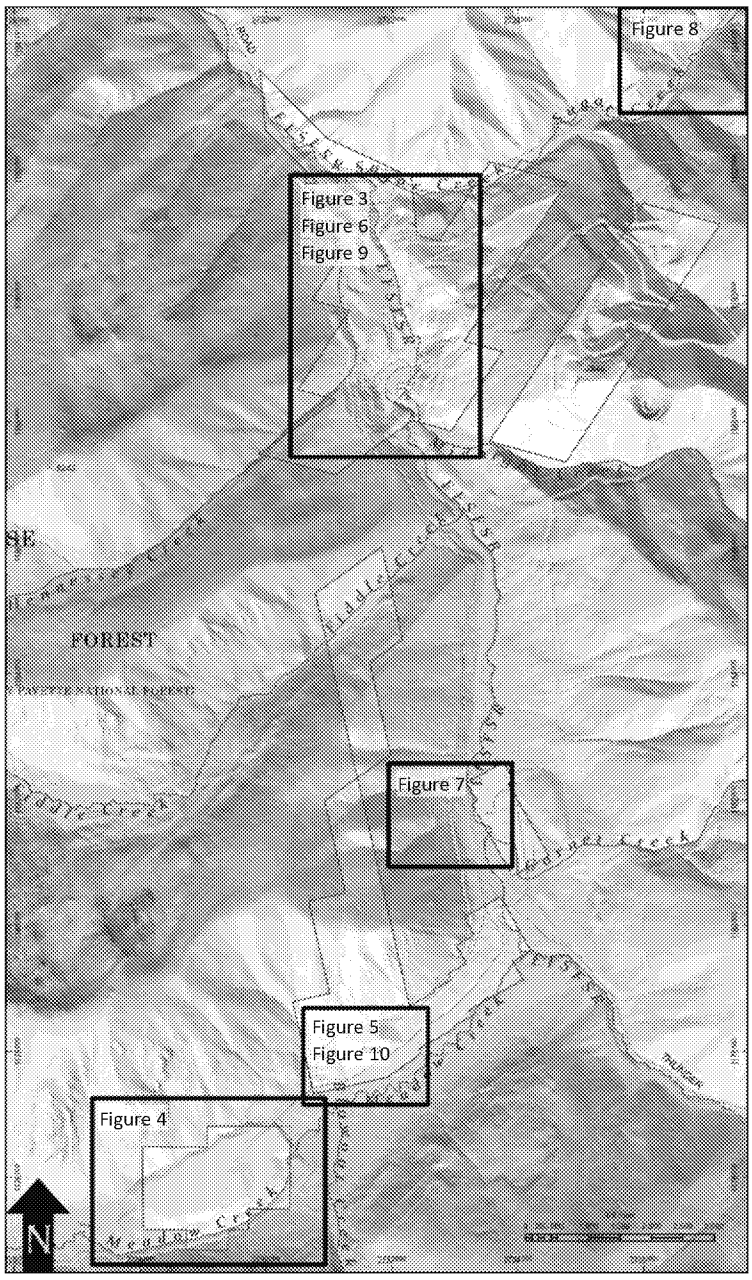


Figure 2 – Stibnite Mine Site

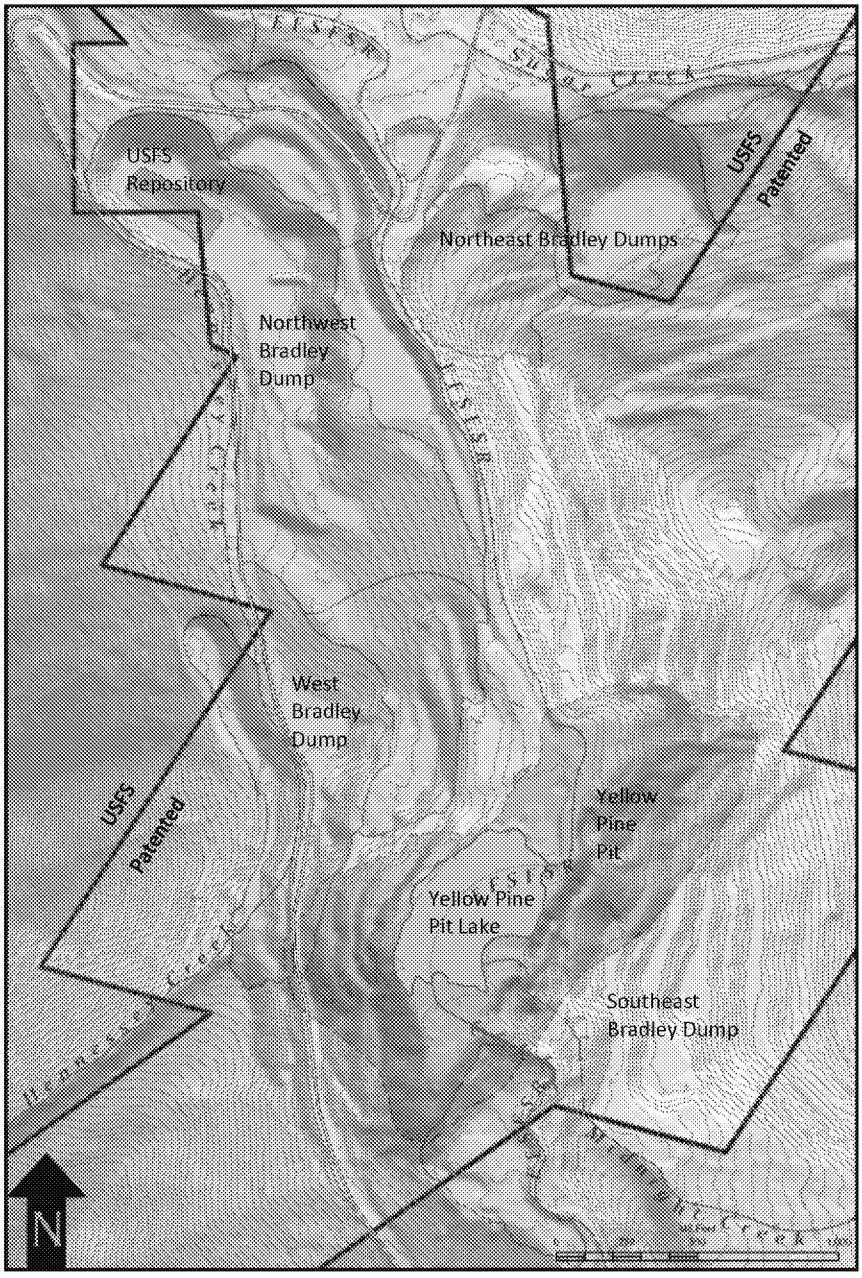


Figure 3 –Yellow Pine Pit

ED_004715_00093899-00039

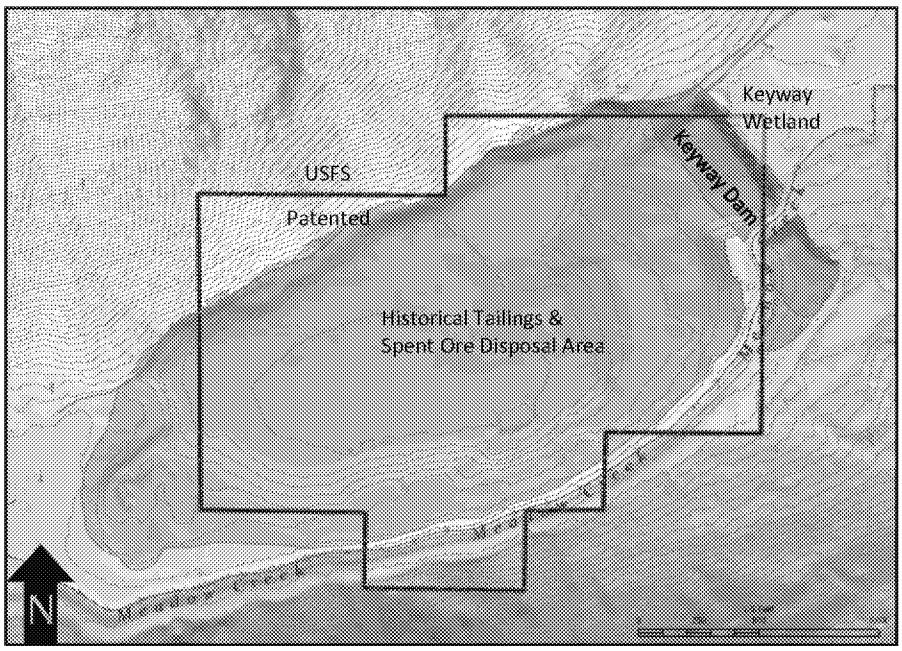


Figure 4 – Historical Tailings and Spent Ore Disposal Area

ED_004715_00093899-00040

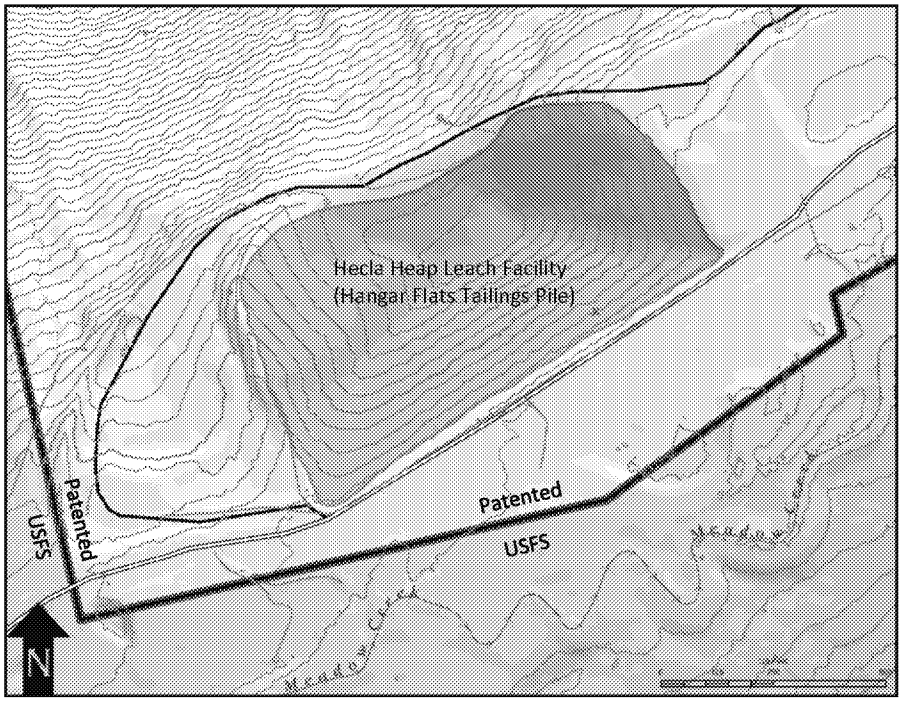


Figure 5 – Hecla Heap Leach Facility

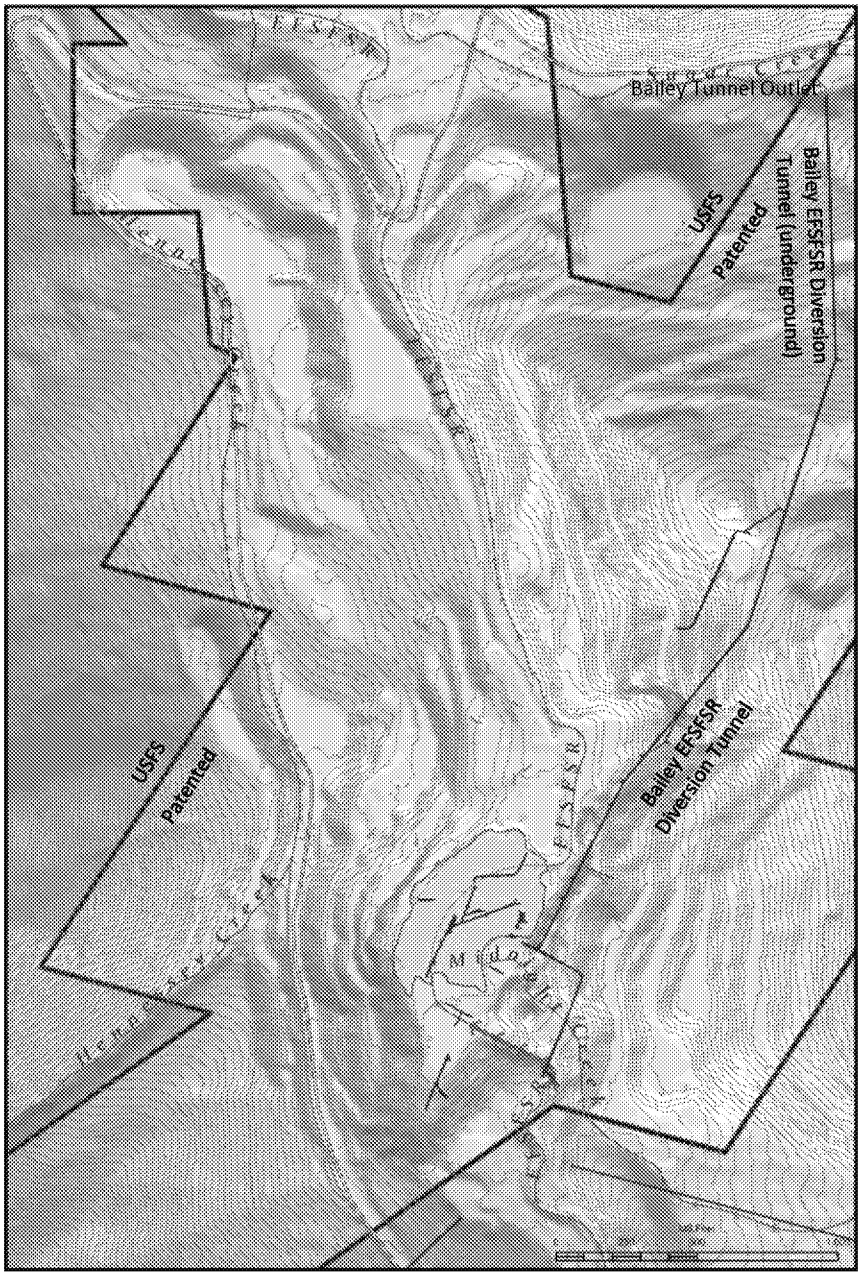


Figure 6 – Bailey Tunnel

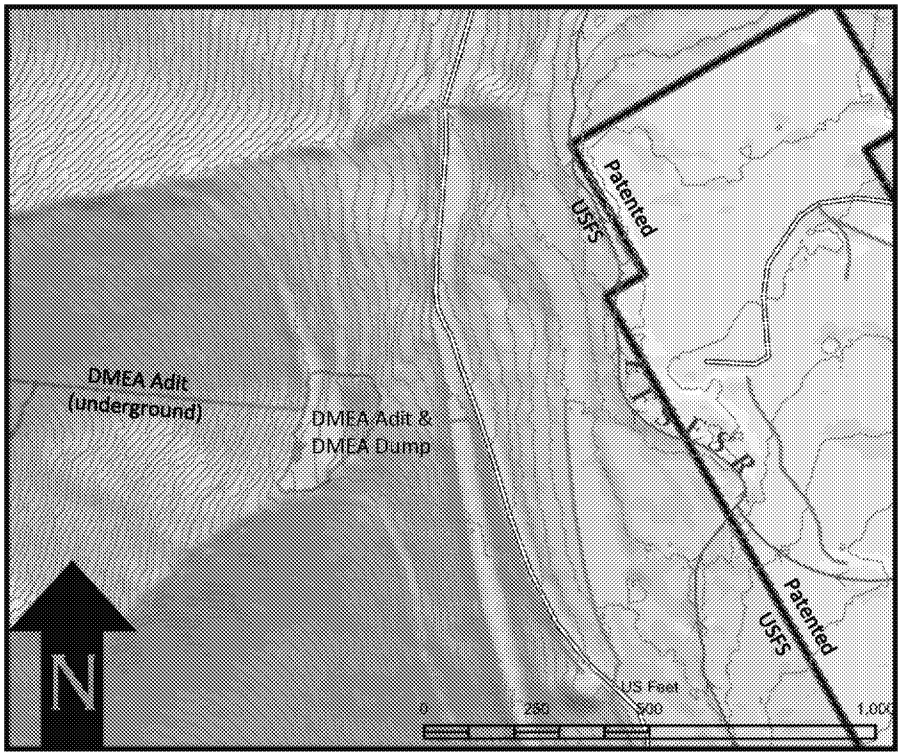


Figure 7 – Defense Minerals Exploration Administration Adit and Waste Rock Dump

ED_004715_00093899-00043

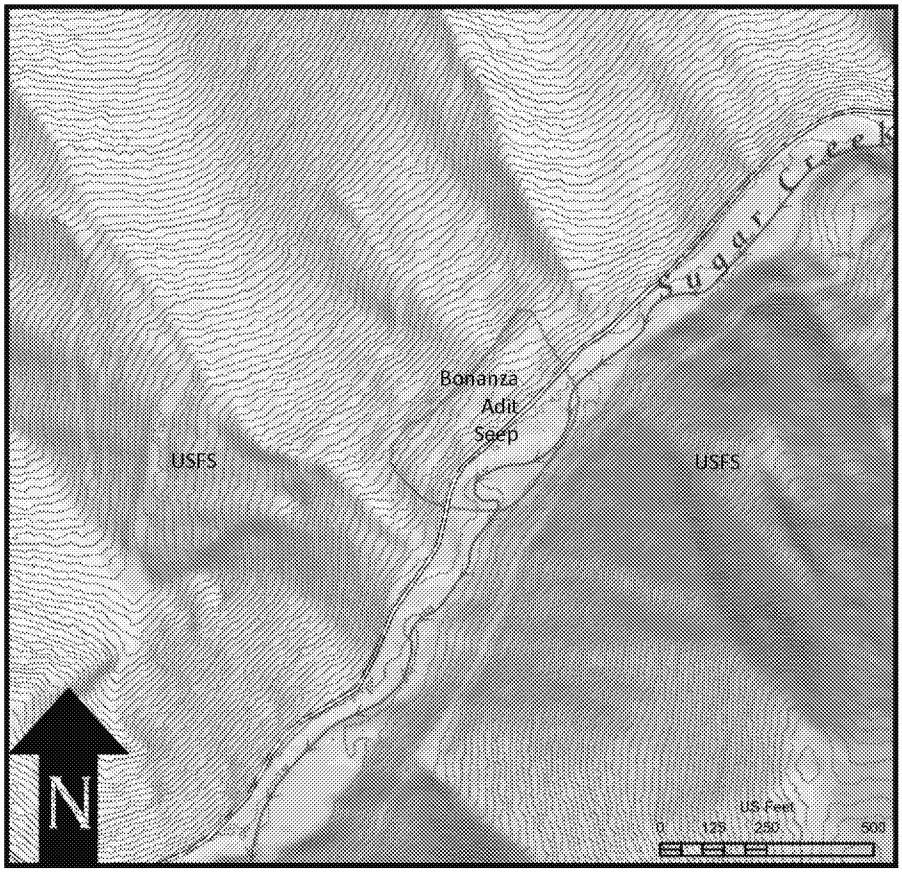


Figure 8 – Bonanza Adit

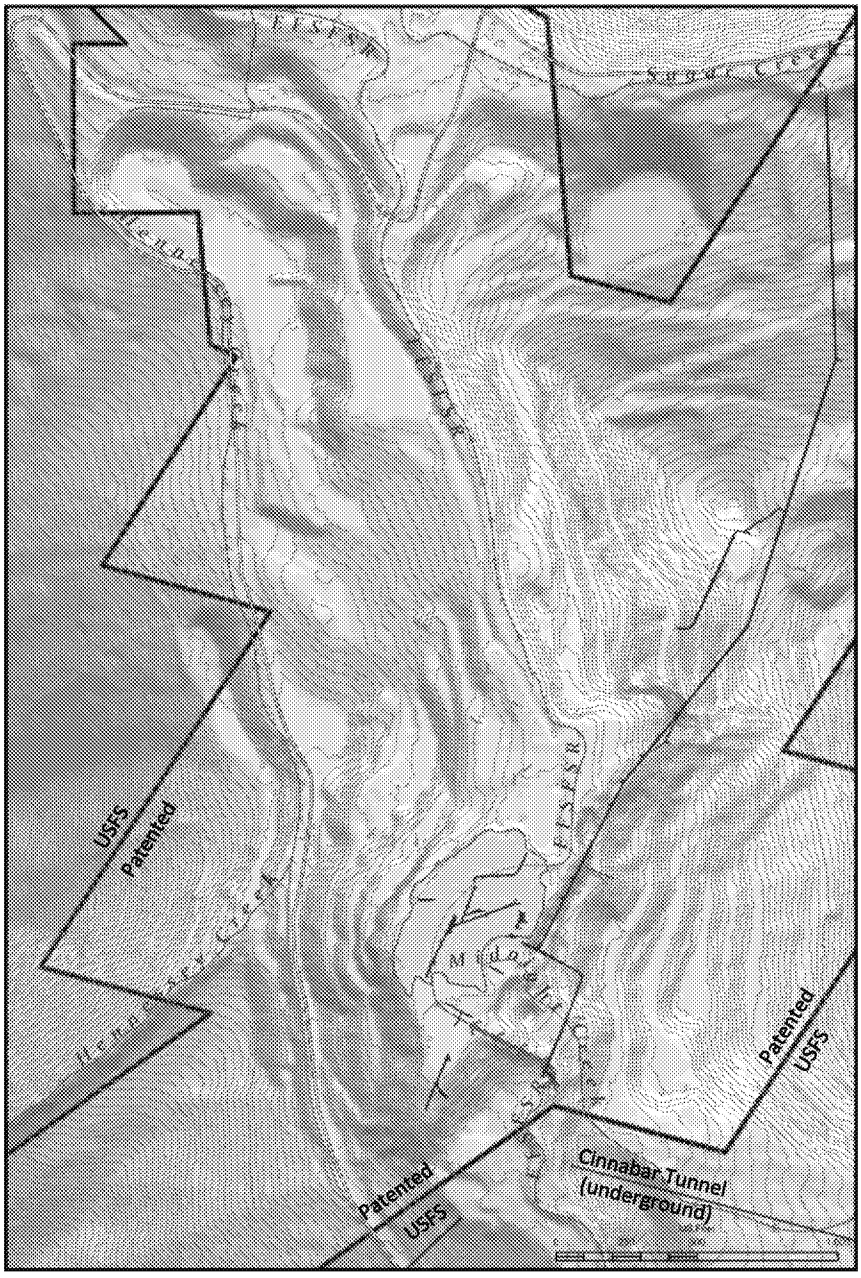


Figure 9 – Cinnabar Tunnel

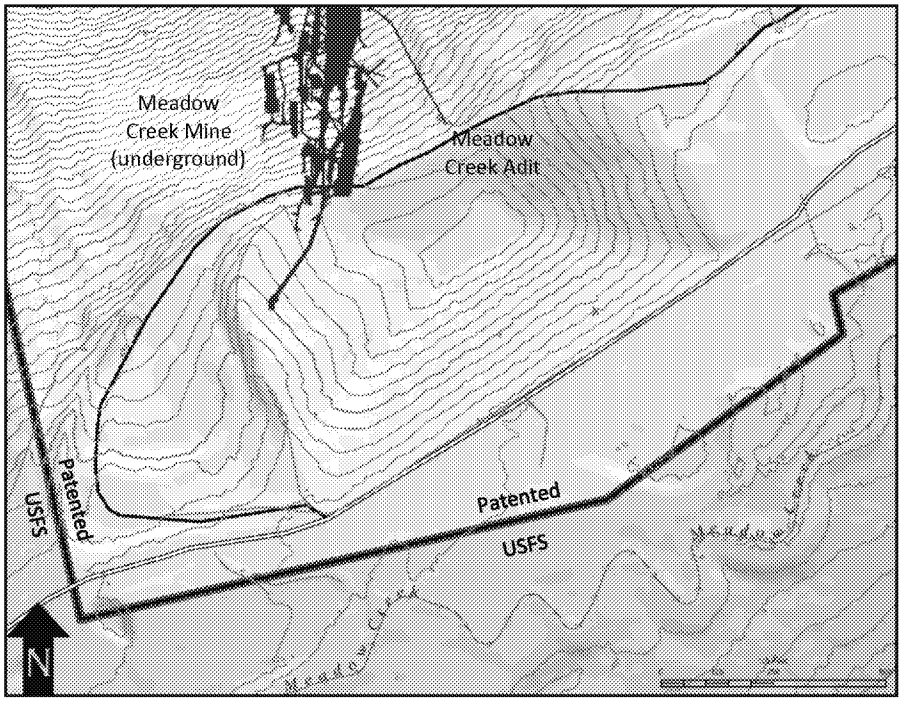


Figure 10 – Meadow Creek Adit

ED_004715_00093899-00046

Draft Statement of Work for Stibnite Mine RI/FS
Shoshone-Bannock Tribes' Comments
November 12, 2019, updated November 13, 2019

General Comments and Questions:

1. Many places throughout the Statement of Work (SOW) should refer to "analyses" rather than "analysis."
2. Does the Mining Plan of Restoration and Operations (PRO) cover all of Midas Gold's patented land, other than the DMEA Adit and Waste Rock Dump (#5 on page 2) and the Bonanza Adit (#6)? What are the plans for the parcels of land outside the PRO?
3. The SOW refers to the PRO, which is very lengthy; we would like some time to review the PRO in its entirety. Our initial comments regarding the PRO are as follows: (1) The PRO refers to a Technical Report and a Pre-Feasibility Report that have been conducted, and we're assuming much of the data in these reports will be used for the RI/FS. The data should be of Tier 4 Quality if it will be used for human health risk purposes. (2) The PRO references Canadian Mining Principles, N143-101. We think that U.S. guidance should be used.

Purpose/Description of the Site:

Page 2 - The Site is defined by 8 areas. Areas #5 and #6 (DMEA Adit and Waste Rock Dump and Bonanza Adit) are listed as not within the footprint of the Midas Gold PRO. The distance of these two areas from proposed mining activities should be listed, as well as any overflow expectations, connectivity of features to proposed mining, tailings, and expected or unexpected impacts on the hydrogeology of both surface water and groundwater.

Oversight:

Page 3 – The Shoshone-Bannock Tribes ("SBT" or "Tribes") should be listed as an oversight Agency, along with the EPA, USFS and IDEQ. [Note –The term "Agency" in the rest of these comments is intended to include the SBT.]

SBT should receive copies of all reports, etc., because the Tribes plan to comment on these documents as part of their oversight responsibilities. This seems to be what Midas Gold intended, since Attachment E (schedule) refers throughout to "consolidated Agency comments." We added specific references to SBT/Tribes (which could be changed to "Agencies" assuming SBT is added as an "Agency" and assuming that the other Agencies want to be included) where we thought appropriate, just to be sure. For example, on page 3 the last full paragraph should say "Respondent shall submit all documents or deliverables required as part of this SOW to EPA <u>and the Tribes</u>, for EPA's <u>and the Tribes'</u> review and <u>EPA's</u> approval." The last paragraph should say "Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA <u>and the Tribes</u> to aid in project planning."

Guidance:

Page 4 – All Guidance documents followed should be the most up to date drafts.

Roles and Responsibilities:

Page 4 – Please add the underlined language for clarity, since there's a required process for EPA to go through before issuing a ROD: "At the completion of the RI/FS . . . in a Record of Decision (ROD), consistent with the NCP."

Task 1 - Scoping:

Page 4 – "Respondent shall document the specific project scope in the RI/FS Work Plan, which shall be consistent with the AOC." Also, "During the scoping process, the Site- specific objectives of the RI/FS . . . will be proposed by the Respondent but will be determined ~~and approved~~ by EPA."

Page 5 – "When scoping the specific aspects of this project, Respondent shall meet with EPA and the Tribes either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site."

Page 5 – "The Respondent, ~~and~~ EPA and the Tribes shall conduct a Site visit during the project scoping phase."

Page 6 – "The Respondent shall meet with EPA's Remedial Project Manager (RPM) and with the appropriate contact from the Tribes (either in person or telephonically) regarding the following activities and before drafting the scoping deliverables listed below."

Page 7 – Document the Need for Treatability Studies – "Should treatability studies be determined to be necessary, a testing plan . . . should be submitted to EPA and the Tribes for review and for EPA's approval."

Page 7 – Scoping Deliverables – "These plans must be reviewed by EPA and the Tribes and approved by EPA prior to the initiation of field activities."

Page 7 - RI/FS Work Plan – "A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM and the Tribes for review and for EPA's approval."

Pages 11 through 14 – Potential Target Analytes – The only radiological constituent listed is uranium, and it isn't listed for all media. Since uranium may be a concern, as indicated by it being listed as a COPC for surface water, then uranium and all associated uranium daughters should be listed as COPCs in all media.

Task 2 - Community Relations:

Page 14 – "Respondent may assist by providing information regarding the Site's history, participating in public and community (including tribal community) meetings, and preparing fact sheets for distribution to the general public and relevant tribes, including the Shoshone-Bannock Tribes." All impacted tribes should be included, even though the Shoshoni historically were the main tribes in this area.

Also, SBT would like to have a copy of the administrative record kept at Fort Hall so that it is readily available to tribal members, especially those who exercise their treaty rights in this area. And finally, "Any PRP-conducted community relations activities will be subject to oversight by EPA and the other Agencies."

Task 3 - Site Characterization

Page 15, 2d ¶ – "The Respondent shall notify the RPM and the relevant contacts for the other Agencies at least two weeks in advance of the field work regarding the planned dates for field activities . . . ."

Same edit in last sentence on pages 15-16: "The Respondent shall notify the RPM and the relevant contacts for the other Agencies at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. The Respondent shall also notify the RPM and the relevant contacts for the other Agencies upon completion of field support activities."

Page 17 – "All data and programming, including any proprietary programs, shall be made available to EPA and the Tribes together with a sensitivity analysis.

Page 18 – same edit: "All validated data shall be made available to EPA and the Tribes in electronic format. . . . Field and validated analytical data results for all media sampled shall be submitted to EPA and the Tribes by uploading the data . . . ."

Page 18 – Similarly, "The Respondent shall prepare and submit a draft RI report to the RPM for review and approval, and shall provide a copy of the report to the Tribes."

Page 19 – The Tribes would provide comments on the report, but they could do so directly to Midas Gold or through EPA (see first complete sentence at the top of p. 19).

Page 19 – BLRA – The EPA human health risk assessment must include a tribal scenario.

Task 4 – Treatability Studies

Page 20 – first sentence: "Respondent shall identify in a technical memorandum, subject to EPA and the Tribes' review and EPA's approval, candidate technologies for a treatability studies program during project planning (Task 1)."

Page 20 – Evaluation of Treatability Studies – "Once a decision has been made to perform treatability studies, the Respondent and EPA, in consultation with the Tribes, will decide the types of treatability testing to utilize. . . . the Respondent shall either submit to the RPM and the Tribes a treatability testing work plan or an amendment to the original Site work plan for EPA's and the Tribes' review and EPA's approval."

Pages 20-21 – Treatability Testing Work Plan – "The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's and the Tribes' review and EPA's approval." Same edit to Treatability Study SAP.

Task 5 – Feasibility Study

Page 22 – "The modified PRGs shall be documented in a technical memorandum that will be reviewed by EPA and the Tribes and approved by EPA."

Attachment C – Suggested RI Report Format

Vegetation results need to be included here so the Tribes can see what has been evaluated. If they aren't included, this will be a major data gap.

Appendix 1

STATEMENT OF WORK FOR THE
STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY
Valley County ID near Yellow Pine, ID

Purpose

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Stibnite Mine Site ("Site") located in northwest Idaho approximately 14 miles from the town of Yellow Pine (see Figure 1). The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of Work that will be carried out by Midas Gold Idaho, Inc. ("Midas Gold" or "Respondent") as it implements the RI/FS at the Site.

In September 2016, Midas Gold filed a proposed Plan of ~~Restoration and~~ Operations (~~"PROproposed Plan of Operations~~ titled the Stibnite Gold Project Plan of Restoration and Operations"[1]) with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider potential mining acitivities in the proposed Plan of Operations~~PRO~~, any modifications and subsequent remediation ~~must be consistent with the PRO and the subsequent restoration~~. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

The Site is defined as the ~~features~~ areas described below (general locations summarized on Figure 2) and the areal extent of contamination from those features and all suitable areas in ~~very~~ close proximity to the contamination necessary for response action implementation:

1. **Yellow Pine Pit (Figure 3)** – The Yellow Pine Pit (formerly known as "The Glory Hole") was actively mined during the 1930s through the 1950s for antimony, tungsten, gold and silver. The pit is located on Midas Gold patented land, and most of the waste rock dumps associated with the pit are adjacent to the pit; some of the waste rock dumps are located on areas subject to unpatented mining claims owned by Midas Gold on USFS managed land. During active mining, the East Fork of the South Fork of the Salmon River (EFSFSR) was routed around the pit through the

Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Strikethrough

[1] Midas Gold's Plan of Restoration and Operations will be referred to as the proposed Plan of Operations, ~~to match terminology inper~~ Forest Service minerals regulations at 36 CFR 228.

ED_004715_00093901-00001

Bailey Tunnel but was allowed to return to its natural course through the pit after the Bailey Tunnel was abandoned in the mid-1950s. The EFSFSR now runs through the pit, but does not currently support fish passage to the headwaters. The Yellow Pine Pit, and the majority of waste rock dumps associated with it, are within the footprint of Midas Gold's proposed Plan of Operations ~~PRO~~.

2. **Bradley Tailings Pile (Figure 4)** – The Bradley Tailings Pile, also known as the Historical Tailings and Spent Ore Disposal Area, is located on Midas Gold patented land. Approximately 3 million tons of mine tailings generated during the 1940s and 1950s are stored in this area, and they are overlain by approximately 6 million tons of spent heap leach ore placed in the 1980s and 1990s. The downstream end of the Tailings Pile is constrained by a structure known as the Keyway Dam, and a wetland exists downgradient of the Keyway Dam, which is also referred to as the Keyway Marsh. Meadow Creek is diverted around the south side of the Tailings Pile. The Bradley Tailings Pile is within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

3. **Hangar Flats Tailings Pile (Figure 5)** – The Hangar Flats Tailings Pile, also known as the Hecla Heap Leach Facility, is a reclaimed heap-leach facility which was built and operated in the 1990s to extract oxide gold and silver. The facility is located on Midas Gold controlled patented land, and is within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

4. **Bailey Tunnel (Figure 6)** – The Bailey Tunnel was constructed in the early 1940s to divert the EFSFSR around the Yellow Pine Pit and into Sugar Creek to facilitate open pit mining operations. The tunnel was no longer used after the mid-1950s, following cessation of open pit mining activities. The Bailey Tunnel is on Midas Gold patented land, and is within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

5. **DMEA Adit and Waste Rock Dump (Figure 7)** – The Defense Minerals Exploration Administration (DMEA) Adit and Waste Rock Dump are mining-related disturbances resulting from underground exploration activities during the 1950s. The adit and dump are located on areas subject to unpatented mining claims owned by Midas Gold on USFS managed land, and are not within the footprint of the Midas Gold ~~PRO~~proposed Plan of Operations.

6. **Bonanza Adit (Figure 8)** – The Bonanza Adit area is a mining-related disturbance in the Sugar Creek drainage resulting from underground exploration activities during the 1930s and 1940s. The Bonanza Adit area is subject to unpatented mining claims owned by Midas Gold ~~located~~ on USFS managed land, and is not within the footprint of the Midas Gold ~~PRO~~proposed Plan of Operations.

7. **Cinnabar Tunnel (Figure 9)** – The Cinnabar Tunnel is a mining-related disturbance resulting from underground exploration activities during the late 1920s and early 1930s. The Tunnel is located on areas subject to unpatented mining

ED_004715_00093901-00002

claims on USFS managed land; the tunnel portal is within the footprint of the Midas Gold ~~PRO~~proposed Plan of Operations.

8. **Meadow Creek Adit (Figure 10)** – The Meadow Creek Adit and associated waste rock dumps are mining-related disturbances that resulted from underground mining activities from the 1920s through the 1940s. The adit and waste rock dumps are located on Midas Gold controlled patented land, and are within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

This RI/FS SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language. This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h] [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h]commonly called the National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the "AOC." Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

Scope

The specific RI/FS activities to be conducted at the Site are set forth in ~~seven~~ six separate tasks.

Task 1 – Scoping
Task 2 – Community Relations
Task 3 – Site Characterization
Task 4 – Treatability Studies
Task 5 – Feasibility Study
Task 6 – Detailed Analysis of Remedial Alternatives

Oversight

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code§§ 39-101 to 39-130; the Hazardous Waste Management Act of Idaho, Idaho Code§§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code§§ 39-3601 et seq. As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

ED_004715_00093901-00003

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

Schedule

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

Guidance

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

Roles and Responsibilities

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the AOC. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

Remedy Requirements

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or

ED_004715_00093901-00004

resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

TASK 1 - SCOPING

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by the Respondent as a function of the project planning process.

a. Site Background

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

Collect and analyze existing data and document the need for additional data

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA. Guidance on systematic planning using the data quality objectives

ED_004715_00093901-00005

process (EPA QA/G-4). Washington, D.C.: 121. [HYPERLINK "http://www.epa.gov/quality/qs-docs/g4-final.pdf"], U.S. EPA (2006)

Conduct site visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

b. *Project Planning*

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the

ED_004715_00093901-00006

information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR

ED_004715_00093901-00007

identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

c. *Scoping Deliverables*

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan will ~~fully account~~ take in to consideration for the timing and scope of potential mining and processing activities associated with the ~~PRO~~proposed Plan of Operations. This could include a phased approach to focus on issues of most concern or requiring early action. The Work Plan shall be developed in conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Formatted: Strikethrough

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a

ED_004715_00093901-00008

data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP, and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision) and specifically should contain the twenty-four elements specified in Table 11 – List of QA Project Plan Elements, EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved

ED_004715_00093901-00009

QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

Potential Target Analytes

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

Chemicals/Analytes of Potential Concern for Surface Water

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium (III)

ED_004715_00093901-00010

- Chromium (VI)
- Cobalt
- Copper
- Hardness
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrogen, total Kjeldahl
- Phosphorus
- Potassium
- Selenium
- Silver
- Sodium
- Sulphate
- Thallium
- Tungsten
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Uranium
- Vanadium
- Zinc

Field Analyses
- Conductivity
- Dissolved Oxygen
- Flow
- pH
- Temperature

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Chemicals/Analytes of Potential Concern for Sediments:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for sediment sampling stations.

ED_004715_00093901-00011

Laboratory Analyses

- Antimony
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Soils/Waste Rock:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for soils/waste rock sampling.

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Uranium
- Vanadium
- Zinc

ED_004715_00093901-00012

Chemicals/Analytes of Potential Concern for Vegetation:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for vegetation sampling stations.

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Groundwater

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chloride

ED_004715_00093901-00013

- Chromium III
- Chromium VI
- Cobalt
- Copper
- Hardness
- Iron
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrate/nitrite as N
- Nitrogen (TKN)
- Orthophosphate
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium
- Total Dissolved Solids
- Total Suspended Solids
- Total Organic Carbon
- Tungsten
- Uranium
- Vanadium
- Zinc

Field Analyses

- Conductivity
- Dissolved Oxygen or ORP
- Ferric Iron
- Ferrous Iron
- Nitrite
- pH
- Temperature

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

ED_004715_00093901-00014

Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

TASK 2 - COMMUNITY RELATIONS

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of McCall, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

TASK 3 - SITE CHARACTERIZATION

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations (including estimates of pre-mining water quality) at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the

ED_004715_00093901-00015

laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

a. Field Investigation

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

Implement and document field support activities

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. The Respondent shall also notify the RPM upon completion of field support activities.

Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

ED_004715_00093901-00016

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

~~Describe~~ Delineate the nature and extent of contamination

The Respondent shall gather information to ~~describe~~ delineate the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

b. *Data Analyses*

Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

ED_004715_00093901-00017

c. *Data Management Procedures*

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See [HYPERLINK "http://www.epa.gov/storet/wqx.hmtl)" \h]

d. *Site Characterization Deliverables*

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site

ED_004715_00093901-00018

characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action, but will consider implementation of the ~~PRO~~proposed Plan of Operations. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

Contaminant Identification – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).

Exposure Assessment – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

Toxicity Assessment – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity). EPA has

ED_004715_00093901-00019

prepared chemical screening tables with updated toxicity values and Preliminary Remediation Goals for various land uses available from: [HYPERLINK "https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables"]

Risk Characterization – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

TASK 4 - TREATABILITY STUDIES

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

a. Determination of Candidate Technologies and of Need for Testing

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the range of technologies required for the development and analysis of alternatives (Task 5 and 6) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment

ED_004715_00093901-00020

as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

b. Treatability Testing and Deliverables

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence

ED_004715_00093901-00021

of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 5 - FEASIBILITY STUDY

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

a. Remedial Alternative Development

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

<u>Refine and document remedial action objectives</u>

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

ED_004715_00093901-00022

Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

ED_004715_00093901-00023

TASK 6 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

a. Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative, the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

Compare alternatives against each other and document the comparison of alternatives

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

b. Detailed Analysis Deliverables

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

ED_004715_00093901-00024

Feasibility Study report

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

ED_004715_00093901-00025

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA -330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008. "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

Attachments

Attachment A – Suggested RI/FS Work Plan Format

Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
   - Types and volumes of waste present
   - Potential pathways of contaminant migration/preliminary public health and environmental impacts
   - Preliminary identification of operable units
   - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
   - DQO needs
   - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
   - Staffing
   - Coordination
9. References

Appendices

ED_004715_00093901-00028

Attachment B – Suggested Format for SAP (FSP and QAPP)

FSP

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

QAPP

Project Management
A1 Title and Approval Sheet
A2 Table of Contents
A2 Distribution List
A4 Project/Task Organization
A5 Problem Definition/Background
A6 Project/Task Description
A7 Quality Objectives and Criteria
A8 Special Training/Certifications
A9 Documentation and Records

Data Generation and Acquisition

B1 Sampling Process Design (Experimental Design)
B2 Sampling Methods
B3 Sample Handling and Custody
B4 Analytical Methods
B5 Quality Control
B6 Instrument/Equipment Testing, Inspection, and Maintenance
B7 Instrument/Equipment Calibration and Frequency
B8 Inspection/Acceptance of Supplies and Consumables
B9 Non-direct Measurements
B10 Data Management

Assessment and Oversight
C1 Assessments and Response Actions
C2 Reports to Management

Data Validation and Usability
D1 Data Review, Verification, and Validation
D2 Verification and Validation Methods
D3 Reconciliation with User Requirements

ED_004715_00093901-00029

~~Title Page~~

~~Table of Contents~~

~~1—Project Description~~

~~2—Project Organization and Responsibilities~~

~~3—QA Objectives for Measurement~~

~~4—Sampling Procedures~~

~~5—Sample Custody~~

~~6—Calibration Procedures~~

~~7—Analytical Procedures~~

~~8—Data Reduction, Validation, and Reporting~~

~~9—Internal Quality Control~~

~~10. Performance and Systems Audits~~

~~11. Preventative Maintenance~~

~~12. Data Assessment Procedures~~

~~13. Corrective Actions~~

~~14. Quality Assurance Reports~~

Attachment C – Suggested RI Report Format

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization
2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology
4. Nature and Extent of Contamination

ED_004715_00093901-00031

4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:

4.1.1 Sources (lagoons, sludges, tanks, etc.)

4.1.2 Soils and Vadose Zone

4.1.3 Ground Water

4.1.4 Surface Water and Sediments

4.1.5 Air

5. Contaminant Fate and Transport

5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)

5.2 Contaminant Persistence

5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest

5.3 Contaminant Migration

5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)

5.3.2 Discuss modeling methods and results, if applicable

6. Baseline Risk Assessment

6.1 Human Health Evaluation

6.1.1 Exposure Assessment

6.1.2 Toxicity Assessment

6.1.3 Risk Characterization

6.2 Environmental Evaluation

7. Summary and Conclusions

7.1 Summary

7.1.1 Nature and Extent of Contamination

7.1.2 Fate and Transport

7.1.3 Risk Assessment

7.2 Conclusions

7.2.1 Data Limitations and Recommendations for Future Work

7.2.2 Recommended Remedial Action Objectives

Appendices

A. Technical Memorandum on Field Activities (if available)

B. Analytical Data and QA/QC Evaluation Results

C. Risk Assessment Methods

ED_004715_00093901-00032

Attachment D – Suggested Format for Feasibility Study Report

Executive Summary

1. Introduction
   - 1.1 Purpose and Organization Report
   - 1.2 Background Information (Summarized from RI Report)
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Nature and Extent of Contamination
     - 1.2.4 Contaminant Fate and Transport
     - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
   - 2.1 Introduction
   - 2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
     - Contaminants of interest
     - Allowable exposure based on risk assessment (including ARARs) Development of remediation goals
   - 2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
   - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:
     - 2.4.1 Identification and Screening of Technologies
     - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
   - 3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
   - 3.2 Screening of Alternatives (if conducted)
     - 3.2.1 Introduction
     - 3.2.2 Alternative 1
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.2 Alternative 2
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.3 Alternative 3

ED_004715_00093901-00033

3.2.3.1 Description
3.2.3.2 Evaluation
4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Evaluation
4.2.2 Alternative 2
4.2.2.1 Description
4.2.2.2 Evaluation
4.2.3 Alternative 3
4.2.3.1 Description
4.2.3.2 Evaluation
4.3 Comparative Analysis

ED_004715_00093901-00034

Attachment E – Stibnite Mine Remedial Investigation and Feasibility Study (RI/FS) Statement of Work (SOW) Schedule

RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

ED_004715_00093901-00035

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

[1]Documents may initially be released as "draft final" pending final resolution of issues.

ED_004715_00093901-00036

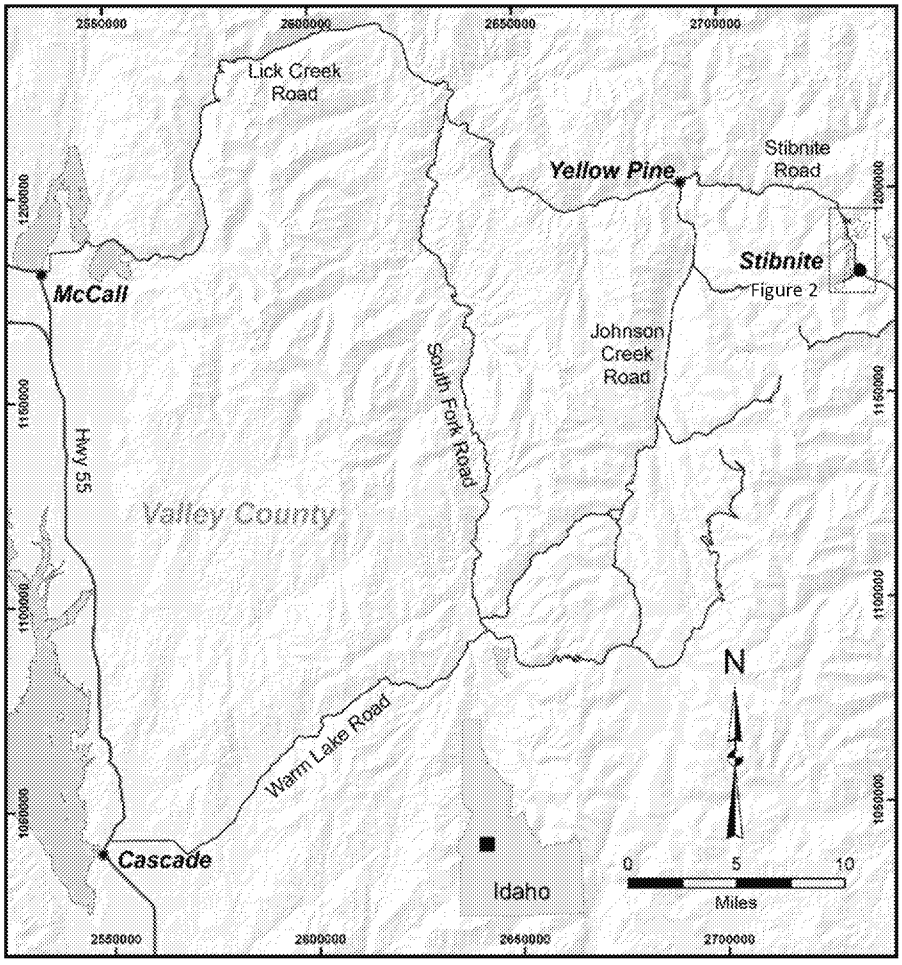


Figure 1 – Site Location

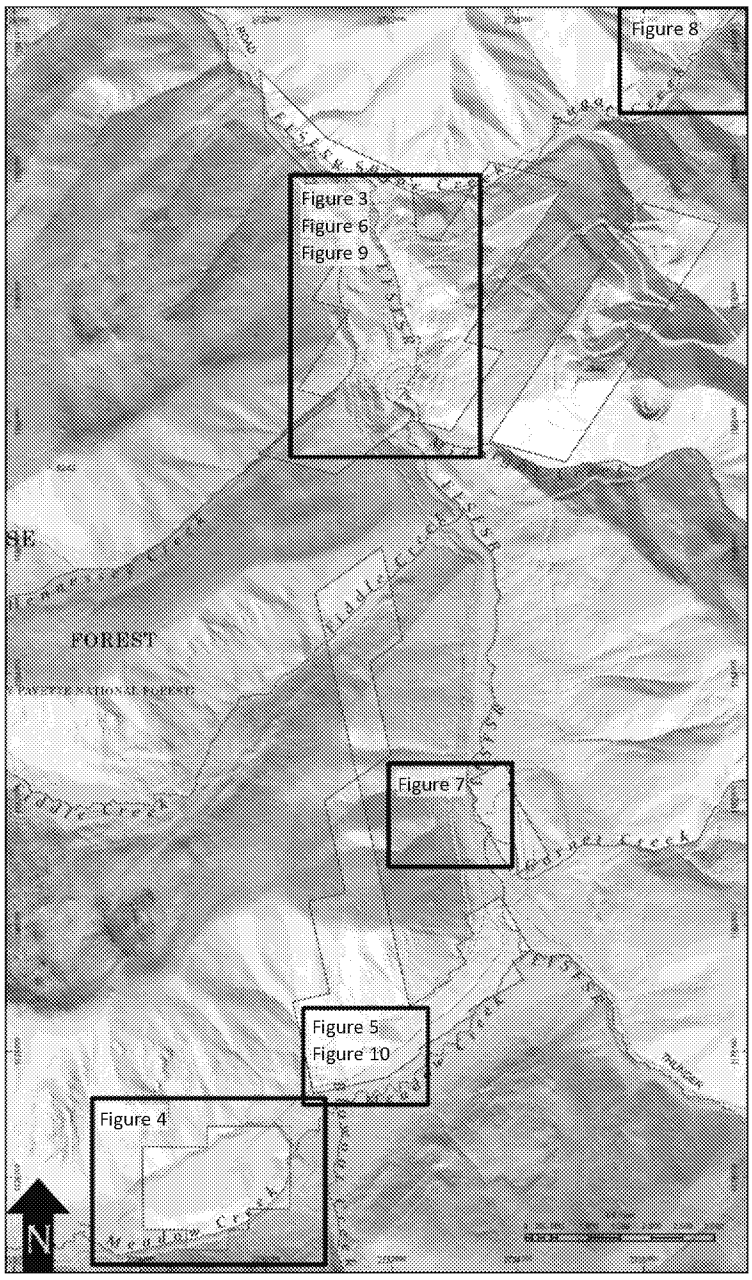


Figure 2 – Stibnite Mine Site

ED_004715_00093901-00038

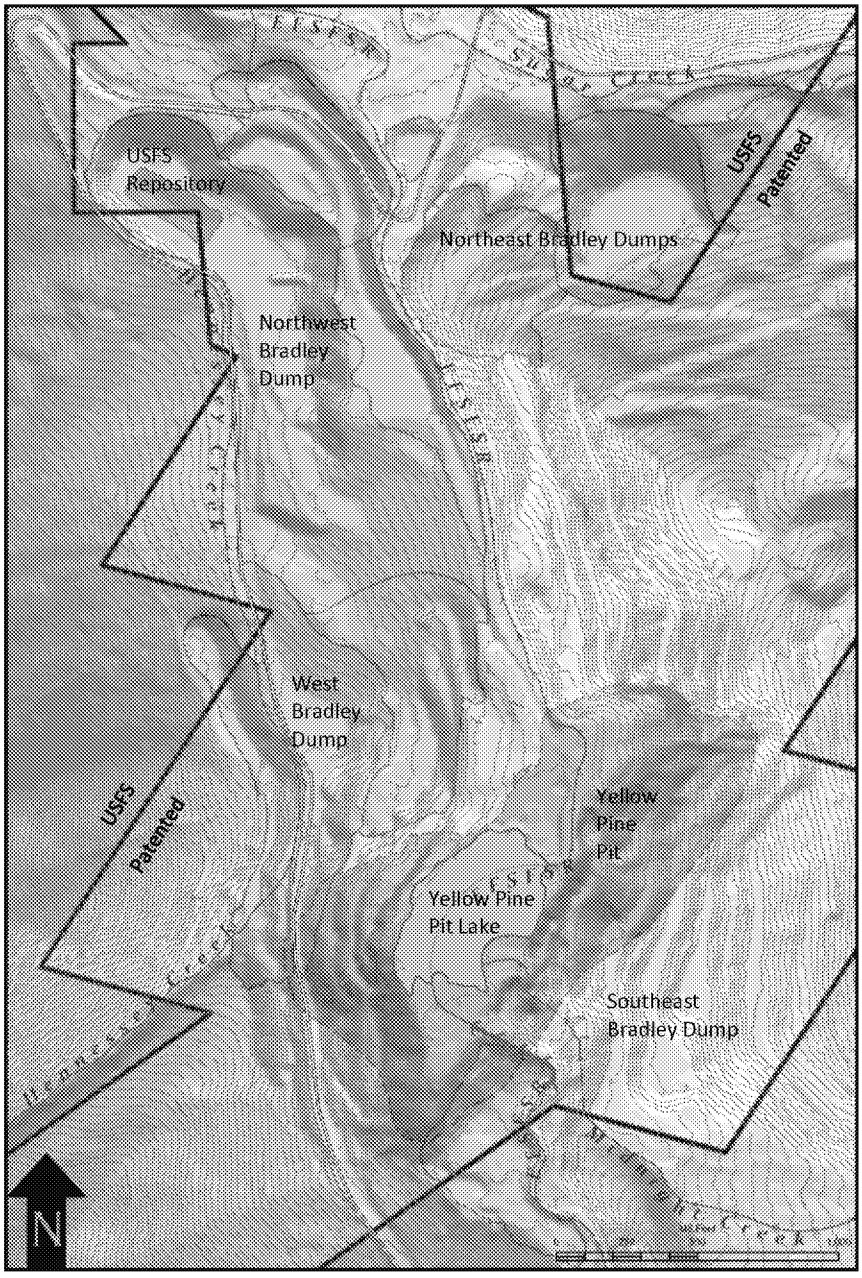


Figure 3 –Yellow Pine Pit

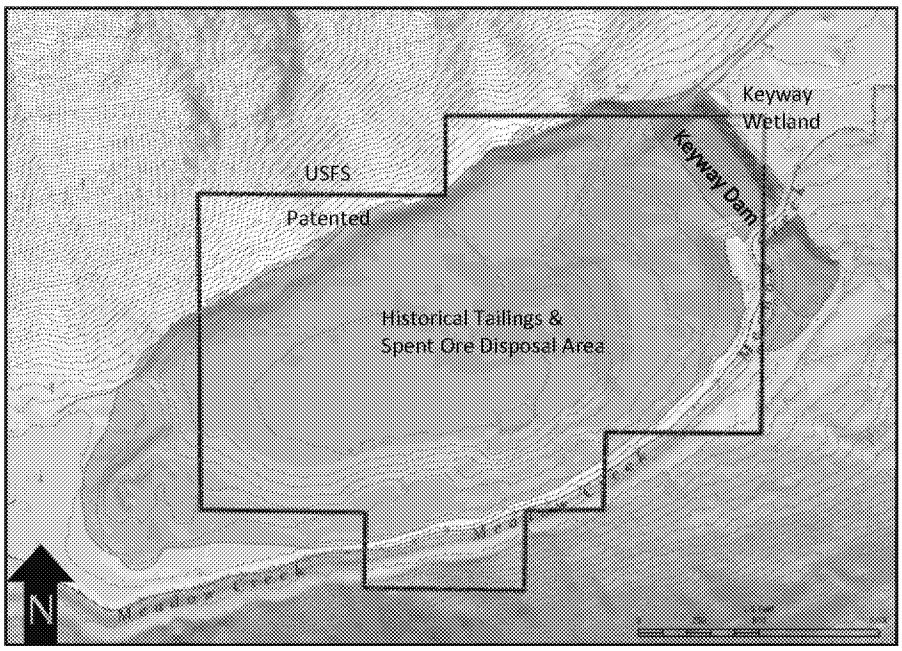


Figure 4 – Historical Tailings and Spent Ore Disposal Area

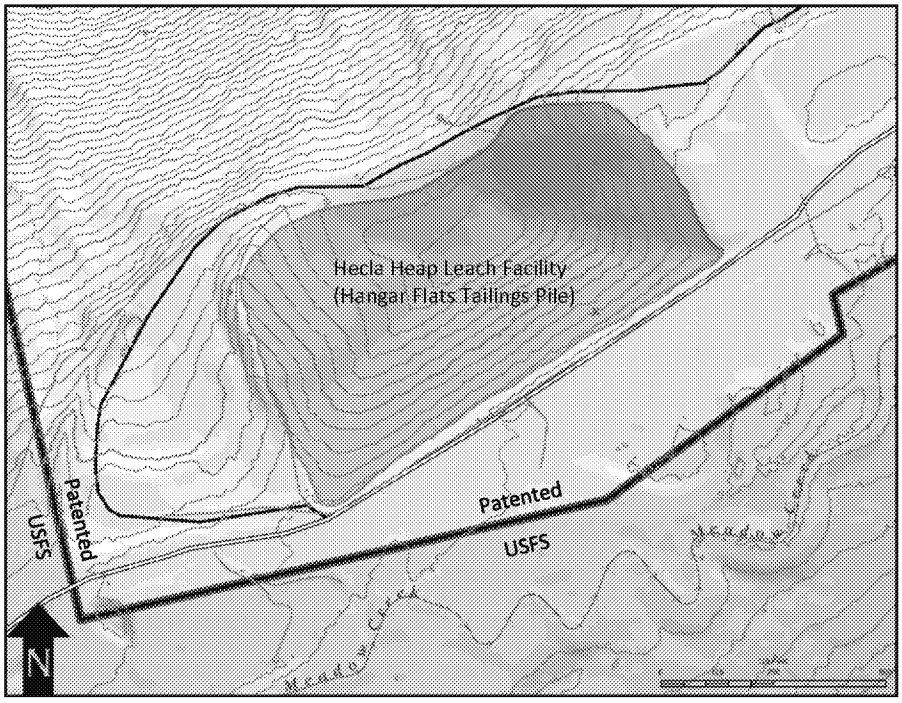


Figure 5 – Hecla Heap Leach Facility

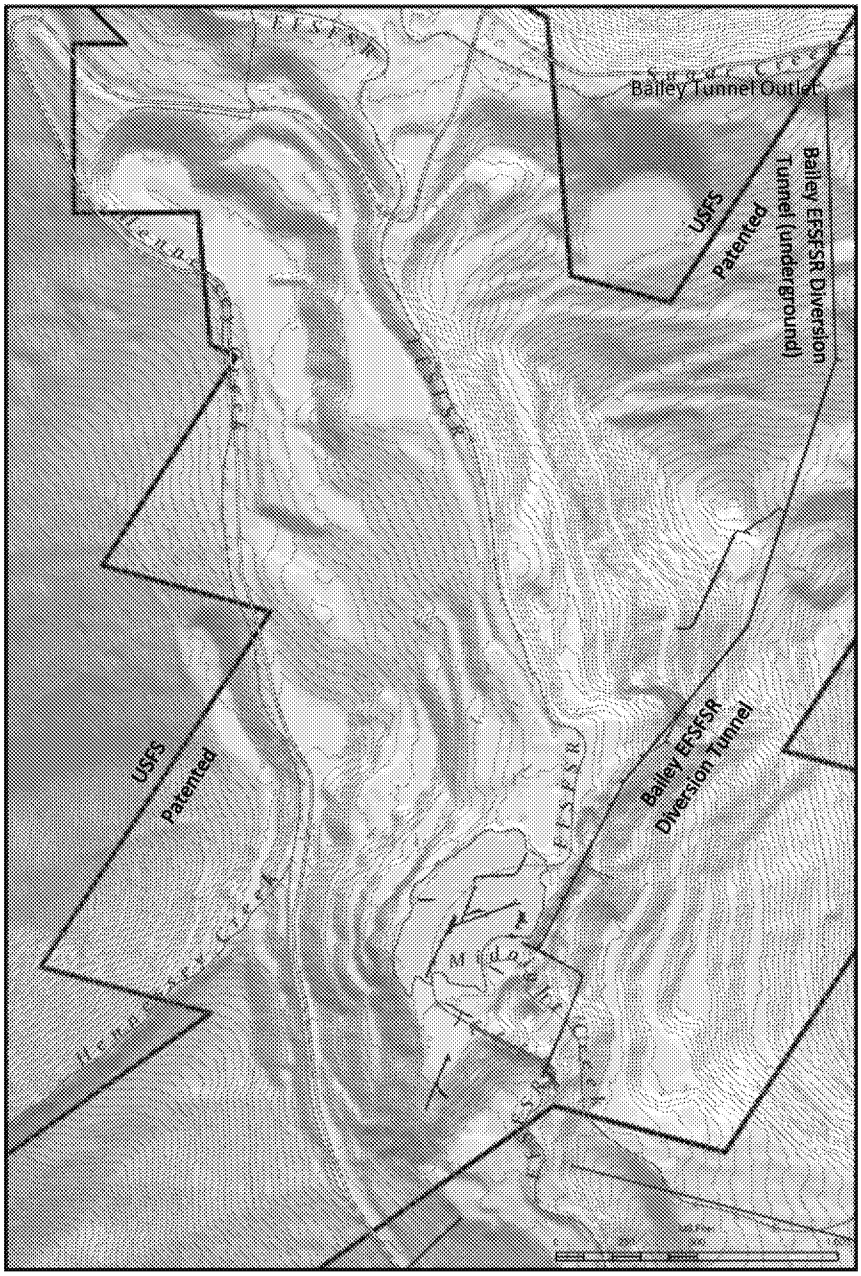


Figure 6 – Bailey Tunnel

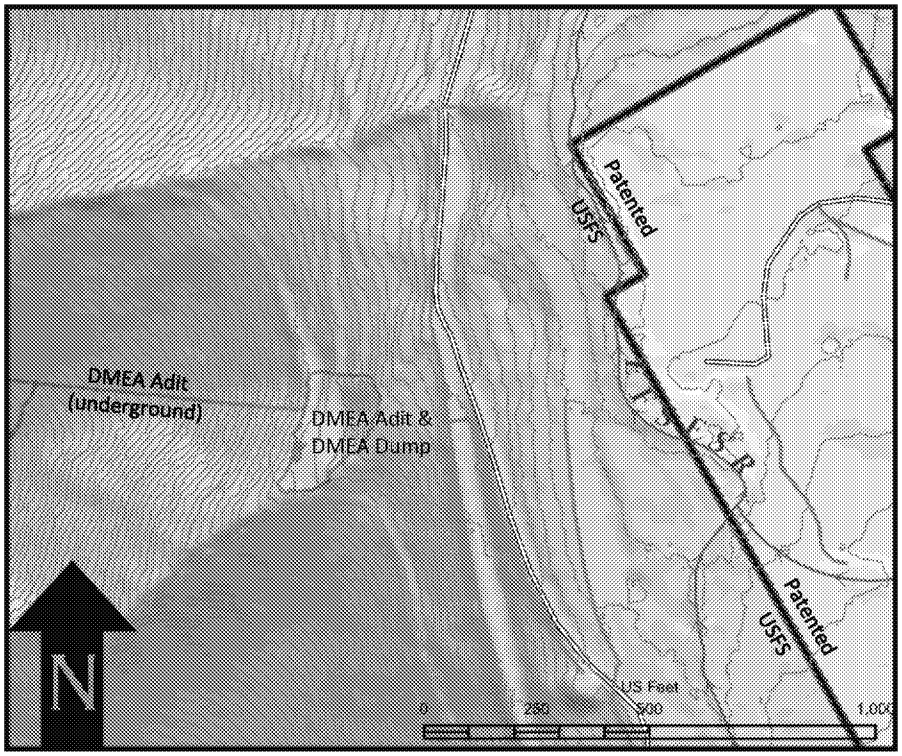


Figure 7 – Defense Minerals Exploration Administration Adit and Waste Rock Dump

ED_004715_00093901-00043

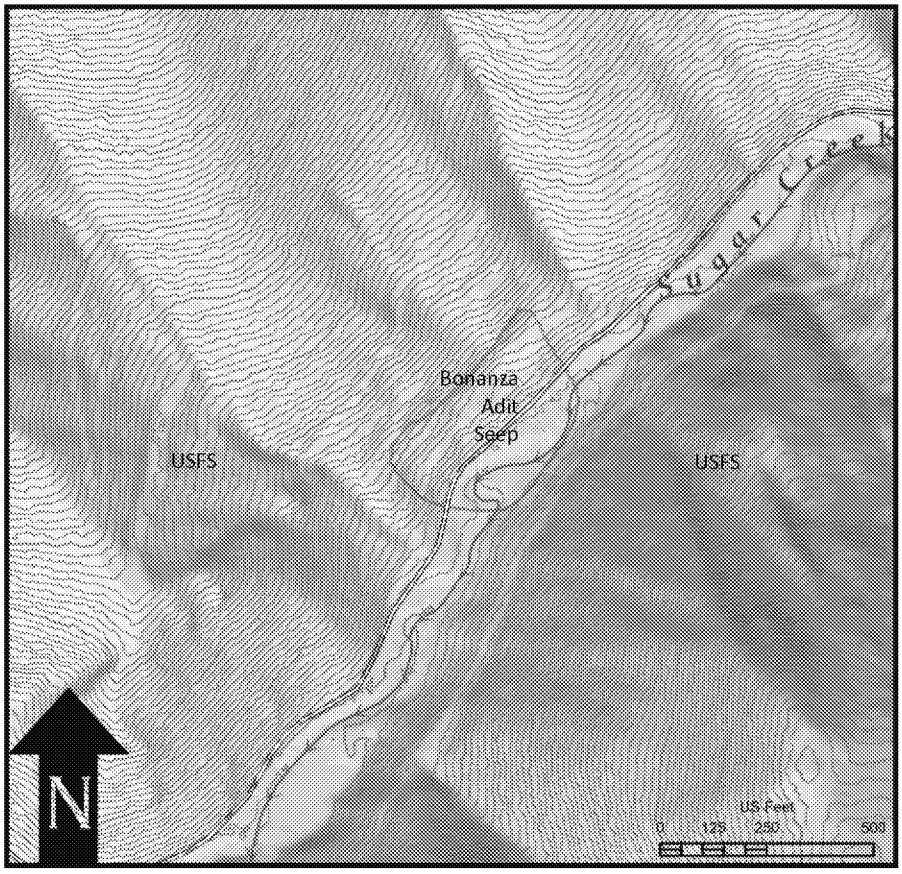


Figure 8 – Bonanza Adit

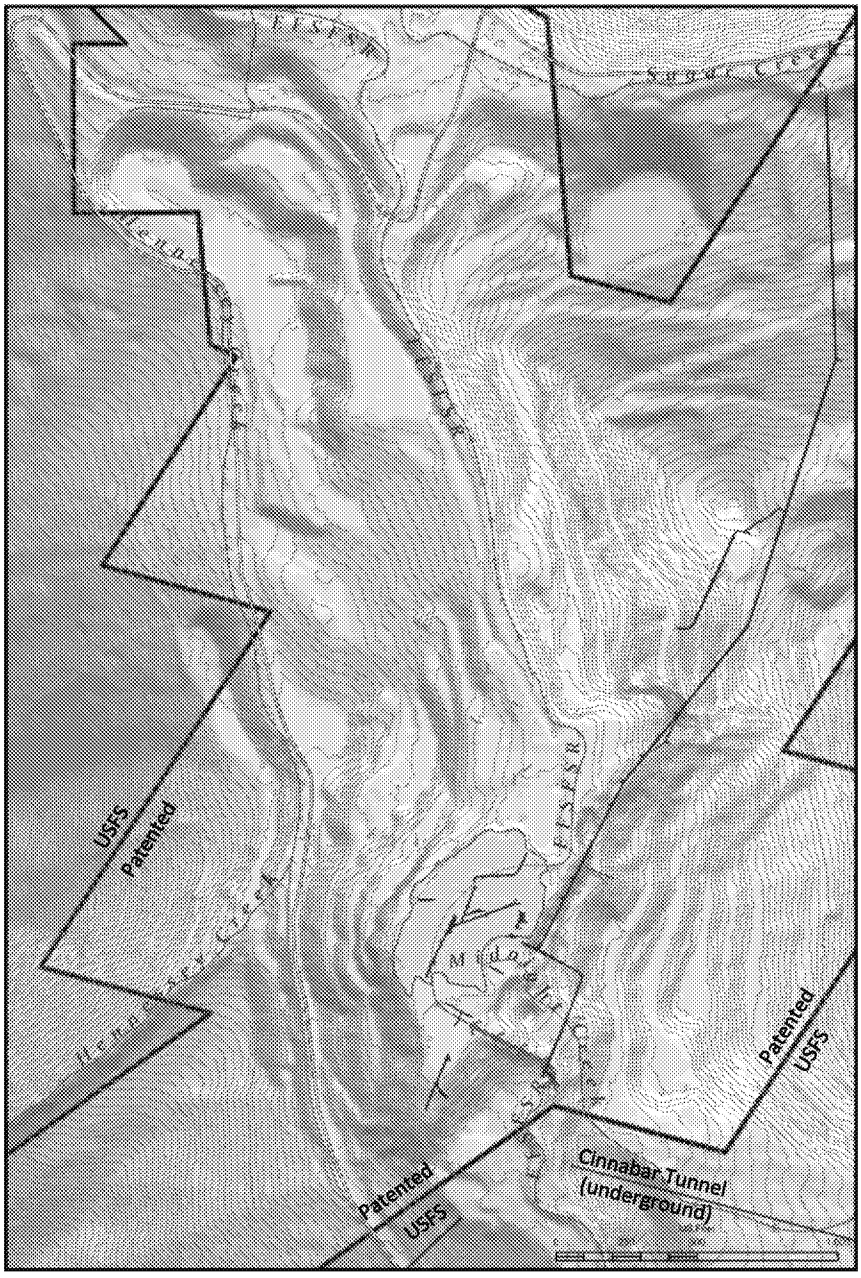


Figure 9 – Cinnabar Tunnel

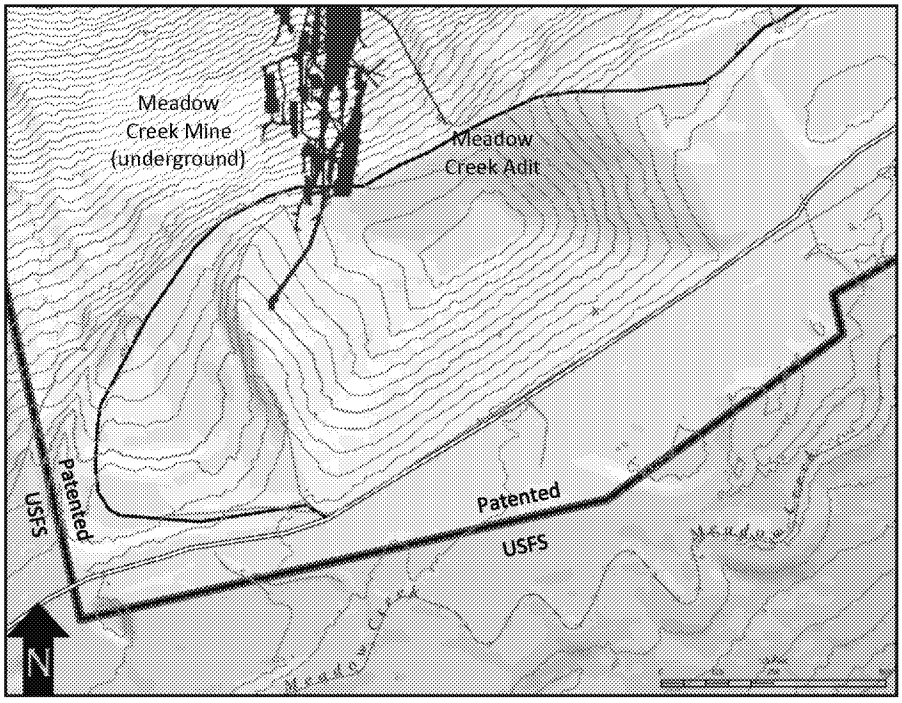


Figure 10 – Meadow Creek Adit

ED_004715_00093901-00046

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/16/2019 12:15:14 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Lisa.O'Hara@deq.idaho.gov; Jill Grant [jgrant@jillgrantlaw.com]
CC: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Cerise, Kathy [Cerise.Kathryn@epa.gov]; John Meyer [JMeyer@midasgoldcorp.com]; 'Andy Koulermos' [akoulermos@FormationEnv.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]
Subject: RE: Stibnite Mine Site

Thanks for these Elizabeth. We had not previously seen them, but will review them over the weekend and be prepared to address on Monday, along with the State and Shoshone Bannock comments.

What we have from the Forest Service (Gary) are red-line comments on the SOW. What we have from the Tribe (Jill) and State (Lisa) are summary comments. Were there red-line comments to the draft submitted by the State or the Tribe?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Friday, November 15, 2019 4:08 PM
To: Lisa.O'Hara@deq.idaho.gov; Bradley M. Marten <bmarten@martenlaw.com>; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: Stibnite Mine Site

Hi Brad, Jill, and Lisa. I'm not sure I ever sent you Gary's comments from October 29th on the SOW. Here you go…

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not

intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 5/2/2019 6:27:26 PM
To: 'Merissa A. Moeller' [mmoeller@martenlaw.com]; 'Lisa.Carlson@deq.idaho.gov' [Lisa.Carlson@deq.idaho.gov]
CC: 'L. Michael Bogert' [mbogert@midasgoldinc.com]; 'Laurel Sayer' [lsayer@midasgoldinc.com]; 'Terry T. Uhling' [tuhling@martenlaw.com]; 'Bradley M. Marten' [bmarten@martenlaw.com]
Subject: RE: Midas Gold - Draft VCO / AOC

Thank you, Merissa. Am I correct in assuming that this will be a large portion of the discussion tomorrow during Midas' meeting at EPA HQ?

Regards,

Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Merissa A. Moeller <mmoeller@martenlaw.com>
Sent: Tuesday, April 30, 2019 12:19 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Lisa.Carlson@deq.idaho.gov
Cc: L. Michael Bogert <mbogert@midasgoldinc.com>; Laurel Sayer <lsayer@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>; Bradley M. Marten <bmarten@martenlaw.com>
Subject: Midas Gold - Draft VCO / AOC

Elizabeth and Lisa –

On behalf of Midas Gold, I am transmitting the attached draft Voluntary Consent Order / Administrative Order on Consent. This draft is intended to frame initial discussions regarding Midas's proposal for limited investigation into historical mining contamination at the Stibnite Mining District. We look forward to your comments.

Sincerely,

Merissa A. Moeller

D - 503 . 241 . 2647
T - 503 . 243 . 2200
E - mmoeller@martenlaw.com

Bio - LinkedIn
martenlaw.com
1050 SW Sixth Ave, Suite 2150
Portland, OR 97204

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 6/28/2019 10:00:37 PM
To: 'Bradley M. Marten' [bmarten@martenlaw.com]
CC: 'Michael Bogert' [mbogert@midasgoldinc.com]; 'John Meyer' [JMeyer@midasgoldcorp.com]; 'Terry T. Uhling' [tuhling@martenlaw.com]; 'Lisa.O'Hara@deq.idaho.gov' [Lisa.O'Hara@deq.idaho.gov]; 'Lisa.Carlson@deq.idaho.gov' [Lisa.Carlson@deq.idaho.gov]; 'gary.fremerman@usda.gov' [gary.fremerman@usda.gov]; 'Andy Koulermos' [akoulermos@formationenv.com]
Subject: RE: Midas -- Monday meeting at IDEQ

Kathy Cerise, Tim Maley and I will be participating by conference call. I believe Gary Fremerman will be participating by conference call. Gary – will anyone else from the from the Forest Service be participating? If so, will they be participating by phone? Lisa, who can we expect to participate from IDEQ?

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, June 28, 2019 2:20 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: 'Michael Bogert' <mbogert@midasgoldinc.com>; John Meyer <JMeyer@midasgoldcorp.com>; Terry T. Uhling <tuhling@martenlaw.com>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; gary.fremerman@usda.gov; Andy Koulermos <akoulermos@formationenv.com>
Subject: Midas -- Monday meeting at IDEQ

Elizabeth:

Just left you an e-mail asking if you could let me know who from the three agencies will be participating in our meeting on Monday, and whether in person or by conference call.

I believe you have the call in number from an earlier e-mail but please let me know if you need me to circulate it again. You also have our attendance list. There may be one additional lawyer from my firm – Merissa Moeller, who you met in Seattle at an earlier meeting and who is working with Terry Uhling and me on this project. Merissa's attendance is uncertain, because of a Monday hearing in Bend that may or may not be going forward.

Thanks – see you Monday (in person or by conference call – please advise) at IDEQ at 10:30 am.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

To: Bradley M. Marten[bmarten@martenlaw.com]; Lisa.O'Hara@deq.idaho.gov[Lisa.O'Hara@deq.idaho.gov]; gary.fremerman@usda.gov[gary.fremerman@usda.gov]; Lisa.Carlson@deq.idaho.gov[Lisa.Carlson@deq.idaho.gov]
Cc: 'Andy Koulermos'[akoulermos@FormationEnv.com]; John Meyer[JMeyer@midasgoldcorp.com]; 'Michael Bogert'[mbogert@midasgoldinc.com]; Terry T. Uhling[tuhling@martenlaw.com]; Merissa A. Moeller[mmoeller@martenlaw.com]
Bcc: Cerise, Kathy[Cerise.Kathryn@epa.gov]
From: McKenna, Elizabeth[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: Thur 6/27/2019 12:53:38 AM (UTC)
Subject: RE: July 1st Meeting at IDEQ

Thanks, Brad. Can you get an agenda to us tomorrow as well a description of what Midas plans to talk about and/or propose? Since the SOW will not be ready until July 5th, I'm wondering if Midas is going to propose something to us during the meeting, seek information on what our folks may have in mind for proposals, and/or raise other issues. As I said in our call, the meeting will be more productive if we know what to expect. Thanks very much.
Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Wednesday, June 26, 2019 2:51 PM
To: Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; gary.fremerman@usda.gov; Lisa.Carlson@deq.idaho.gov
Cc: 'Andy Koulermos' <akoulermos@FormationEnv.com>; John Meyer <JMeyer@midasgoldcorp.com>; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>; Merissa A. Moeller <mmoeller@martenlaw.com>
Subject: July 1st Meeting at IDEQ

Elizabeth, Lisas and Gary:
First, thank you for meeting with Terry Uhling and me yesterday in Boise. We thought it was very productive and look forward to working with you. We look forward to meeting again next Monday, July 1, 2019 at IDEQ's offices from 10:30 am-noon. We are prepared to spend more time together if we can solve the problem of lunch. Perhaps we can work on a plan to take a break, if folks are available and want to continue the conversation.
Midas has retained Andy Koulermos of Formation Environmental as its outside consultant. Some of you may know Andy from other work that he and his team have done in Idaho and elsewhere in the West on mining sites. Terry and I have known Andy and his colleagues for a long time, and we know that they will bring to the table both immense knowledge and the ability to listen.
https://www.formationenvironmental.com/about/
For those unable to attend in person, as you requested, we have set up videoconferencing through a web based service called Zoom.

To join the Zoom meeting via computer video and audio please use:

https://zoom.us/j/2822089706

To join via audio only use:
Ex. 6 Personal Privacy (PP)
Meeting ID: Ex. 6 Personal Privacy (PP)
As I mentioned at yesterday's meeting, we would welcome the opportunity to show the Site to any of the technical team members from the agencies who can make it. Reaching the site is quickest by plane (otherwise it is a 10 hour round trip drive). If you are interested in flying to the Site on Tuesday, July 2, following our Monday meeting, please let me or John Meyer at Midas (copied) know by noon tomorrow (Thursday) if at all possible. Andy will be joining the tour. The Midas lawyers will stay at their desks.
Finally, recognizing that we have a heavy lift ahead, I would like to suggest we plan ahead and schedule weekly meetings every Monday in July, starting at 10 am MST in Boise, either at DEQ (if space is available) or at Midas's offices. That would be July 8, 15, 22 and 29. It may not be necessary to have every meeting, or for everyone to attend (certainly in person), but it would be good to reserve the time, if at all possible.
With regard to the meeting on July 1, as I mentioned on the call, we regard this as an information and listening exercise. Based on that, we hope to have a draft scope of work to you by July 5, 2019, for presentation on July 8. We appreciate that this is a tight turnaround, and would not expect decisions to be made on July 8, but believe we will make substantive progress, allowing for a better understanding of our proposal.

Please let me know if any of this causes any concern; if so, we will adjust. Thanks again for your time.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 11/20/2019 2:16:52 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Jill Grant [jgrant@jillgrantlaw.com]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: Stibnite Mine Meeting

Let's put this over until I can get you some comments on the AOC from the Midas side next week. It may be best to plan for an AOC call the week of December 2, the week after the Thanksgiving holiday. In the meantime, perhaps, as we discussed, you can aim for circulating by Friday a new draft of the SOW, and circulate it to all Participants as well as the Tribe, Make sense?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com Let's
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Tuesday, November 19, 2019 4:08 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Jill Grant <jgrant@jillgrantlaw.com>
Subject: Stibnite Mine Meeting

I now have a conflict on Friday for the start time of our discussion. An issue has come up in another case and I need to attend a briefing for the RA from 10:00 a.m. to 11:00 a.m. Is there any chance that we rearrange the time of the meeting a bit? We can talk at 9:00 for an hour or meet at 11:00 a.m. for longer than an hour. Otherwise, we can look at next week. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Lisa.O'Hara@deq.idaho.gov [Lisa.O'Hara@deq.idaho.gov]
Sent: 6/28/2019 10:03:53 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; bmarten@martenlaw.com
CC: mbogert@midasgoldinc.com; JMeyer@midasgoldcorp.com; tuhling@martenlaw.com; Lisa.Carlson@deq.idaho.gov; gary.fremerman@usda.gov; akoulermos@formationenv.com
Subject: RE: Midas -- Monday meeting at IDEQ

For IDEQ, Aaron Scheff, Derek Young and I will be participating in person. Lisa Carlson will be in attendance if her schedule allows.

From: McKenna, Elizabeth [mailto:Mckenna.Elizabeth@epa.gov]
Sent: Friday, June 28, 2019 4:01 PM
To: Bradley M. Marten
Cc: 'Michael Bogert'; John Meyer; Terry T. Uhling; Lisa O'Hara; Lisa Carlson; gary.fremerman@usda.gov; Andy Koulermos
Subject: RE: Midas -- Monday meeting at IDEQ

Kathy Cerise, Tim Maley and I will be participating by conference call. I believe Gary Fremerman will be participating by conference call. Gary – will anyone else from the from the Forest Service be participating? If so, will they be participating by phone? Lisa, who can we expect to participate from IDEQ?

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, June 28, 2019 2:20 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: 'Michael Bogert' <mbogert@midasgoldinc.com>; John Meyer <JMeyer@midasgoldcorp.com>; Terry T. Uhling <tuhling@martenlaw.com>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; gary.fremerman@usda.gov; Andy Koulermos <akoulermos@formationenv.com>
Subject: Midas -- Monday meeting at IDEQ

Elizabeth:

Just left you an e-mail asking if you could let me know who from the three agencies will be participating in our meeting on Monday, and whether in person or by conference call.

I believe you have the call in number from an earlier e-mail but please let me know if you need me to circulate it again. You also have our attendance list. There may be one additional lawyer from my firm – Merissa Moeller, who you met in Seattle at an earlier meeting and who is working with Terry Uhling and me on this project. Merissa's attendance is uncertain, because of a Monday hearing in Bend that may or may not be going forward.

Thanks – see you Monday (in person or by conference call – please advise) at IDEQ at 10:30 am.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]
Sent: 6/28/2019 9:59:39 PM
To: Bradley M. Marten [bmarten@martenlaw.com]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: 'Michael Bogert' [mbogert@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]; Terry T. Uhling [tuhling@martenlaw.com]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; Andy Koulermos [akoulermos@formationenv.com]
Subject: RE: Midas -- Monday meeting at IDEQ

For USDA, Gary Fremerman, Kathy Zamba and Nick Pino, all by phone to my knowledge.

Gary M. Fremerman
Senior Counsel
Natural Resources and Environment Division
Office of the General Counsel
U.S. Department of Agriculture
1400 Independence Ave., S.W., Rm 2013-S
Washington, D.C. 20250
202-720-8041 (voice)
202-631-4881 (mobile)
844-354-1119 (fax)
gary.fremerman@usda.gov

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, June 28, 2019 5:20 PM
To: 'Elizabeth McKenna' <mckenna.elizabeth@epamail.epa.gov>
Cc: 'Michael Bogert' <mbogert@midasgoldinc.com>; John Meyer <JMeyer@midasgoldcorp.com>; Terry T. Uhling <tuhling@martenlaw.com>; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Andy Koulermos <akoulermos@formationenv.com>
Subject: Midas -- Monday meeting at IDEQ

Elizabeth:

Just left you an e-mail asking if you could let me know who from the three agencies will be participating in our meeting on Monday, and whether in person or by conference call.

I believe you have the call in number from an earlier e-mail but please let me know if you need me to circulate it again. You also have our attendance list. There may be one additional lawyer from my firm – Merissa Moeller, who you met in Seattle at an earlier meeting and who is working with Terry Uhling and me on this project. Merissa's attendance is uncertain, because of a Monday hearing in Bend that may or may not be going forward.

Thanks – see you Monday (in person or by conference call – please advise) at IDEQ at 10:30 am.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 4/2/2019 1:15:34 AM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Michael Bogert [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]
Subject: RE: Midas Gold/Stibnite Mine

I should add to my last email that it is not critical to get me the information tomorrow. I was in meetings all day today and didn't get to respond to you until this evening, so I understand that it might be difficult to get the information to me in time for my call with HQ (which is at 10 a.m.).

- Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Sunday, March 31, 2019 7:35 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Michael Bogert <mbogert@midasgoldinc.com>; Laurel Sayer <lsayer@midasgoldinc.com>
Subject: Midas Gold/Stibnite Mine

Elizabeth:

I am pulling together some of the records you requested when we met a few weeks ago, and the slides from the December presentation that Midas Gold made to EPA. I understand you have a Tuesday call with EPA Headquarters and would like to have that material (at least the slides). As we discussed, some of this information is Confidential Business Information ("CBI") and some of it reflects positions Midas has taken relevant to its status as a BFPP. I left our last meeting with the understanding that any materials provided by Midas to EPA would be considered by the agency to be exempt from disclosure by EPA under Exemption 4 of the FOIA regulations, and that EPA would take that position if a request for the information were received. https://www.justice.gov/oip/foia-guide-2004-edition-exemption-4

Can you confirm that understanding on behalf of EPA?

From: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Date: Friday, March 29, 2019 at 4:13 PM
To: Bradley Marten <bmarten@martenlaw.com>
Subject: RE: Stibnite Mine

Great. Thanks Brad!

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA

1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, March 29, 2019 4:08 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Subject: Re: Stibnite Mine

We can do that. Will give you a call on Monday morning. Have a good weekend.

Sent from my iPhone

On Mar 29, 2019, at 1:53 PM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

> Hi Brad. A few months ago Michael and Lauren gave a power point presentation to EPA in response to some of the questions EPA has asked Midas regarding its mining plan and proposal for a CERCLA cleanup agreement. Michael agreed to provide a copy of the power point to us, but we have not received it. I have a call on Tuesday with EPA HQ and it would be helpful if I had a copy of the presentation before that meeting. Would it be possible for you to obtain the slides for me before Tuesday? Thanks very mush.
>
> Elizabeth
>
> Elizabeth McKenna
> Assistant Regional Counsel
> U.S. EPA
> 1200 Sixth Avenue
> Seattle, WA 98101
> (206) 553-0016
> Cell: (206) 402-9963

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 4/2/2019 12:59:56 AM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Michael Bogert [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]
Subject: RE: Midas Gold/Stibnite Mine

Hi Brad. Without seeing the documents, I can't determine if withholding specific documents is appropriate. I can think of two exemptions that may come into play – Exemption 7 and Exemption 4. Factual information regarding existing contamination would likely not be withheld. Certainly, if Midas has disclosed any of the information in the NEPA process, it would not be confidential. If Midas plans to claim certain information as CBI, it should include its basis for making a CBI claim with its submission of the information, which will help EPA evaluate the CBI claim if a FOIA for the information is submitted by another party.

Thanks, Brad. I'm happy to discuss this further if you'd like.

- Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Sunday, March 31, 2019 7:35 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Michael Bogert <mbogert@midasgoldinc.com>; Laurel Sayer <lsayer@midasgoldinc.com>
Subject: Midas Gold/Stibnite Mine

Elizabeth:

I am pulling together some of the records you requested when we met a few weeks ago, and the slides from the December presentation that Midas Gold made to EPA. I understand you have a Tuesday call with EPA Headquarters and would like to have that material (at least the slides). As we discussed, some of this information is Confidential Business Information ("CBI") and some of it reflects positions Midas has taken relevant to its status as a BFPP. I left our last meeting with the understanding that any materials provided by Midas to EPA would be considered by the agency to be exempt from disclosure by EPA under Exemption 4 of the FOIA regulations, and that EPA would take that position if a request for the information were received. https://www.justice.gov/oip/foia-guide-2004-edition-exemption-4

Can you confirm that understanding on behalf of EPA?

From: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Date: Friday, March 29, 2019 at 4:13 PM
To: Bradley Marten <bmarten@martenlaw.com>
Subject: RE: Stibnite Mine

Great. Thanks Brad!

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, March 29, 2019 4:08 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Subject: Re: Stibnite Mine

We can do that. Will give you a call on Monday morning. Have a good weekend.

Sent from my iPhone

On Mar 29, 2019, at 1:53 PM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

> Hi Brad. A few months ago Michael and Lauren gave a power point presentation to EPA in response to some of the questions EPA has asked Midas regarding its mining plan and proposal for a CERCLA cleanup agreement. Michael agreed to provide a copy of the power point to us, but we have not received it. I have a call on Tuesday with EPA HQ and it would be helpful if I had a copy of the presentation before that meeting. Would it be possible for you to obtain the slides for me before Tuesday? Thanks very mush.
>
> Elizabeth
>
> Elizabeth McKenna
> Assistant Regional Counsel
> U.S. EPA
> 1200 Sixth Avenue
> Seattle, WA 98101
> (206) 553-0016
> Cell: (206) 402-9963

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Merissa A. Moeller [mmoeller@martenlaw.com]
Sent: 4/30/2019 7:18:37 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Lisa.Carlson@deq.idaho.gov
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]; Bradley M. Marten [bmarten@martenlaw.com]
Subject: Midas Gold - Draft VCO / AOC
Attachments: Midas Gold - Draft VCO - AOC 04.30.19.docx

Elizabeth and Lisa –

On behalf of Midas Gold, I am transmitting the attached draft Voluntary Consent Order / Administrative Order on Consent. This draft is intended to frame initial discussions regarding Midas's proposal for limited investigation into historical mining contamination at the Stibnite Mining District. We look forward to your comments.

Sincerely,

Merissa A. Moeller

D - 503 . 241 . 2647
T - 503 . 243 . 2200
E - mmoeller@martenlaw.com

Bio - LinkedIn
martenlaw.com
1050 SW Sixth Ave, Suite 2150
Portland, OR 97204

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

IN THE MATTER OF	)	VOLUNTARY CONSENT
	)	ORDER/ADMINISTRATIVE ORDER ON
Midas Gold Idaho, Inc.	)	CONSENT
Stibnite Mining District	)	

I. PARTIES

The Idaho Department of Environmental Quality ("IDEQ") and the United States Environmental Protection Agency ("EPA") enter into this Voluntary Consent Order/Administrative Order on Consent ("Agreement") with Midas Gold Corp. ("MGC") as the owner of Midas Gold Idaho, Inc. ("MGII"), and Idaho Gold Resources Company, LLC ("IGRCLLC") as the owner of Stibnite Gold Company ("SGC"), with MGII being the mine operator and IGRCLLC and SGC being the owners of various patented, unpatented and mill site claims that comprise the property, (collectively "Midas"). All parties enter into this Agreement voluntarily. IDEQ and EPA are hereinafter collectively referred to as the "Agencies." IDEQ, EPA, and Midas are hereinafter collectively referred to as the "Parties" and may be singularly referred to as a "Party."

II. PURPOSE AND SCOPE OF AGREEMENT

The purpose and scope of this Agreement is to carry out a limited investigation into Existing Contamination from historical mining operations in the Stibnite Mining District ("the Stibnite Site") in the state of Idaho. The investigation activities for which Midas seeks approval are more particularly set forth in the Statement of Work ("SOW") attached hereto as Appendix A, incorporated herein by reference.

III. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Agreement that are defined in the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), the Federal Water Pollution Control Act ("Clean Water Act" or "CWA"), or the Idaho Environmental Protection and Health Act ("EPHA") shall have the meaning assigned to them in those statutes or their implementing regulations, including any amendments thereto. Whenever terms listed below are used in this Agreement, the following definitions shall apply:

a. "Agency" or "Agencies" shall mean IDEQ and EPA.

b. "Agreement" shall mean this Voluntary Consent Order/Administrative Order on Consent, all appendices attached hereto (listed in Section XI), and all documents incorporated by reference into this Agreement. In the event of conflict between this Agreement and any appendix, this Agreement shall control.

c. "BFPP" shall mean a bona fide prospective purchaser as defined in section 101(40) of CERCLA, 42 U.S.C. § 9601(40).

ED_004715_00093999-00001

d. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601–9675.

e. "Covered Sites" shall mean the Forest Service Repository and the DMEA Dump.

f. "CWA" shall mean the Federal Water Pollution Control Act, as amended, commonly referred to as the Clean Water Act, 33 U.S.C. §§ 1251–1387.

g. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

h. "DMEA Dump" shall mean the dump area associated with tunnel construction by the Bradley Mining Company, depicted on Appendix C.

i. "Effective Date" shall be the effective date of this Agreement as provided in Section X.

j. "EFSFSR" shall mean the East Fork South Fork Salmon River.

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

l. "EPHA" shall mean the Idaho Environmental Protection and Health Act, Idaho Code §§ 39-101 to 39-130.

m. "Existing Contamination" shall mean:

   i. any hazardous substances, pollutants, or contaminants present or existing on or under the Stibnite Site as of the Effective Date;

   ii. any hazardous substances, pollutants, or contaminants that migrated from the Stibnite Site before the Effective Date; and

   iii. any hazardous substances, pollutants, or contaminants presently at the Stibnite Site that migrate onto or under or from the Stibnite Site after the Effective Date.

n. "Forest Service" or "USFS" shall mean the United States Department of Agriculture Forest Service and any successor departments or agencies of the United States.

o. "Forest Service Smelter Waste Repository" means the legacy Forest Service-constructed repository depicted on Appendix C.

p. "HWMA" shall mean the Hazardous Waste Management Act of 1983, Idaho Code §§ 39-4401 to 39-4432.

ED_004715_00093999-00002

q. "IDEQ" shall mean the Idaho Department of Environmental Quality and any successor departments or agencies of the State of Idaho.

r. "IGRCLLC" shall mean Idaho Gold Resources Company, LLC.

s. "MGII" shall mean Midas Gold Idaho, Inc.

t. "MGC" shall mean Midas Gold Corp.

u. "Midas" shall mean MGII, MGC, IGRCLLC, and SGC.

v. "Mining Claims" shall mean those certain patented mining claims owned by Midas.

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

x. "NEPA" shall mean the National Environmental Policy Act, 42 U.S.C. §§ 4321 et seq., as amended, and any regulations promulgated pursuant thereto.

y. "Paragraph" shall mean a portion of this Agreement identified by an Arabic numeral or a lower case letter.

z. "Party" or "Parties" shall mean IDEQ, EPA, MGII, and MGC.

aa. "PRO" shall mean Midas's Plan of Restoration and Operations submitted to the Forest Service pursuant to 36 C.F.R. § 228 Subpart A.

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

cc. "SGC" shall mean Stibnite Gold Company.

dd. "SOW" shall mean the Statement of Work in Appendix A to this Agreement and any modifications made in accordance with this Agreement.

ee. "Stibnite Gold Project" shall mean Midas's comprehensive restoration, operation, and reclamation plan for the Stibnite Site, detailed in the PRO.

ff. "Stibnite Site" shall mean the historic Stibnite Mining District.

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

ED_004715_00093999-00003

hh. "Work" shall mean the limited investigation of Existing Contamination at the Covered Sites as set forth in the SOW.

ii. "Work Plan" shall mean the plan to be approved by the Agencies pursuant to Section VII of this Agreement.

IV. LIMITATION OF SCOPE

Nothing herein shall be deemed to affect or govern any of the parties' rights, duties, or obligations with respect to the identification, remediation, or cleanup of the Stibnite Site other than at the "Covered Sites." Each Party reserves all claims, rights, causes of action, and defenses with respect to the Stibnite Site, except as provided in this Agreement. The Parties agree that Midas's entry into this Agreement and the actions taken by Midas in accordance with this Agreement do not constitute an admission of any liability by Midas.

V. AUTHORITIES

The Statements of Authority set forth below shall not be construed to restrict, enlarge, or otherwise determine the rights, interests, and jurisdiction of the United States or the State of Idaho, or any of their respective departments, agencies, or members. Nor shall any statements made herein be construed to represent an admission, determination, settlement, or adjudication of any legal or factual dispute relating to any Party's rights, privileges, interests, authority, or jurisdiction. Each Party hereto reserves all claims, rights, causes of action, and defenses with respect to any claim of jurisdiction expressed herein.

1. FEDERAL AUTHORITY. Pursuant to Executive Order 12580, as amended by Executive Order 13016, the authority to conduct various activities and recover costs under CERCLA has been delegated to, among others, EPA. Such response activities include investigations and response activities (42 U.S.C. § 9604), cost recovery (42 U.S.C. § 9607), issuing such orders as may be necessary to protect public health or welfare or the environment (42 U.S.C. § 9606(a)), and entering into agreements to perform investigations (42 U.S.C. § 9622(d)(3)).

2. STATE AUTHORITY. The authority to identify, investigate and clean-up facilities where hazardous substances have come to be located in the State of Idaho has been delegated to IDEQ, pursuant to the EPHA and the Hazardous Waste Management Act of 1983 ("HWMA"), Idaho Code §§ 39-4401 to 39-4432. IDEQ is also the Idaho state agency with the authority to cooperate with EPA and to participate in the initiation and development of CERCLA response actions to be undertaken in the State of Idaho.

VI. FACTUAL BACKGROUND

1. Midas owns patented mining claims ("Mining Claims") within the Stibnite Site. Extensive mining has been conducted by prior owners and operators of the Stibnite Site, including the Bradley Mining Company. During World War II and the Korean War, mining in the Stibnite Mining District was encouraged and supported by the United

ED_004715_00093999-00004

States for strategic mineral development. Those mining activities include underground and open pit mining, heap leaching, ore processing in a mill, smelting, tailings disposal, development rock disposal, waterway diversions, hydro dam development, town and camp sites, haul roads, power lines, landfills, etc. Those activities, compounded by extensive forest fires, have resulted in releases of hazardous substances which have impaired water quality, compromised fish habitat, and elevated metals loading in surface and ground waters. The approximate extent of currently known historical mining operations at the Stibnite Site is indicated on the map attached hereto for informational purposes as Appendix B.

2. The Stibnite Site has been subject to substantial cost recovery litigation under CERCLA, and several consent decrees emerged from these actions including *Mobil Oil Corp. v. United States*, Case No. 1:99-cv-01467-LMB (E.D. Va.) (consent decree filed June 26, 2000); *United States v. Oberbillig*, Case No. 1:02-cv-00451-LMB (D. Idaho) (consent decree filed March 18, 2004); and *United States v. Bradley Mining Company*, Case No. 3:08-CV-03968 TEH (N.D. Cal.) and *United States v. Bradley Mining Company*, Case No. 3:08-CV-05501 TEH (N.D. Cal.) (consent decree filed April 19, 2012).

3. Midas is a bona fide prospective purchaser ("BFPP") as defined by section 101(40) of CERCLA, 42 U.S.C. § 9601(40). Midas has not conducted mining activities at the Stibnite Site and has conducted environmental investigations and site exploration activities in a manner consistent with and in order to maintain its status as a BFPP. Midas is presently assessing whether the Stibnite Site can be redeveloped, reclaimed, and restored. Midas has proposed to address the historical contamination and environmental impacts at the Stibnite Site through a comprehensive operation, reclamation and restoration plan (the "Stibnite Gold Project"), detailed in a Plan of Restoration and Operations ("PRO") submitted to the Forest Service pursuant to 36 C.F.R. § 228 Subpart A.

4. Since 2012, Midas has collected water quality monitoring samples in support of ongoing assessment of current site conditions and the National Environmental Policy Act ("NEPA") review of the PRO. Midas has previously provided those data to IDEQ and EPA, consistent with its continuing obligations as a BFPP.

5. The water quality sampling conducted to date has shown elevated arsenic and antimony levels in ground water beneath the Stibnite Site. One alluvial monitoring well (MWH-A19) near a legacy Forest Service-constructed repository ("Forest Service Smelter Waste Repository") has consistently measured particularly high arsenic concentrations, typically ranging from 3,000 to 6,000 μg/L and as high as 7,520 μg/L in a sample gathered in Q2 2017. By comparison, the arsenic concentration measured in the East Fork South Fork Salmon River ("EFSFR") near this location (site YP-SR-04) during the same quarterly monitoring period was measured at 48.4 μg/L.

6. Elevated arsenic, antimony, and mercury levels have also been detected in sampling locations located near a dump area associated with tunnel construction by the Bradley Mining Company pursuant to a contract and loan by the United States and supervised by

ED_004715_00093999-00005

the Defense Minerals Exploration Administration ("DMEA," hereinafter referred to as the "DMEA Dump").

7. The approximate locations of the Forest Service Smelter Waste Repository and the DMEA Dump are indicated on the map attached hereto for informational purposes as Appendix C.

VII. AGREEMENT

1. Without admitting any liability and expressly reserving all claims and defenses except as specifically waived herein, the Parties hereto mutually agree as follows:

    a. Midas agrees to conduct a limited initial investigation (the "Work") into Existing Contamination at the Covered Sites, pursuant to a work plan ("Work Plan") to be submitted for approval to the Agencies pursuant to this Agreement. The Work for which Midas seeks approval is more particularly set forth in the SOW attached hereto as Appendix A.

    b. Within thirty (30) days of the execution date of this Agreement, Midas shall submit the Work Plan to the Agencies for approval. The Work Plan shall describe the proposed investigation activities in detail and propose an expedited schedule to implement them.

    c. Within thirty (30) days following submission of the Work Plan, the Agencies shall approve, disapprove, or request revisions to the Work Plan. If either Agency requests revisions, Midas shall submit a revised Work Plan to both Agencies responding to their request(s) within fifteen (15) days of receipt of the Agency's notification of the requested revisions.

    d. When the Agencies have both approved the Work Plan, Midas shall implement the actions required thereunder as approved in writing by the Agencies in accordance with the schedule they have approved. Once approved, the Work Plan and schedule, and any subsequent modifications to those documents, shall be incorporated into and become fully enforceable under this Agreement.

    e. Midas shall not commence the Work, except as approved by the Agencies and in conformance with the terms of this Agreement. Midas may continue its ongoing water quality monitoring, which is not Work requiring approval under this Agreement.

    f. Midas agrees only to the Work approved pursuant to this Agreement and does not agree to perform any other removal or remedial action at the Stibnite Site. The Parties may, but are not obligated to, address any related removal or remedial action through a subsequent agreement.

VIII. CONSISTENCY WITH NATIONAL CONTINGENCY PLAN

ED_004715_00093999-00006

Any Work implemented or required under this Agreement shall be conducted in a manner that is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. Part 300, including without limitation 40 C.F.R. Subpart H (40 C.F.R. §§ 300.415 and 300.700).

IX. COMPLIANCE WITH OTHER LAWS

Except as set forth herein, this Agreement shall not relieve Midas from its obligations to comply with any of the applicable provisions of and the Parties hereto specifically reserve all other rights under the EPHA; the HWMA; the Idaho Water Quality Standards and Wastewater Treatment Requirements, IDAPA 16.01.02.001 to 16.01.02.999; the Rules and Standards for Hazardous Waste, IDAPA 16.01.05.001 to 16.01.05.999; the Ground Water Quality Rule, IDAPA 16.01.11.001-16.01.11.999, CERCLA, 42 U.S.C. §§ 9601–9675 and any other applicable local, state, tribal or federal law.

X. GENERAL PROVISIONS

1. Conflict Between Agreement and Appendices. To the extent of any conflict between the meaning of the terms and provisions in this Agreement and the Appendices, the meaning in this Agreement shall control.

2. Modifications. This Agreement may be modified by the Parties' mutual agreement. Agreed modifications to the Agreement must be in writing signed by an authorized representative of each Party.

3. Notice. All communications required by this Agreement shall be addressed to:

   [IDEQ Contact]

   [EPA Contact]

   [Midas Contact]
   Midas Gold Idaho, Inc.
   P.O. Box 429
   13181 Hwy 55
   Donnelly, ID 83615

4. Integration. This Agreement contains the entire agreement between the Parties. This Agreement Order may not be enlarged, modified, or altered, except in writing signed by the Parties.

5. Authority. Each Party represents and warrants that it has the authority to enter into this Agreement and to take all actions provided for herein and that no further action or authorization is required.

DRAFT

6. Severability. In case any provision or authority of this Agreement or the application of this Agreement to any Party or circumstances is held by any judicial or administrative authority to be invalid, the application of such provisions to other Parties or circumstances and the remainder of the Agreement shall remain in force and not be affected thereby.

7. Termination. Upon fulfilling the requirements of this Agreement, Midas may petition the Agencies in writing for termination of this Agreement. This Agreement shall remain in full force and effect until the Agencies acknowledge in writing that the Agreement is terminated and that Midas has fulfilled all requirements of this Agreement.

8. Successors and Assigns. This Agreement shall bind Midas, its successors and assigns until terminated in writing by the Agencies.

9. Effective Date. The effective date of this Agreement shall be the later of the date of signature by the Director of the Idaho Department of Environmental Quality or the [EPA Representative].

XI. APPENDICES

The following appendices are attached to and incorporated into this Agreement:

a. Appendix A shall mean the SOW.

b. Appendix B shall mean the map depicting the approximate extent of currently known historical mining operations at the Stibnite Site.

c. Appendix C shall mean the map depicting the approximate locations of the Forest Service Smelter Waste Repository and the DMEA Dump.

DRAFT

ED_004715_00093999-00008

DATED this __ day of _____, 2019.

By: _____
John Tippets, Director
Idaho Department of Environmental Quality

DATED this __ day of _____, 2019.

By: _____
[EPA Representative]
United States Environmental Protection Agency
Office of Environmental Cleanup, Region 10

DATED this __ day of_____, 2019.

By: _____
[xx]
[xx]
Midas Gold Idaho, Inc.

By: _____
[xx]
[xx]
Midas Gold Corp.

DRAFT

ED_004715_00093999-00009

APPENDIX A

STATEMENT OF WORK

ASSESSMENT ACTIONS FOR THE STIBNITE MINE SITE

I. PURPOSE

The purpose and objective of the work described by this Statement of Work is to undertake Stibnite Site response activity in areas of previous contamination. Further details of work activities, including the sequencing of actions, will be included in work plans that will subsequently be approved by the Agencies pursuant to the Voluntary Consent Order/Administrative Order on Consent.

II. STATEMENT OF WORK

A. Forest Service Smelter Waste Repository

The subject area is located just south of the EFSFSR below its junction with Sugar Creek and on the west side of the EFSFSR above its junction with Sugar Creek. The Forest Service Smelter Waste Repository is located on private land with a small area in the SW corner on public land.

In 2002 and 2003, the United States Forest Service, in coordination with EPA and IDEQ, constructed an unlined smelter waste repository to store residual soils contaminated with high levels of arsenic and antimony from the former smelter and tailings from various "poison ponds" recovered in two removal actions near the former mill and smelter site (USFS, 2003).

The estimated volume of contaminated material in the Forest Service Smelter Waste Repository is estimated, from an after-action report (MSE, 2003), to be at least 400 cubic yards of smelter soil and residues as well as an unknown amount of former tailings and pond material. The dimensions described for the repository in the Smelter Stack Removal Action Report indicate the constructed cell had dimensions of approximately 288 feet x 77 feet x 8 feet for a total estimated contained volume of approximately 177,408 cubic feet. The estimated volume of tailings, contaminated soils and other materials is estimated at between approximately 6,170 cubic yards and 10,000 cubic yards.

Three groundwater monitoring wells drilled flanking the Forest Service Smelter Waste Repository have weakly elevated arsenic in groundwater, but a single well (MWH-A19) drilled directly down gradient has consistently reported exceptionally high total and dissolved arsenic and antimony (>3000-8000 µg/l arsenic) suggesting the presence of a source of soluble arsenic to load groundwater nearby.

<u>Proposed Elements of the Work Plan</u>

An investigation utilizing dye tests, synoptic methods and other field sampling methods and geochemical characterization is proposed for the spring and summer of 2019 to further evaluate whether a release of hazardous substances to surface waters (EFSRSR) is occurring or likely to occur. Field sampling procedures and measured parameters, sample preservation, chain of custody, analytical and quality control and quality assurance methods and analytical suites and

ED_004715_00093999-00010

laboratories will be the same as or consistent with those used in the agency-approved baseline surface and groundwater water quality studies for the MGII PRO (HDR, 2012; MWH, 2012). In particular, the elements of the Work Plan will include:

1. Dye tests & mini-synoptic at high flow vs. low flow;
2. Pump tests; and
3. Additional groundwater quality monitoring and well drilling if required.

B. DMEA Dump

The subject area is located west of and uphill from the EFSFSR below its junction with Meadow Creek. Access is along the Stibnite Road—an improved two-lane public county road just below the dump and via a small unimproved single lane trail up the slope. The dump and portal are on public land managed by the USFS.

The federal government, through United States Bureau of Mines (USBM), sponsored and loaned funds to assist mine operators in locating minable reserves of strategic metals under the Defense Mineral Exploration Administration (DMEA) program. The DMEA Dump area resulting from the tunnel construction has indicated high levels of arsenic, antimony and mercury that could be impacting groundwater and surface water through seepage from the collapsed portal and from the stream passing through the toe of the DMEA Dump.

In particular, surface runoff from the unnamed Creek flows through the dumps and possibly comes in contact with the dump materials and/or adit seepage water loading with metals and passing into groundwater and/or migrating into the EFSFSR several hundred feet nearby and down gradient. Additionally, there is potential surface water impacts to EFSFSR and possibly groundwater from high arsenic, antimony and mercury, which in sampled seep and gully waters has exceeded acute freshwater aquatic life standards down gradient from the dump area.

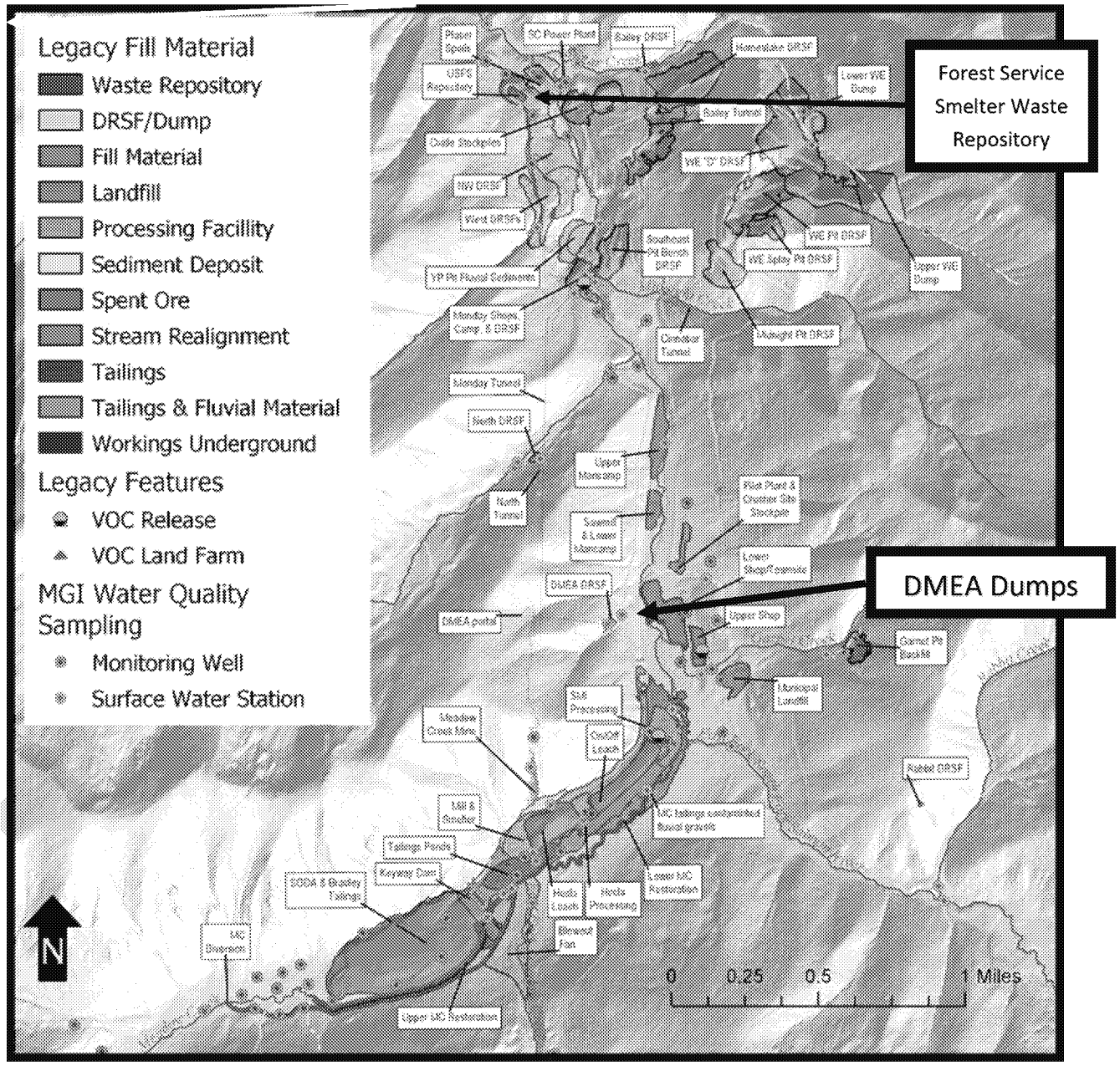
Proposed Elements of the Work Plan

An investigation utilizing dye tests, synoptic methods and other field sampling methods and geochemical characterization is proposed for the spring and summer of 2019 to further evaluate whether a release of hazardous substances to surface waters (EFSRSR). An auger hole may be warranted to evaluate whether the lower part of the dump is saturated and to help characterize the dumps overall geochemical composition. In particular, the elements of the Work Plan will include:

1. Dye tests & mini-synoptic at high flow vs. low flow;
2. Potential auger drilling to obtain sufficient material for further characterization of the DMEA Dump; and
3. Further Investigation to determine whether seeping bedrock portal can be closed efficiently.

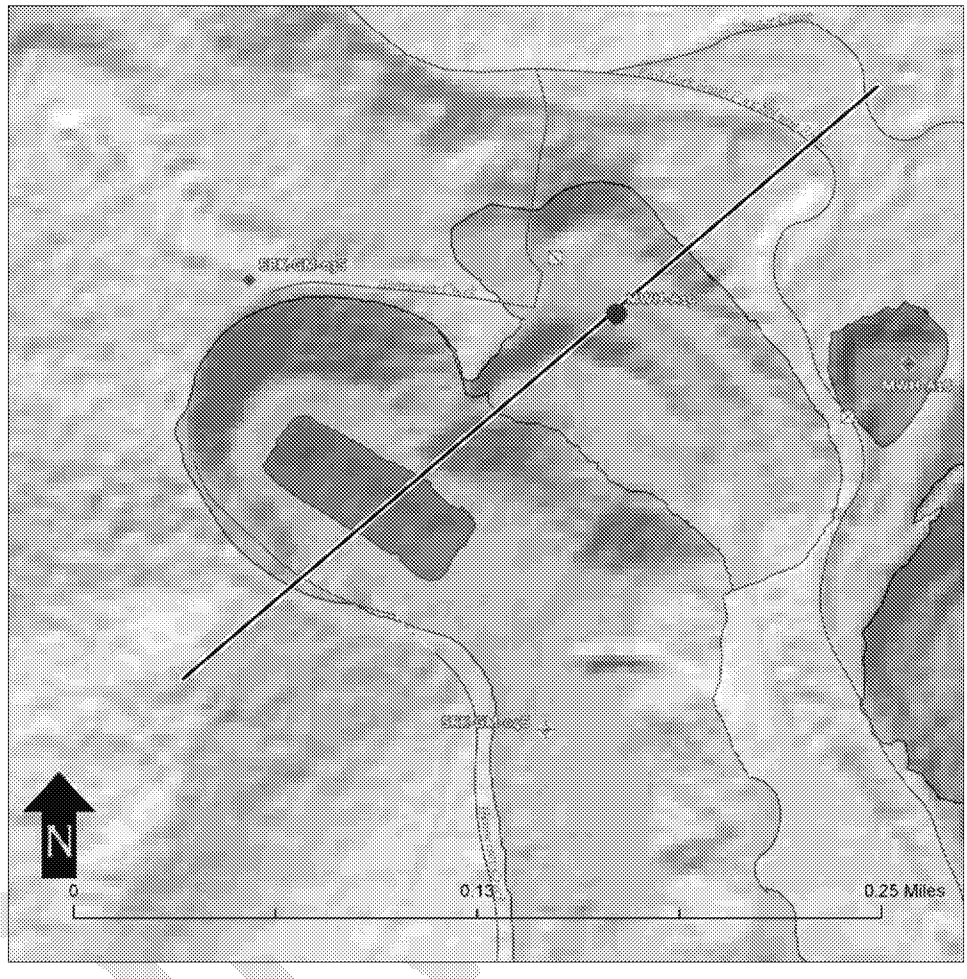
ED_004715_00093999-00011

APPENDIX B

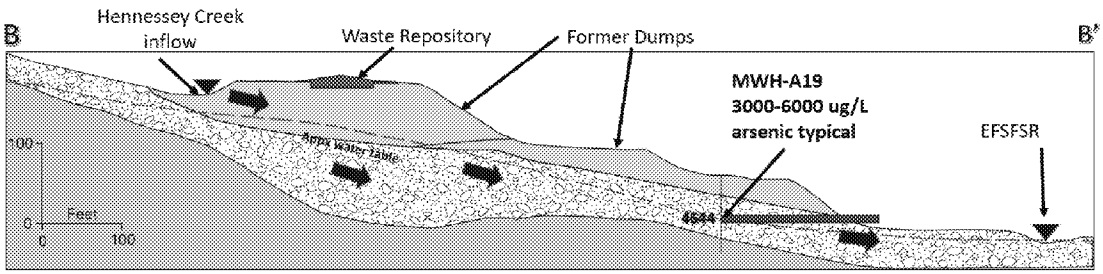

Legacy Fill Material
Waste Repository
DRSF/Dump
Fill Material
Landfill
Processing Facillity
Sediment Deposit
Spent Ore
Stream Realignment
Tailings
Tailings & Fluvial Material
Workings Underground
Legacy Features
VOC Release
VOC Land Farm
MGI Water Quality Sampling
Monitoring Well
Surface Water Station
Forest Service Smelter Waste Repository
DMEA Dumps
N
0
0.25
0.5
1 Miles

APPENDIX C

A. Forest Service Smelter Waste Repository and Profile Locations

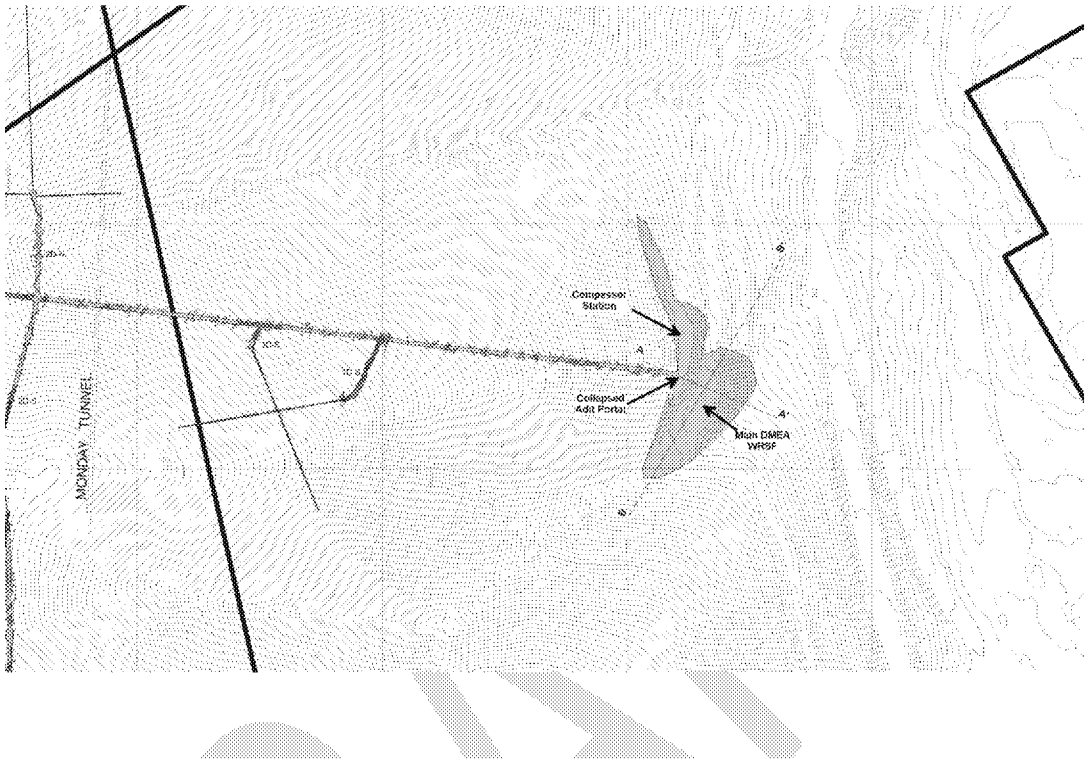


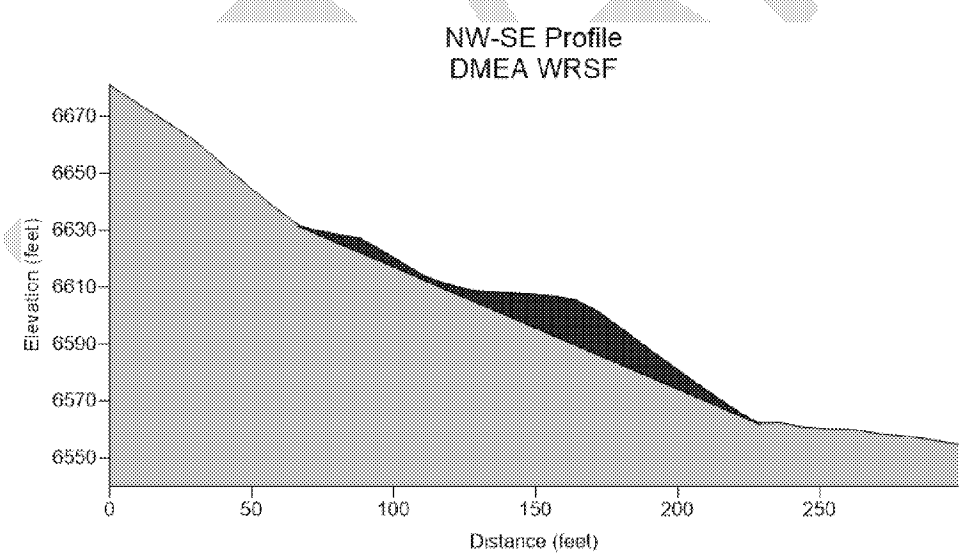
Northwest Bradley Waste Rock Dump
& Smelter Waste Repository Cross Section

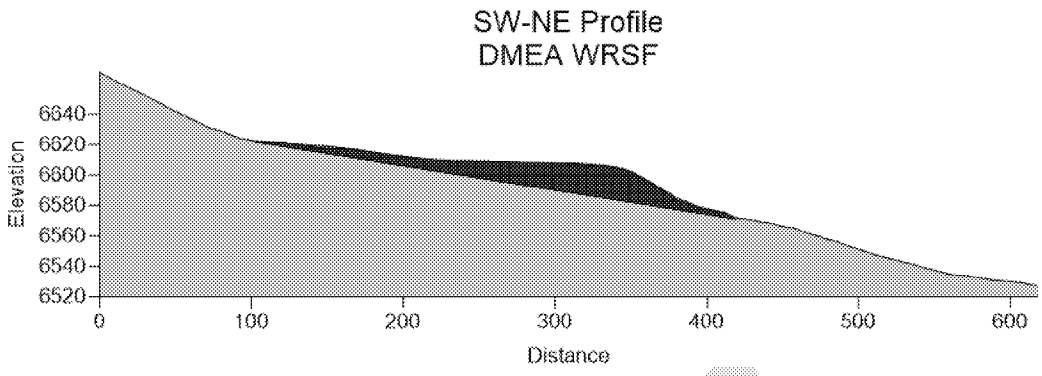


- Highly elevated geochemical values present in legacy dump materials adjacent to well
- Adjacent wells do not typically exceed WQ standards suggesting a local phenomena
- Bedrock source (at least proximal source) unlikely
- Also potential for other sources upgradient (Yellow Pine Deposit)

B. DMEA Dump Portal and Profile Locations







References

HDR, Inc. (2012) Appendix A, Surface Water Quality Baseline Study Work Plan for the Stibnite Gold Project, 2016. Prepared for Midas Gold Idaho, Inc. and Cooperating Agencies for baseline studies to support the Stibnite Gold Project Environmental Impact Statement, (including updates in 2014, 2015, and 2016)

USFS (2003) Removal Report, Smelter Stack Removal Action, Yellow Pine, Idaho, August 2003. Report from Pat Trainor, On Scene Coordinator, USDA - Forest Service, Region 4 - Payette National Forest McCall, Idaho.

MWH (2012) Groundwater Hydrology Baseline Study Work Plan, May 2012.

DRAFT

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 9/10/2019 9:17:07 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: 'Michael Bogert' [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]; Tenpas, Ron [rtenpas@velaw.com]; John C. Cruden [JCruden@bdlaw.com]; Christopher H Meyer [ChrisMeyer@givenspursley.com]; Preston N. Carter [prestoncarter@givenspursley.com]
Subject: Midas Letter to Tribe re: Stay
Attachments: Midas Gold to Nez Perce Tribe, 2019.09.09.PDF

Elizabeth:

As I mentioned in an e-mail earlier today, it has been nearly a month since Midas asked the Nez Perce Tribe to enter into a stay of the CWA lawsuit they have filed against Midas, in order to give the parties to the AOC an opportunity to consult with the Tribe without contemporaneous litigation. Despite informal attempts to engage, Midas has had no response from the Tribe's lawyers. Midas therefore sent the attached letter, which I am copying you on, so that you are current on our efforts. It sets a deadline for a response on the stay request of September 16 – next Monday. We hope we will hear something by then, one way or the other, and get back to working with EPA, the State and the Forest Service on completing the AOC.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

GIVENS PURSLEY LLP
Attorneys and Counselors at Law

601 W. Bannock Street
PO Box 2720
Boise, ID 83701
Telephone: 208-388-1200
Facsimile: 208-388-1300

www.givenspursley.com

Preston N. Carter
prestoncarter@givenspursley.com
208-388-1222

Gary G. Allen
Charlie S. Baser
Christopher J. Beeson
Jason J. Blakley
Clint R. Bolinder
Jeff W. Bower
Preston N. Carter
Jeremy C. Chou
Michael C. Creamer
Amber N. Dina
Bradley J. Dixon
Thomas E. Dvorak
Debora Kristensen Grasham
Donald Z. Gray
Brian J. Holleran
Kersti H. Kennedy
Neal A. Koskella
Michael P. Lawrence
Franklin G. Lee
David R. Lombardi
Kimberly D. Maloney
Kenneth R. McClure
Kelly Greene McConnell
Alex P. McLaughlin
Melodie A. McQuade
Christopher H. Meyer
L. Edward Miller
Judson B. Montgomery
Deborah E. Nelson
W. Hugh O'Riordan, LL.M.
Randall A. Peterman
Jack W. Relf
Michael O. Roe
Jamie Caplan Smith
Jeffrey A. Warr
Robert B. White

William C. Cole (Of Counsel)

Kenneth L. Pursley (1940-2015)
James A. McClure (1924-2011)
Raymond D. Givens (1917-2008)

September 9, 2019

VIA EMAIL (arogerson@advocateswest.org)
Amanda Rogerson, Advocates for the West
Counsel for the Nez Perce Tribe
P.O. Box 1612
Boise, ID 83701

Re: Nez Perce Tribe's response to stay request
Nez Perce Tribe v. Midas Gold Corp. et al., Case No. 19-cv-307-BLW

Dear Amanda:

I write today to follow up on our prior correspondence and discussions regarding the Defendants' (collectively, "Midas Gold") request that the Nez Perce Tribe consider an agreement to stay of the litigation while Midas Gold, the State of Idaho, the Environmental Protection Agency ("EPA") and the United States Forest Service work toward a CERCLA Administrative Order on Consent ("AOC") to begin addressing the resource concerns at the Stibnite site raised by the Tribe in its Clean Water Act litigation.

As we have discussed, the State of Idaho, EPA and Midas Gold began negotiating an AOC long before the Tribe provided its Clean Water Act notice of intent to sue in early June of this year. An AOC is the best long-term path to learn more about and eventually respond to the Tribe's resource concerns at the Stibnite site. Midas Gold's well-developed efforts to work with its State and Federal regulators to finalize an AOC demonstrate its commitment to provide the most effective mechanism to address the core issue: remediating damage caused by historical mining operations. A Clean Water Act remedy cannot provide the same kind of comprehensive approach that will be the outcome of the CERCLA framework that was fully maturing before the Tribe brought its action against Midas Gold.

As we have also discussed, a CERCLA AOC on the site will preclude the current Clean Water Act lawsuit under 42 U.S.C. §9613(h), as the United States District Court for the District of Idaho concluded in *Greater Yellowstone Coalition, et al. v. Nu-West Industries*, Case No. 04-

116-BLW. In sum, an AOC will effectively bar jurisdiction over the Clean Water Act case with a result that is more protective of the environment.

Midas Gold first requested that the Tribe consider a stay in the litigation in a phone call on August 16, 2019. The request was made by Brad Marten, Midas Gold's CERCLA counsel, to you and Michael Lopez as the Tribe's counsel. Before that communication from Mr. Marten, it is our understanding that the Tribe had been made aware of the CERCLA discussions with Midas Gold by EPA and that further, in late July, Mr. Marten reached out to the Tribe to entertain any questions about the company's role in the AOC discussions. Finally, on August 1, Mr. Marten, on behalf of Midas Gold, provided directly to Mr. Lopez a well-developed draft of a proposed Statement of Work that would address further assessment of the key areas pointed to by the Tribe in the notice of intent "NOI" as potential contributors to degraded water quality at Stibnite. This direct outreach to the Tribe's legal counsel from Midas Gold exemplifies the company's efforts through the past several years to attempt to work collaboratively with the Nez Perce Tribe, in this instance, even *after* the NOI was formally served on our clients on June 5.

Chris Meyer and I met with you and Bryan Hurlbutt on August 21 to discuss our request for an extension of time to respond to the complaint. That was a productive meeting resulting in a stipulated extension, for which we appreciate your courtesy. At that August 21 meeting, Chris and I explained that the stipulated extension was important to give us time to explore a stipulated stay. I noted that again during our exchange of voicemails on August 28-29. It was our understanding that the Tribe wished to be briefed by EPA before responding to our stay request. We understand that the Tribe met with EPA almost two weeks ago in Lapwai to discuss the AOC process, and we have not yet heard the Tribe's position in response to our request for your client to consider a stay. To be clear, we would anticipate building into any stay appropriate "safeguards" that the Tribe is reasonably protected—for example, requirements for periodic reporting to the Court on the status of the AOC process as the AOC is finalized.

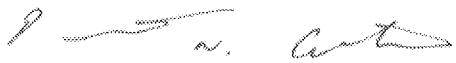
Midas Gold is committed to concluding the AOC negotiations with the Tribe being fully informed of that process. A stay of the Tribe's litigation will allow for all parties to focus on the AOC and avoid the expense and effort of litigation that will ultimately prove ineffectual once an AOC is finalized. As it has before the Tribe brought its action, Midas Gold will continue to attempt to work collaboratively with the Nez Perce Tribe given their common interests in restoration of the Stibnite Site.

If the Tribe does not agree to a stay, Midas Gold anticipates seeking one from the District Court. If that becomes necessary, it is in everyone's interest to present that request to the Court in a timely fashion. As you can understand, it will take some time to prepare a motion to stay and supporting materials.

In the hope of avoiding a contested motion to stay, Midas Gold respectfully requests that the Tribe provide a response to Midas Gold's request for a stay by September 16, 2019. If Midas Gold does not have an affirmative response by that time, it will turn its attention to a unilateral request for a stay.

As always, Chris and I are available at any time to discuss this or any other matter. Please don't hesitate to call.

Sincerely,



Preston N. Carter
Attorney for Midas Gold

cc (email): Michael Lopez, Nez Perce Tribe
L. Michael Bogert, Midas Gold
Ronald J. Tenpas, Vinson & Elkins LLP, counsel for Midas Gold

14807387_3.docx [14681.2]

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 10/17/2019 2:00:14 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: 'Michael Bogert' [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; Lisa.Carlson@deq.idaho.gov
Subject: Consultation by Nez Perce Tribe in AOC negotiations at Stibnite Mine Site

Elizabeth:

As we discussed on the phone today, our client Midas Gold would appreciate the courtesy of receiving the letter sent to EPA by the Nez Perce Tribe regarding consultation in the AOC negotiations we have been engaged in with the Forest Service, the State of Idaho and EPA regarding the Stibnite Mine. The letter is a public record, not protected by FOIA, and it would be helpful for Midas to be able to review it in order to be able to understand the role the Nez Perce Tribe wishes to play when our AOC negotiations resume later this fall.

I look forward to getting back to work with you, Gary and Lisa on this project, and to working with representatives of the Nez Perce. I understand that the Shoshone Bannock Tribe has also expressed an interest in working with us on the AOC, and welcome the chance to work with their lawyers and technical staff as well.

Regards

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 5/15/2019 2:51:17 AM
To: Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Terry T. Uhling [tuhling@martenlaw.com]; Aaron.Scheff@deq.idaho.gov; michael.mccurdy@deq.idaho.gov; Cerise, Kathy [Cerise.Kathryn@epa.gov]; 'Michael Bogert' [mbogert@midasgoldinc.com]; Merissa A. Moeller [mmoeller@martenlaw.com]; Lisa.Carlson@deq.idaho.gov; Cruden, John (ENRD) [John.Cruden@usdoj.gov]
Subject: Friday Stibnite Project Meeting

Lisa:

Thanks for your message earlier today.

The Friday meeting on the Stibnite project will start at 10 am Boise time (9 am PST) and be held at EPA Region X. Attending for Midas will be John Meyer, Merissa Moeller of our firm and me. Attending for EPA will be Kathy Cerise and Elizabeth McKenna. Aaron and Michael will be able to call in via a web conference line. John Meyer will circulate a webconference number prior to the call to everyone copied here. We can use that in lieu of the number Elizabeth circulated Monday evening.

Elizabeth has invited Lynne Hood, EPA's NEPA project manager, to join by phone. I do not have her e-mail address, but -- by copy of this e-mail -- I am going to ask Elizabeth to send it to me. Members of Midas's technical team in Boise will join by phone. In total, we will have a group of 5 in person at EPA's office, and a group of about the same size on the phone. All will receive an Outlook invite and e-mail from John.

The purpose of the Friday meeting is to 1) provide Kathy with an introduction to the Stibnite site; 2) to respond to EPA's information requests; and 3) to begin to work cooperatively toward the goal of conducting a focused site investigation this summer into areas at the site where elevated arsenic levels have been observed at the Stibnite site. We will circulate a roster of the individuals that will be on the call, in order to facilitate communication as we move forward. We do not expect our meeting on Friday to be decisional so much as informational, and we want to be sure we can answer EPA and IDEQ's questions related to the focused site investigation. We do not anticipate discussing the Plan of Restoration and Operation or the NEPA process, but rather to stay focused on the focused investigation at hand in order to expeditiously address the elevated arsenic levels resulting from historic operations.

Please let me know if you have any questions about logistics or anticipate additional information needed prior to Friday. We look forward to speaking with everyone then.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

-----Original Message-----
From: Lisa.O'Hara@deq.idaho.gov <Lisa.O'Hara@deq.idaho.gov>
Sent: Tuesday, May 14, 2019 2:57 PM
To: Mckenna.Elizabeth@epa.gov
Cc: Bradley M. Marten <bmarten@martenlaw.com>; Terry T. Uhling <tuhling@martenlaw.com>
Subject: Friday meeting

Elizabeth & Brad,
Michael McCurdy and Aaron Scheff from DEQ will be able to call in for Friday's meeting. I am unable to participate that morning. Will you provide the call in information when it is available? Also, is there a way for DEQ to see the presentation - either through a webex or a hard copy to follow along?
Thank you,
Lisa

Sent from my iPhone

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 6/21/2019 9:22:37 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Uhling, Terry [Terry.Uhling@simplot.com]; Michael Bogert [mbogert@midasgoldinc.com]; Lisa.O'Hara@deq.idaho.gov
Subject: Stibnite

Elizabeth:

Left you a message on your voice mail. Hoping to talk this afternoon about our recent meeting with the Forest Service in DC, and a planned meeting next week in Boise with IDEQ to address your comments on the work plan proposed by Midas to address arsenic releases at the Stibnite mine site. I can be best reached on my cell. Ex. 6 Personal Privacy (PP)

Thanks

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 4/4/2019 2:31:11 PM
To: Lisa.Carlson@deq.idaho.gov
CC: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; mbogert@midasgoldinc.com; jess.byrne@deq.idaho.gov
Subject: Re: Internet/WiFi

Lisa - think I've got it now. I never was very good at numbers. Thank goodness for social science.

Talk to you soon.

Sent from my iPhone

On Apr 4, 2019, at 7:09 AM, "Lisa.Carlson@deq.idaho.gov" <Lisa.Carlson@deq.idaho.gov> wrote:

> Brad – I am told that is something you guys should have created when you set up the zoom? Conference Room B is reserved and participants here should be able to access the public WIFI which is Guest.Idaho.Gov using the Password (b) (6) just talked to one of our IT guys and he will be in conf rm B at 10:15 to help in any way he can.
> Thanks.
>
> *Lisa J. Carlson*
> Deputy Attorney General
> Environmental Quality Section Chief
> Idaho Office of the Attorney General
> 1410 North Hilton Street
> Boise, ID 83706
> *Direct:* 208.373.0455
> *Fax:* 208.373.0481
>
> **From:** Bradley M. Marten [mailto:bmarten@martenlaw.com]
> **Sent:** Wednesday, April 03, 2019 7:10 PM
> **To:** Lisa Carlson
> **Cc:** 'Elizabeth McKenna'; 'Michael Bogert'
> **Subject:** Internet/WiFi
>
> Hi, Lisa:
>
> Elizabeth McKenna and I will be calling in from our office tomorrow morning to the Midas Gold meeting. We have the "Zoom" url, but it requires a "Meeting Number." Can you please forward it at your convenience?
>
> **Bradley M. Marten**
> Partner
>
> D - 206 . 292 . 2604
> T - 206 . 292 . 2600
> E - bmarten@martenlaw.com

martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

<image001.png>

From: Terry T. Uhling <tuhling@martenlaw.com>
Sent: Wednesday, April 3, 2019 4:38 PM
To: L. Michael Bogert <mbogert@midasgoldinc.com>; Bradley M. Marten <bmarten@martenlaw.com>
Subject: Fwd: Internet/WiFi

FYI. Brad you will need to call Lisa in the morning to confirm or answer logistic questions. I assume Michael would be on the call to answer any technical questions.

Terry

Terry Uhling
tuhling@martenlaw.com

Begin forwarded message:

> **From:** tuhling@martenlaw.com
> **Date:** April 3, 2019 at 5:35:16 PM MDT
> **To:** Lisa.Carlson@deq.idaho.gov
> **Subject: Internet/WiFi**
>
> Lisa-
>
> We will need WiFi/ internet access if possible tomorrow. The following url will be utilized to access Zoom. In addition, Elizabeth McKenna and Brad Marten will be joining from Seattle.
>
> Thank you,
>
> Terry
>
> https://zoom.us(b) (6)
>
> Terry Uhling
> tuhling@martenlaw.com

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of

the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 4/4/2019 1:10:07 AM
To: Lisa.Carlson@deq.idaho.gov
CC: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; 'Michael Bogert' [mbogert@midasgoldinc.com]
Subject: Internet/WiFi

Hi, Lisa:

Elizabeth McKenna and I will be calling in from our office tomorrow morning to the Midas Gold meeting. We have the "Zoom" url, but it requires a "Meeting Number." Can you please forward it at your convenience?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: Terry T. Uhling <tuhling@martenlaw.com>
Sent: Wednesday, April 3, 2019 4:38 PM
To: L. Michael Bogert <mbogert@midasgoldinc.com>; Bradley M. Marten <bmarten@martenlaw.com>
Subject: Fwd: Internet/WiFi

FYI. Brad you will need to call Lisa in the morning to confirm or answer logistic questions. I assume Michael would be on the call to answer any technical questions.

Terry

Terry Uhling
tuhling@martenlaw.com

Begin forwarded message:

> **From:** tuhling@martenlaw.com
> **Date:** April 3, 2019 at 5:35:16 PM MDT
> **To:** Lisa.Carlson@deq.idaho.gov
> **Subject: Internet/WiFi**
>
> Lisa-
>
> We will need WiFi/ internet access if possible tomorrow. The following url will be utilized to access Zoom. In addition, Elizabeth McKenna and Brad Marten will be joining from Seattle.
>
> Thank you,
>
> Terry

https://zoom.us (b) (6)

Terry Uhling
tuhling@martenlaw.com

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]
Sent: 11/16/2019 12:23:03 AM
To: Bradley M. Marten [bmarten@martenlaw.com]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Lisa.O'Hara@deq.idaho.gov; Jill Grant [jgrant@jillgrantlaw.com]
CC: Cerise, Kathy [Cerise.Kathryn@epa.gov]; John Meyer [JMeyer@midasgoldcorp.com]; 'Andy Koulermos' [akoulermos@FormationEnv.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]; Zamba, Kathy -FS [kathy.zamba@usda.gov]
Subject: RE: Stibnite Mine Site
Attachments: StibniteSOW.docx

Hi Brad, Elizabeth, Jill & Lisa – please use the attached version of the Forest Service comments on the SOW instead. The attached document reflects the revised comments that we sent to EPA on Oct. 29. Thanks.

Gary M. Fremerman
Senior Counsel
Natural Resources and Environment Division
Office of the General Counsel
U.S. Department of Agriculture
1400 Independence Ave., S.W., Rm 2013-S
Washington, D.C. 20250
202-720-8041 (voice)
202-631-4881 (mobile)
844-354-1119 (fax)
gary.fremerman@usda.gov

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, November 15, 2019 7:15 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Lisa.O'Hara@deq.idaho.gov; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Cerise, Kathy <Cerise.Kathryn@epa.gov>; John Meyer <JMeyer@midasgoldcorp.com>; 'Andy Koulermos' <akoulermos@FormationEnv.com>; 'Michael Bogert' <mbogert@midasgoldinc.com>
Subject: RE: Stibnite Mine Site

Thanks for these Elizabeth. We had not previously seen them, but will review them over the weekend and be prepared to address on Monday, along with the State and Shoshone Bannock comments.

What we have from the Forest Service (Gary) are red-line comments on the SOW. What we have from the Tribe (Jill) and State (Lisa) are summary comments. Were there red-line comments to the draft submitted by the State or the Tribe?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Friday, November 15, 2019 4:08 PM
To: Lisa.O'Hara@deq.idaho.gov; Bradley M. Marten <bmarten@martenlaw.com>; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Cerise, Kathy <Cerise.Kathryn@epa.gov>
Subject: Stibnite Mine Site

Hi Brad, Jill, and Lisa. I'm not sure I ever sent you Gary's comments from October 29th on the SOW. Here you go...

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

Appendix 1

STATEMENT OF WORK FOR THE
STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY
Valley County ID near Yellow Pine, ID

Purpose

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Stibnite Mine Site ("Site") located in northwest Idaho approximately 14 miles from the town of Yellow Pine (see Figure 1). The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of Work that will be carried out by Midas Gold Idaho, Inc. ("Midas Gold" or "Respondent") as it implements the RI/FS at the Site.

In September 2016, Midas Gold filed a proposed Plan of ~~Restoration and~~ Operations (~~"PROproposed Plan of Operations~~ titled the Stibnite Gold Project Plan of Restoration and Operations"[1]) with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider potential mining acitivities in the proposed Plan of Operations~~PRO~~, any modifications and subsequent remediation ~~must be consistent with the PRO and the subsequent restoration~~. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

The Site is defined as the ~~features~~ areas described below (general locations summarized on Figure 2) and the areal extent of contamination from those features and all suitable areas in ~~very~~ close proximity to the contamination necessary for response action implementation:

1. **Yellow Pine Pit (Figure 3)** – The Yellow Pine Pit (formerly known as "The Glory Hole") was actively mined during the 1930s through the 1950s for antimony, tungsten, gold and silver. The pit is located on Midas Gold patented land, and most of the waste rock dumps associated with the pit are adjacent to the pit; some of the waste rock dumps are located on areas subject to unpatented mining claims owned by Midas Gold on USFS managed land. During active mining, the East Fork of the South Fork of the Salmon River (EFSFSR) was routed around the pit through the

Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Not Highlight
Formatted: Strikethrough

[1] Midas Gold's Plan of Restoration and Operations will be referred to as the proposed Plan of Operations, ~~to match terminology inper~~ Forest Service minerals regulations at 36 CFR 228.

ED_004715_00094477-00001

Bailey Tunnel but was allowed to return to its natural course through the pit after the Bailey Tunnel was abandoned in the mid-1950s. The EFSFSR now runs through the pit, but does not currently support fish passage to the headwaters. The Yellow Pine Pit, and the majority of waste rock dumps associated with it, are within the footprint of Midas Gold's proposed Plan of Operations ~~PRO~~.

2. **Bradley Tailings Pile (Figure 4)** – The Bradley Tailings Pile, also known as the Historical Tailings and Spent Ore Disposal Area, is located on Midas Gold patented land. Approximately 3 million tons of mine tailings generated during the 1940s and 1950s are stored in this area, and they are overlain by approximately 6 million tons of spent heap leach ore placed in the 1980s and 1990s. The downstream end of the Tailings Pile is constrained by a structure known as the Keyway Dam, and a wetland exists downgradient of the Keyway Dam, which is also referred to as the Keyway Marsh. Meadow Creek is diverted around the south side of the Tailings Pile. The Bradley Tailings Pile is within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

3. **Hangar Flats Tailings Pile (Figure 5)** – The Hangar Flats Tailings Pile, also known as the Hecla Heap Leach Facility, is a reclaimed heap-leach facility which was built and operated in the 1990s to extract oxide gold and silver. The facility is located on Midas Gold controlled patented land, and is within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

4. **Bailey Tunnel (Figure 6)** – The Bailey Tunnel was constructed in the early 1940s to divert the EFSFSR around the Yellow Pine Pit and into Sugar Creek to facilitate open pit mining operations. The tunnel was no longer used after the mid-1950s, following cessation of open pit mining activities. The Bailey Tunnel is on Midas Gold patented land, and is within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

5. **DMEA Adit and Waste Rock Dump (Figure 7)** – The Defense Minerals Exploration Administration (DMEA) Adit and Waste Rock Dump are mining-related disturbances resulting from underground exploration activities during the 1950s. The adit and dump are located on areas subject to unpatented mining claims owned by Midas Gold on USFS managed land, and are not within the footprint of the Midas Gold ~~PRO~~proposed Plan of Operations.

6. **Bonanza Adit (Figure 8)** – The Bonanza Adit area is a mining-related disturbance in the Sugar Creek drainage resulting from underground exploration activities during the 1930s and 1940s. The Bonanza Adit area is subject to unpatented mining claims owned by Midas Gold ~~located~~ on USFS managed land, and is not within the footprint of the Midas Gold ~~PRO~~proposed Plan of Operations.

7. **Cinnabar Tunnel (Figure 9)** – The Cinnabar Tunnel is a mining-related disturbance resulting from underground exploration activities during the late 1920s and early 1930s. The Tunnel is located on areas subject to unpatented mining

ED_004715_00094477-00002

claims on USFS managed land; the tunnel portal is within the footprint of the Midas Gold ~~PRO~~proposed Plan of Operations.

8. **Meadow Creek Adit (Figure 10)** – The Meadow Creek Adit and associated waste rock dumps are mining-related disturbances that resulted from underground mining activities from the 1920s through the 1940s. The adit and waste rock dumps are located on Midas Gold controlled patented land, and are within the footprint of Midas Gold's proposed ~~PRO~~Plan of Operations.

This RI/FS SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language. This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h] [HYPERLINK "http://www.epa.gov/oilspill/pdfs/40cfr300.pdf" \h]commonly called the National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the "AOC." Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

Scope

The specific RI/FS activities to be conducted at the Site are set forth in ~~seven~~ six separate tasks.

Task 1 – Scoping
Task 2 – Community Relations
Task 3 – Site Characterization
Task 4 – Treatability Studies
Task 5 – Feasibility Study
Task 6 – Detailed Analysis of Remedial Alternatives

Oversight

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code§§ 39-101 to 39-130; the Hazardous Waste Management Act of Idaho, Idaho Code§§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code§§ 39-3601 et seq. As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

ED_004715_00094477-00003

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

Schedule

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

Guidance

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

Roles and Responsibilities

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the AOC. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

Remedy Requirements

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or

ED_004715_00094477-00004

resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

TASK 1 - SCOPING

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by the Respondent as a function of the project planning process.

a. Site Background

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

Collect and analyze existing data and document the need for additional data

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA. Guidance on systematic planning using the data quality objectives

ED_004715_00094477-00005

process (EPA QA/G-4). Washington, D.C.: 121. [HYPERLINK "http://www.epa.gov/quality/qs-docs/g4-final.pdf"], U.S. EPA (2006)

Conduct site visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

b. *Project Planning*

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the

ED_004715_00094477-00006

information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR

ED_004715_00094477-00007

identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

c. *Scoping Deliverables*

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan will ~~fully account~~ take in to consideration for the timing and scope of potential mining and processing activities associated with the ~~PRO~~proposed Plan of Operations. This could include a phased approach to focus on issues of most concern or requiring early action. The Work Plan shall be developed in conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Formatted: Strikethrough

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a

ED_004715_00094477-00008

data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP,and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision) and specifically should contain the twenty-four elements specified in Table 11 – List of QA Project Plan Elements, EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved

ED_004715_00094477-00009

QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

Potential Target Analytes

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

Chemicals/Analytes of Potential Concern for Surface Water

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium (III)

ED_004715_00094477-00010

- Chromium (VI)
- Cobalt
- Copper
- Hardness
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrogen, total Kjeldahl
- Phosphorus
- Potassium
- Selenium
- Silver
- Sodium
- Sulphate
- Thallium
- Tungsten
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Uranium
- Vanadium
- Zinc

Field Analyses
- Conductivity
- Dissolved Oxygen
- Flow
- pH
- Temperature

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Chemicals/Analytes of Potential Concern for Sediments:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for sediment sampling stations.

ED_004715_00094477-00011

Laboratory Analyses

- Antimony
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Soils/Waste Rock:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for soils/waste rock sampling.

Laboratory Analyses

- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Uranium
- Vanadium
- Zinc

ED_004715_00094477-00012

Chemicals/Analytes of Potential Concern for Vegetation:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for vegetation sampling stations.

Laboratory Analyses
- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Groundwater

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

Laboratory Analyses
- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chloride

ED_004715_00094477-00013

- Chromium III
- Chromium VI
- Cobalt
- Copper
- Hardness
- Iron
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrate/nitrite as N
- Nitrogen (TKN)
- Orthophosphate
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium
- Total Dissolved Solids
- Total Suspended Solids
- Total Organic Carbon
- Tungsten
- Uranium
- Vanadium
- Zinc

Field Analyses

- Conductivity
- Dissolved Oxygen or ORP
- Ferric Iron
- Ferrous Iron
- Nitrite
- pH
- Temperature

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

ED_004715_00094477-00014

Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

TASK 2 - COMMUNITY RELATIONS

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of McCall, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

TASK 3 - SITE CHARACTERIZATION

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations (including estimates of pre-mining water quality) at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the

ED_004715_00094477-00015

laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

a. Field Investigation

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

Implement and document field support activities

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. The Respondent shall also notify the RPM upon completion of field support activities.

Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

ED_004715_00094477-00016

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

~~Describe~~ Delineate the nature and extent of contamination

The Respondent shall gather information to ~~describe~~ delineate the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

b. *Data Analyses*

Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

ED_004715_00094477-00017

c. *Data Management Procedures*

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See [HYPERLINK "http://www.epa.gov/storet/wqx.hmtl)" \h]

d. *Site Characterization Deliverables*

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site

ED_004715_00094477-00018

characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action, but will consider implementation of the PROproposed Plan of Operations. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

Contaminant Identification – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).

Exposure Assessment – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

Toxicity Assessment – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity). EPA has

ED_004715_00094477-00019

prepared chemical screening tables with updated toxicity values and Preliminary Remediation Goals for various land uses available from: [HYPERLINK "https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables"]

Risk Characterization – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

TASK 4 - TREATABILITY STUDIES

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

a. Determination of Candidate Technologies and of Need for Testing

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the range of technologies required for the development and analysis of alternatives (Task 5 and 6) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment

ED_004715_00094477-00020

as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

b. Treatability Testing and Deliverables

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence

ED_004715_00094477-00021

of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 5 - FEASIBILITY STUDY

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

a. Remedial Alternative Development

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

<u>Refine and document remedial action objectives</u>

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

ED_004715_00094477-00022

Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

ED_004715_00094477-00023

TASK 6 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

a. Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative, the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

Compare alternatives against each other and document the comparison of alternatives

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

b. Detailed Analysis Deliverables

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

ED_004715_00094477-00024

Feasibility Study report

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

ED_004715_00094477-00025

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA -330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008. "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

ED_004715_00094477-00027

Attachments

Attachment A – Suggested RI/FS Work Plan Format

Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
   - Types and volumes of waste present
   - Potential pathways of contaminant migration/preliminary public health and environmental impacts
   - Preliminary identification of operable units
   - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
   - DQO needs
   - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
   - Staffing
   - Coordination
9. References

Appendices

ED_004715_00094477-00028

Attachment B – Suggested Format for SAP (FSP and QAPP)

FSP

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

QAPP

Project Management
A1 Title and Approval Sheet
A2 Table of Contents
A2 Distribution List
A4 Project/Task Organization
A5 Problem Definition/Background
A6 Project/Task Description
A7 Quality Objectives and Criteria
A8 Special Training/Certifications
A9 Documentation and Records

Data Generation and Acquisition

B1 Sampling Process Design (Experimental Design)
B2 Sampling Methods
B3 Sample Handling and Custody
B4 Analytical Methods
B5 Quality Control
B6 Instrument/Equipment Testing, Inspection, and Maintenance
B7 Instrument/Equipment Calibration and Frequency
B8 Inspection/Acceptance of Supplies and Consumables
B9 Non-direct Measurements
B10 Data Management

Assessment and Oversight
C1 Assessments and Response Actions
C2 Reports to Management

Data Validation and Usability
D1 Data Review, Verification, and Validation
D2 Verification and Validation Methods
D3 Reconciliation with User Requirements

ED_004715_00094477-00029

~~Title Page~~

~~Table of Contents~~

~~1. Project Description~~

~~2. Project Organization and Responsibilities~~

~~3. QA Objectives for Measurement~~

~~4. Sampling Procedures~~

~~5. Sample Custody~~

~~6. Calibration Procedures~~

~~7. Analytical Procedures~~

~~8. Data Reduction, Validation, and Reporting~~

~~9. Internal Quality Control~~

~~10. Performance and Systems Audits~~

~~11. Preventative Maintenance~~

~~12. Data Assessment Procedures~~

~~13. Corrective Actions~~

~~14. Quality Assurance Reports~~

ED_004715_00094477-00030

Attachment C – Suggested RI Report Format

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization
2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology
4. Nature and Extent of Contamination

ED_004715_00094477-00031

4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:

4.1.1 Sources (lagoons, sludges, tanks, etc.)

4.1.2 Soils and Vadose Zone

4.1.3 Ground Water

4.1.4 Surface Water and Sediments

4.1.5 Air

5. Contaminant Fate and Transport

5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)

5.2 Contaminant Persistence

5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest

5.3 Contaminant Migration

5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)

5.3.2 Discuss modeling methods and results, if applicable

6. Baseline Risk Assessment

6.1 Human Health Evaluation

6.1.1 Exposure Assessment

6.1.2 Toxicity Assessment

6.1.3 Risk Characterization

6.2 Environmental Evaluation

7. Summary and Conclusions

7.1 Summary

7.1.1 Nature and Extent of Contamination

7.1.2 Fate and Transport

7.1.3 Risk Assessment

7.2 Conclusions

7.2.1 Data Limitations and Recommendations for Future Work

7.2.2 Recommended Remedial Action Objectives

Appendices

A. Technical Memorandum on Field Activities (if available)

B. Analytical Data and QA/QC Evaluation Results

C. Risk Assessment Methods

ED_004715_00094477-00032

Attachment D – Suggested Format for Feasibility Study Report

Executive Summary

1. Introduction
   - 1.1 Purpose and Organization Report
   - 1.2 Background Information (Summarized from RI Report)
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Nature and Extent of Contamination
     - 1.2.4 Contaminant Fate and Transport
     - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
   - 2.1 Introduction
   - 2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
     - Contaminants of interest
     - Allowable exposure based on risk assessment (including ARARs) Development of remediation goals
   - 2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
   - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:
     - 2.4.1 Identification and Screening of Technologies
     - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
   - 3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
   - 3.2 Screening of Alternatives (if conducted)
     - 3.2.1 Introduction
     - 3.2.2 Alternative 1
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.2 Alternative 2
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.3 Alternative 3

ED_004715_00094477-00033

3.2.3.1 Description
3.2.3.2 Evaluation
4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Evaluation
4.2.2 Alternative 2
4.2.2.1 Description
4.2.2.2 Evaluation
4.2.3 Alternative 3
4.2.3.1 Description
4.2.3.2 Evaluation
4.3 Comparative Analysis

ED_004715_00094477-00034

Attachment E – Stibnite Mine Remedial Investigation and Feasibility Study (RI/FS) Statement of Work (SOW) Schedule

RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

ED_004715_00094477-00035

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

[1]Documents may initially be released as "draft final" pending final resolution of issues.

ED_004715_00094477-00036

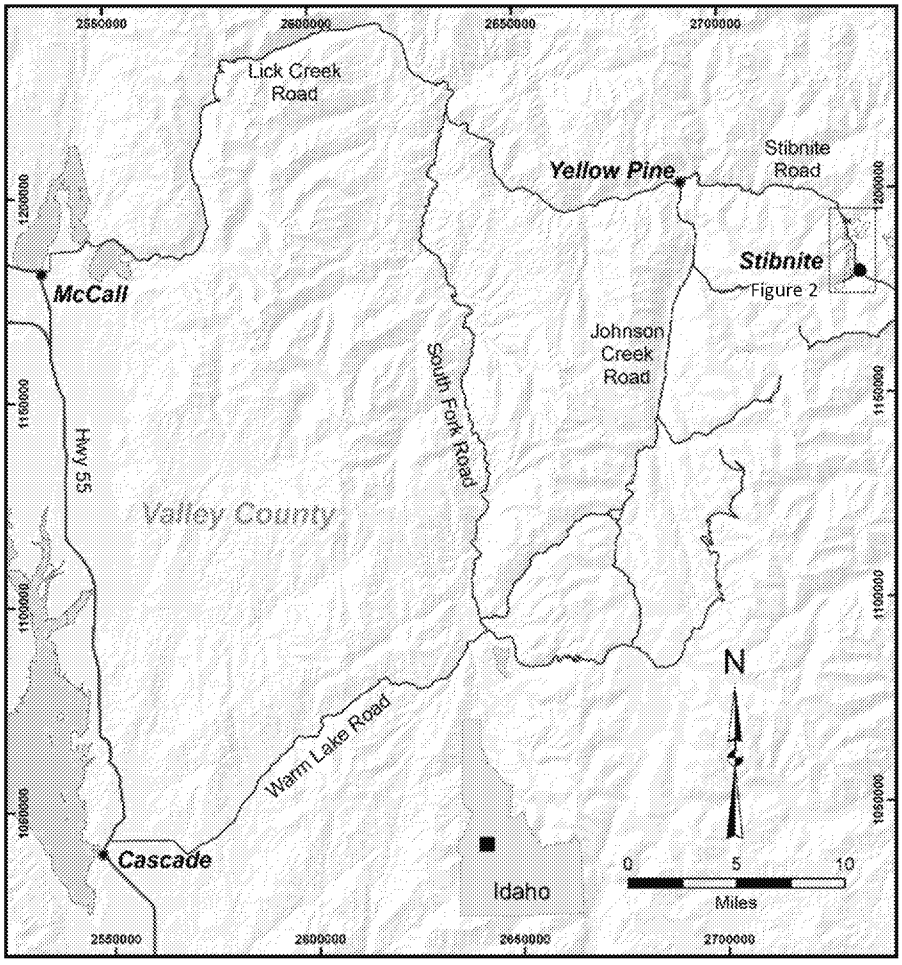


Figure 1 – Site Location

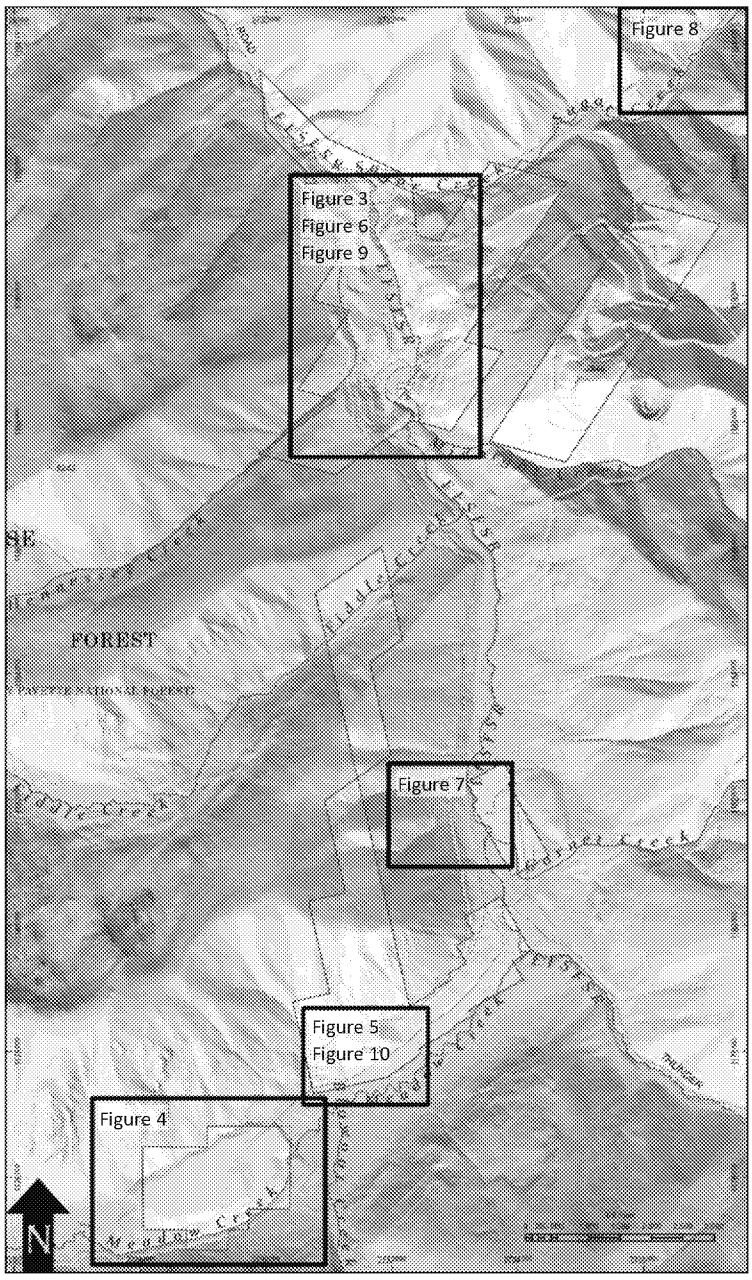


Figure 2 – Stibnite Mine Site

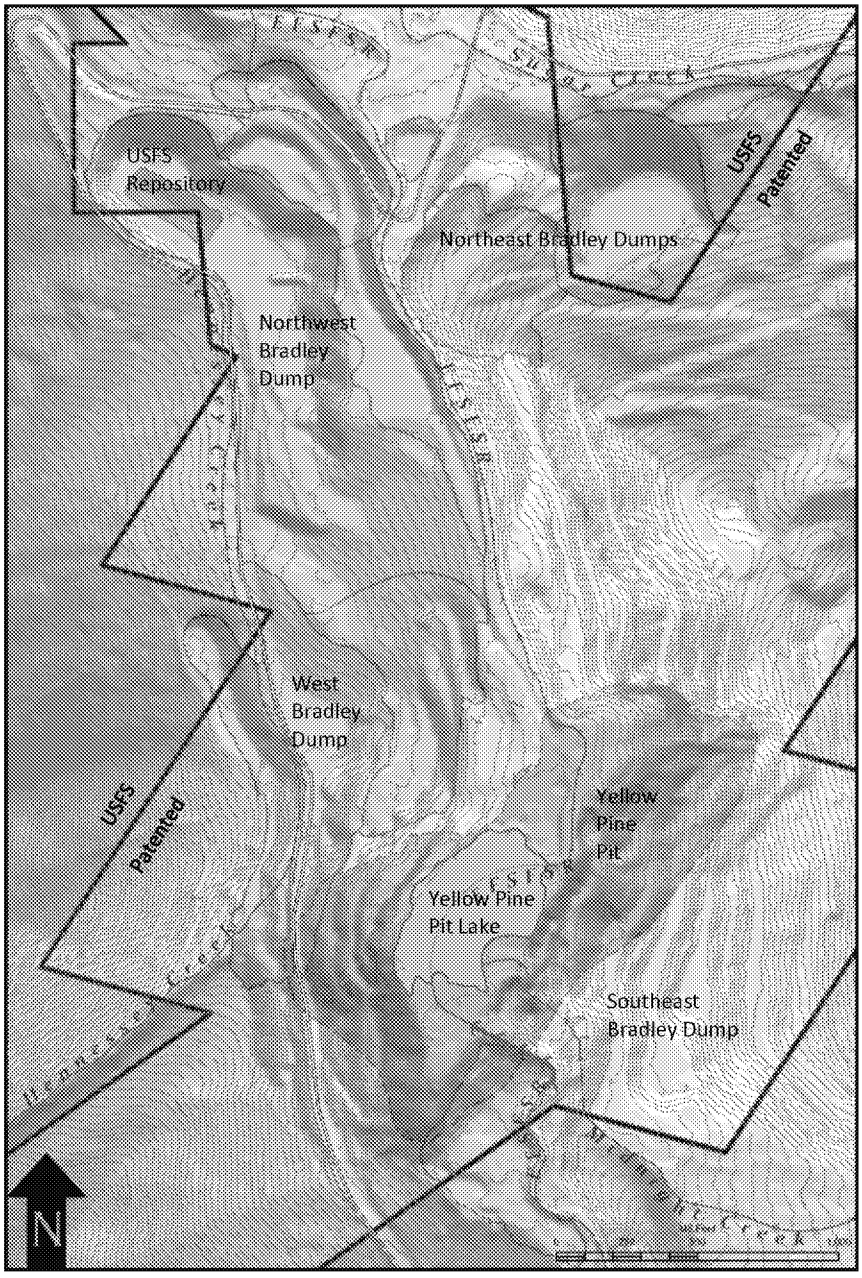


Figure 3 –Yellow Pine Pit

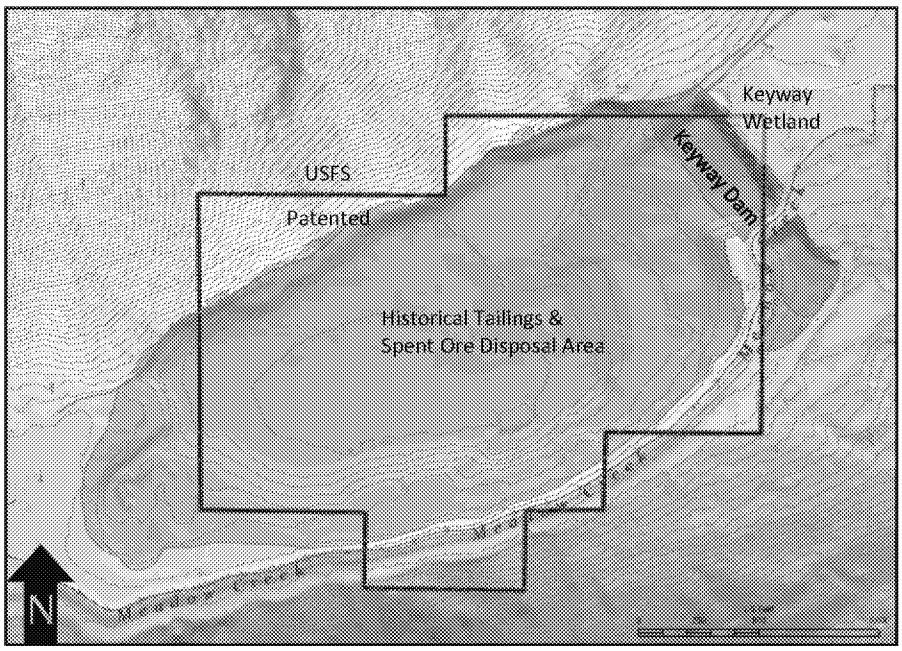


Figure 4 – Historical Tailings and Spent Ore Disposal Area

ED_004715_00094477-00040

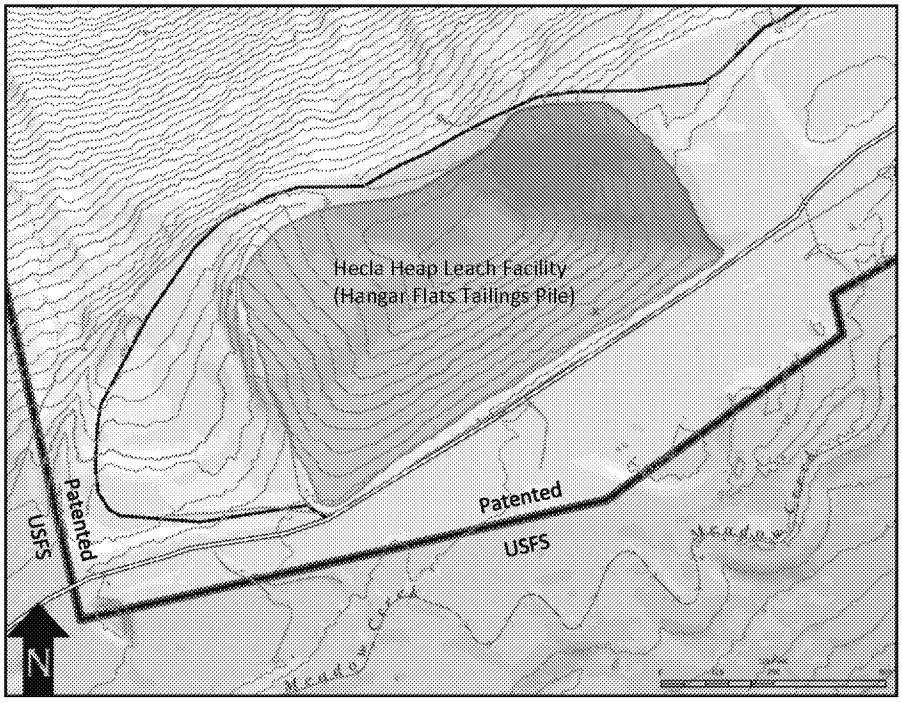


Figure 5 – Hecla Heap Leach Facility

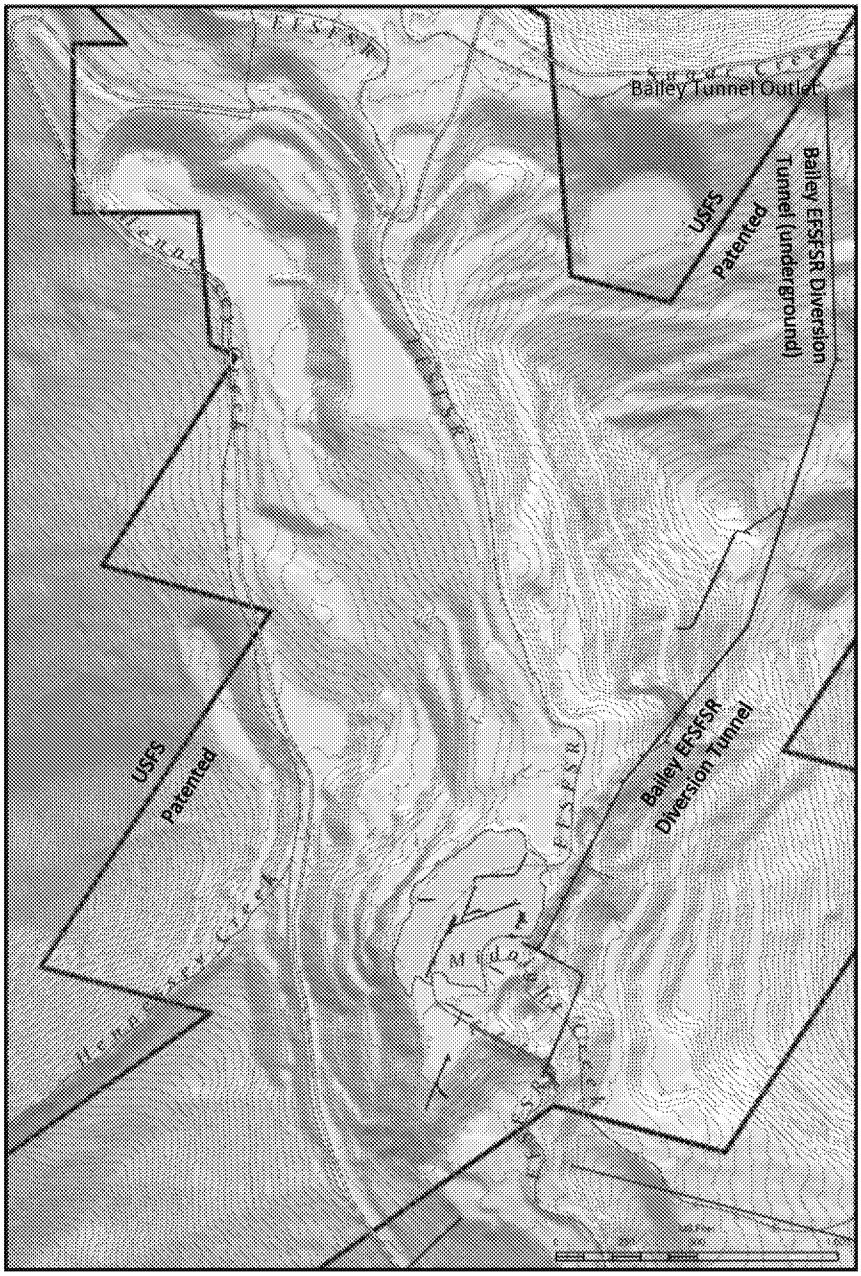


Figure 6 – Bailey Tunnel

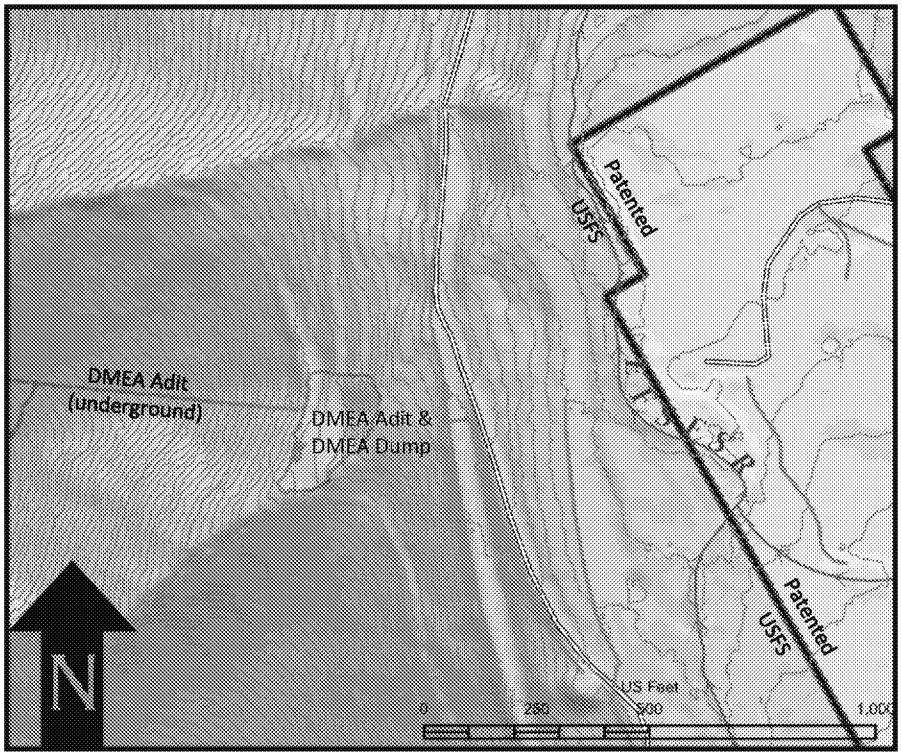


Figure 7 – Defense Minerals Exploration Administration Adit and Waste Rock Dump

ED_004715_00094477-00043

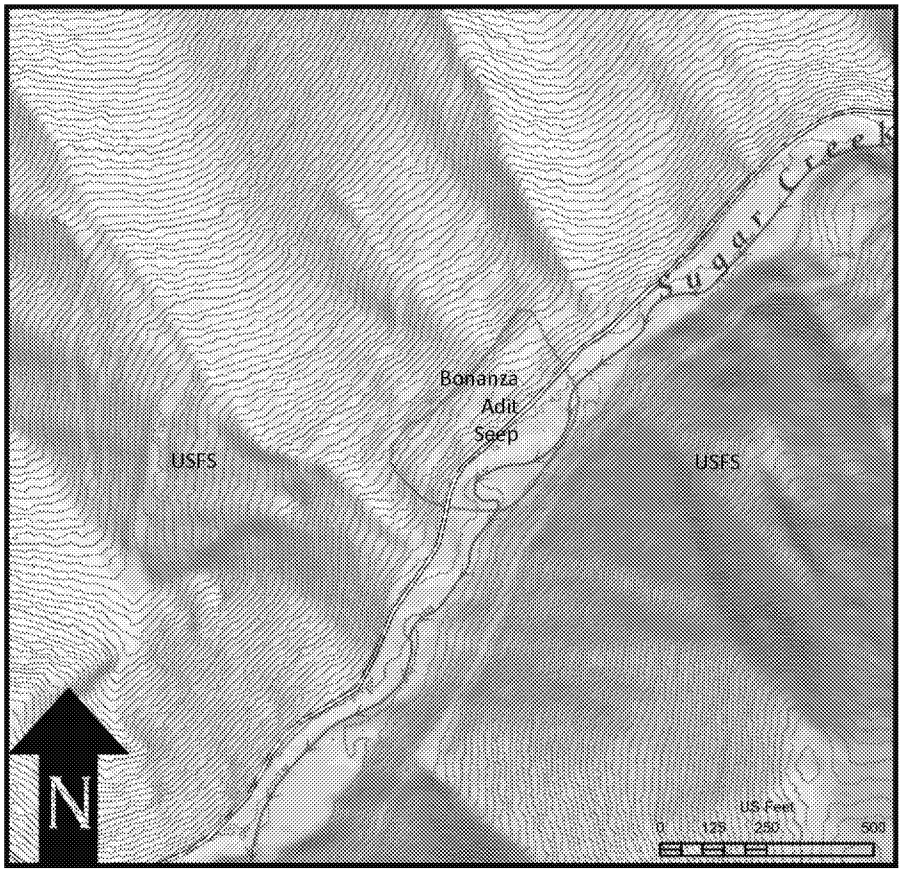


Figure 8 – Bonanza Adit

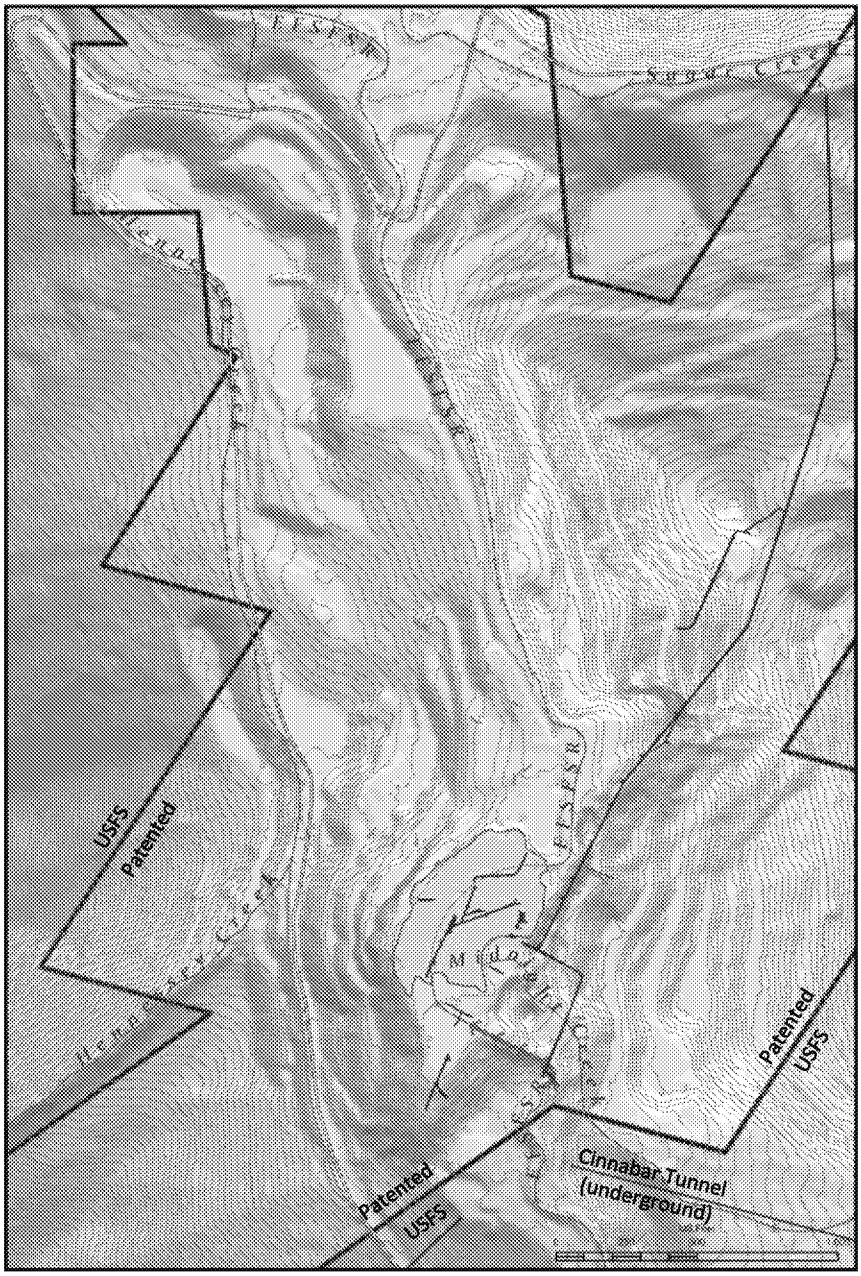


Figure 9 – Cinnabar Tunnel

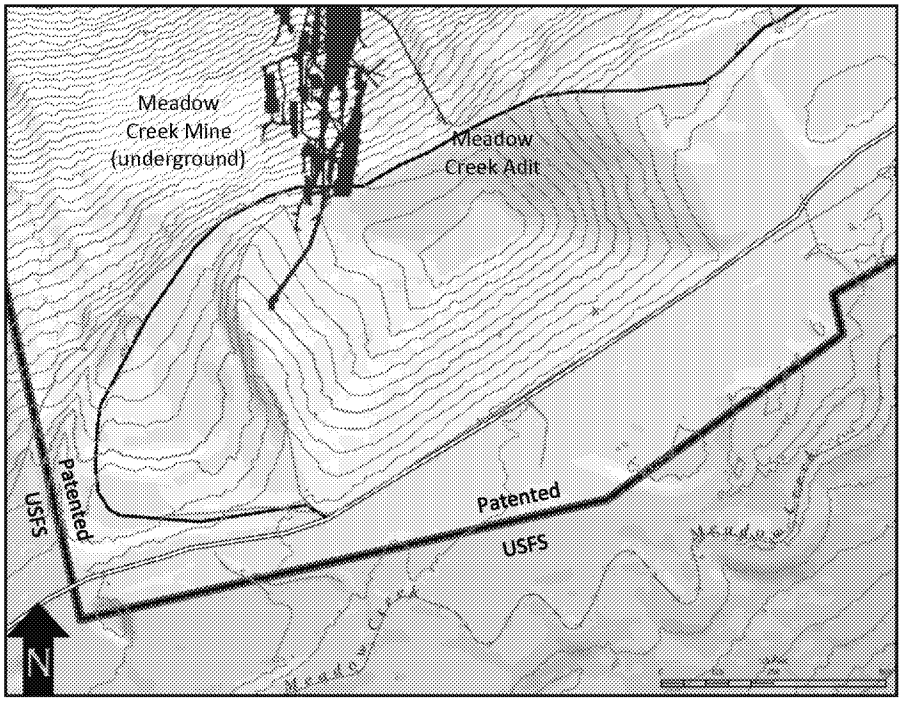


Figure 10 – Meadow Creek Adit

ED_004715_00094477-00046

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 4/2/2019 1:42:11 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Michael Bogert [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]
Subject: RE: Midas Gold/Stibnite Mine

No worries, and thanks. I'm going to lean on a lawyer here who just joined us from EPA's General Counsel's office and worked on FOIA issues for EPA. She knows the rules better than I do. Her name is Jennifer Hammitt.

I have been gathering quite a bit of site information for you that I'd like to share this week or as soon as possible, in response to your request the last time we met. We are also pulling together some slides to share on Thursday, specifically addressing two or three areas Midas would like to do some work in this summer, with approval from EPA and IDEQ.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Monday, April 1, 2019 6:16 PM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: Michael Bogert <mbogert@midasgoldinc.com>; Laurel Sayer <lsayer@midasgoldinc.com>
Subject: RE: Midas Gold/Stibnite Mine

I should add to my last email that it is not critical to get me the information tomorrow. I was in meetings all day today and didn't get to respond to you until this evening, so I understand that it might be difficult to get the information to me in time for my call with HQ (which is at 10 a.m.).

- Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Sunday, March 31, 2019 7:35 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>

Cc: Michael Bogert <mbogert@midasgoldinc.com>; Laurel Sayer <lsayer@midasgoldinc.com>
Subject: Midas Gold/Stibnite Mine

Elizabeth:

I am pulling together some of the records you requested when we met a few weeks ago, and the slides from the December presentation that Midas Gold made to EPA. I understand you have a Tuesday call with EPA Headquarters and would like to have that material (at least the slides). As we discussed, some of this information is Confidential Business Information ("CBI") and some of it reflects positions Midas has taken relevant to its status as a BFPP. I left our last meeting with the understanding that any materials provided by Midas to EPA would be considered by the agency to be exempt from disclosure by EPA under Exemption 4 of the FOIA regulations, and that EPA would take that position if a request for the information were received. https://www.justice.gov/oip/foia-guide-2004-edition-exemption-4

Can you confirm that understanding on behalf of EPA?

From: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Date: Friday, March 29, 2019 at 4:13 PM
To: Bradley Marten <bmarten@martenlaw.com>
Subject: RE: Stibnite Mine

Great. Thanks Brad!

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, March 29, 2019 4:08 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Subject: Re: Stibnite Mine

We can do that. Will give you a call on Monday morning. Have a good weekend.

Sent from my iPhone

On Mar 29, 2019, at 1:53 PM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

> Hi Brad. A few months ago Michael and Lauren gave a power point presentation to EPA in response to some of the questions EPA has asked Midas regarding its mining plan and proposal for a CERCLA cleanup agreement. Michael agreed to provide a copy of the power point to us, but we have not received it. I have a call on Tuesday with EPA HQ and it would be helpful if I had a copy of the presentation before that meeting. Would it be possible for you to obtain the slides for me before Tuesday? Thanks very mush.
>
> Elizabeth
>
> Elizabeth McKenna
> Assistant Regional Counsel
> U.S. EPA

1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 4/2/2019 12:45:38 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Terry T. Uhling [tuhling@martenlaw.com]; Bogert Michael [mbogert@midasgoldinc.com]
Subject: Midas Gold/Stibnite Mine Slides

Elizabeth- just following up on this. Ok to send the slides under FOIA exemption 4? Know you'd like them for your call tomorrow with EPA headquarters. I have the slides and can send if we can have your advice on protecting CBI. Thanks

Sent from my iPhone

Begin forwarded message:

> **From:** "Bradley M. Marten" <bmarten@martenlaw.com>
> **Date:** March 31, 2019 at 7:34:55 PM PDT
> **To:** "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
> **Cc:** Michael Bogert <mbogert@midasgoldinc.com>, Laurel Sayer <lsayer@midasgoldinc.com>
> **Subject: Midas Gold/Stibnite Mine**
>
> Elizabeth:
>
> I am pulling together some of the records you requested when we met a few weeks ago, and the slides from the December presentation that Midas Gold made to EPA. I understand you have a Tuesday call with EPA Headquarters and would like to have that material (at least the slides). As we discussed, some of this information is Confidential Business Information ("CBI") and some of it reflects positions Midas has taken relevant to its status as a BFPP. I left our last meeting with the understanding that any materials provided by Midas to EPA would be considered by the agency to be exempt from disclosure by EPA under Exemption 4 of the FOIA regulations, and that EPA would take that position if a request for the information were received. https://www.justice.gov/oip/foia-guide-2004-edition-exemption-4
>
> Can you confirm that understanding on behalf of EPA?
>
> ---
>
> **From:** "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
> **Date:** Friday, March 29, 2019 at 4:13 PM
> **To:** Bradley Marten <bmarten@martenlaw.com>
> **Subject:** RE: Stibnite Mine
>
> Great. Thanks Brad!
>
> Elizabeth McKenna
> Assistant Regional Counsel
> U.S. EPA
> 1200 Sixth Avenue
> Seattle, WA 98101
> (206) 553-0016
> Cell: (206) 402-9963
>
> ---
>
> **From:** Bradley M. Marten <bmarten@martenlaw.com>
> **Sent:** Friday, March 29, 2019 4:08 PM

To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Subject: Re: Stibnite Mine

We can do that. Will give you a call on Monday morning. Have a good weekend.

Sent from my iPhone

On Mar 29, 2019, at 1:53 PM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

> Hi Brad. A few months ago Michael and Lauren gave a power point presentation to EPA in response to some of the questions EPA has asked Midas regarding its mining plan and proposal for a CERCLA cleanup agreement. Michael agreed to provide a copy of the power point to us, but we have not received it. I have a call on Tuesday with EPA HQ and it would be helpful if I had a copy of the presentation before that meeting. Would it be possible for you to obtain the slides for me before Tuesday? Thanks very mush.
>
> Elizabeth
>
> Elizabeth McKenna
> Assistant Regional Counsel
> U.S. EPA
> 1200 Sixth Avenue
> Seattle, WA 98101
> (206) 553-0016
> Cell: (206) 402-9963

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 6/27/2019 3:12:01 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Lisa.O'Hara@deq.idaho.gov; gary.fremerman@usda.gov; Lisa.Carlson@deq.idaho.gov; Andy Koulermos [akoulermos@formationenv.com]; John Meyer [JMeyer@midasgoldcorp.com]; Michael Bogert [mbogert@midasgoldinc.com]; Terry T. Uhling [tuhling@martenlaw.com]; Merissa A. Moeller [mmoeller@martenlaw.com]
Subject: Re: July 1st Meeting at IDEQ

Of course! Will get you an agenda for our Monday meeting tomorrow.

Sent from my iPhone

On Jun 26, 2019, at 5:53 PM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

> Thanks, Brad. Can you get an agenda to us tomorrow as well a description of what Midas plans to talk about and/or propose? Since the SOW will not be ready until July 5th, I'm wondering if Midas is going to propose something to us during the meeting, seek information on what our folks may have in mind for proposals, and/or raise other issues. As I said in our call, the meeting will be more productive if we know what to expect. Thanks very much.
>
> Elizabeth
>
> Elizabeth McKenna
> Assistant Regional Counsel
> U.S. EPA
> 1200 Sixth Avenue
> Seattle, WA 98101
> (206) 553-0016
> Cell: (206) 402-9963
>
> **From:** Bradley M. Marten <bmarten@martenlaw.com>
> **Sent:** Wednesday, June 26, 2019 2:51 PM
> **To:** Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; gary.fremerman@usda.gov; Lisa.Carlson@deq.idaho.gov
> **Cc:** 'Andy Koulermos' <akoulermos@FormationEnv.com>; John Meyer <JMeyer@midasgoldcorp.com>; 'Michael Bogert' <mbogert@midasgoldinc.com>; Terry T. Uhling <tuhling@martenlaw.com>; Merissa A. Moeller <mmoeller@martenlaw.com>
> **Subject:** July 1st Meeting at IDEQ
>
> Elizabeth, Lisas and Gary:
>
> First, thank you for meeting with Terry Uhling and me yesterday in Boise. We thought it was very productive and look forward to working with you. We look forward to meeting again next Monday, July 1, 2019 at IDEQ's offices from 10:30 am-noon. We are prepared to spend more time together if we can solve the problem of lunch. Perhaps we can work on a plan to take a break, if folks are available and want to continue the conversation.
>
> Midas has retained Andy Koulermos of Formation Environmental as its outside consultant. Some of you may know Andy from other work that he and his team have done in Idaho and elsewhere in the West on mining sites. Terry and I have known Andy and his colleagues for a long time, and we know that they will

bring to the table both immense knowledge and the ability to listen.
https://www.formationenvironmental.com/about/

For those unable to attend in person, as you requested, we have set up videoconferencing through a web based service called Zoom.

To join the Zoom meeting via computer video and audio please use:

https://z Ex. 6 Personal Privacy (PP)

To join via audio only use:

Ex. 6 Personal Privacy (PP)

Meeting ID Ex. 6 Personal Privacy (PP)

As I mentioned at yesterday's meeting, we would welcome the opportunity to show the Site to any of the technical team members from the agencies who can make it. Reaching the site is quickest by plane (otherwise it is a 10 hour round trip drive). If you are interested in flying to the Site on Tuesday, July 2, following our Monday meeting, please let me or John Meyer at Midas (copied) know by noon tomorrow (Thursday) if at all possible. Andy will be joining the tour. The Midas lawyers will stay at their desks.

Finally, recognizing that we have a heavy lift ahead, I would like to suggest we plan ahead and schedule weekly meetings every Monday in July, starting at 10 am MST in Boise, either at DEQ (if space is available) or at Midas's offices. That would be July 8, 15, 22 and 29. It may not be necessary to have every meeting, or for everyone to attend (certainly in person), but it would be good to reserve the time, if at all possible.

With regard to the meeting on July 1, as I mentioned on the call, we regard this as an information and listening exercise. Based on that, we hope to have a draft scope of work to you by July 5, 2019, for presentation on July 8. We appreciate that this is a tight turnaround, and would not expect decisions to be made on July 8, but believe we will make substantive progress, allowing for a better understanding of our proposal.

Please let me know if any of this causes any concern; if so, we will adjust. Thanks again for your time.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

<image001.png>

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is

not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Lisa.O'Hara@deq.idaho.gov [Lisa.O'Hara@deq.idaho.gov]
Sent: 11/18/2019 4:04:25 PM
To: bmarten@martenlaw.com; gary.fremerman@usda.gov; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Jill Grant [jgrant@jillgrantlaw.com]
CC: mbogert@midasgoldinc.com; JMeyer@midasgoldcorp.com; lsayer@midasgoldinc.com; rackoff@martenlaw.com
Subject: RE: Agenda for Nov 18 call

I had a previously scheduled call at 11 am (MST) so I will not be able to call in until that is over. Michael McCurdy from IDEQ will be on the line. I had in my notes from our last meeting that there will be an attorney call this Friday – will that still be occurring?
Thank you,
Lisa

Lisa O'Hara | **Deputy Attorney General**
Office of the Attorney General | Environmental Quality Section
1410 N. Hilton – 2nd Floor
Boise, ID 83706
Office: 208.373.0453
lisa.ohara@deq.idaho.gov

CONFIDENTIALITY STATEMENT: This electronic message, including any attached file(s), is for the use of the intended recipient(s) only and may contain privileged and confidential information from the State of Idaho, Office of the Attorney General. Any unauthorized use, disclosure, or distribution is prohibited. Inadvertent dissemination of this message does not waive any applicable privilege. If you are not the intended recipient, please notify the sender immediately and destroy all copies of this message.

From: Bradley M. Marten [mailto:bmarten@martenlaw.com]
Sent: Sunday, November 17, 2019 3:07 PM
To: Fremerman, Gary - OGC, Washington, DC; Lisa O'Hara; McKenna, Elizabeth; Jill Grant
Cc: Michael Bogert; John Meyer; Laurel Sayer; Jonathan E. Rackoff
Subject: Agenda for Nov 18 call

Elizabeth, Jill, Gary and Lisa:

My thought for the call tomorrow at 10 am is to go through the comments filed by the Shoshone Bannock Tribe, the State of Idaho and the US Forest Service one by one, and to get any comments from EPA and from Midas out on the table and resolved. We should also set up a call to review any additional comments, if any, received from the Nez Perce Tribe. My understanding is that they have been promised, but not before Nov. 26th, which is essentially the end of the short Thanksgiving holiday week. Perhaps we can set a call for Monday, December 2 with the goal of finalizing the SOW. Please advise of your availability, at 10 am PST.

Midas will be prepared to have an attorney call next week to discuss the AOC Elizabeth circulated late Friday night. Please let me know your availability Thanksgiving week and we will coordinate schedules.

For ease of reference, I attach the three sets of comments received (as revised or updated), and Midas's comments (sent Saturday, Nov. 16) below. The attachments are from the Forest Service (titled "Stibnite SOW"), the State (titled 2019-07-25 Draft)" and the Shoshone Bannock Tribe (titled 2019-11-13 SBT Comments").

Talk to you tomorrow.

Jill and Lisa:

Thanks for your comments on the Statement of Work we have been working on with you, EPA and the US Forest Service. In advance of our call on Monday, I am providing these preliminary responses, in order to expedite our call. I anticipate that we can complete the call in an hour or less.

- Shoshone Bannock Tribe comments:

    - Scope

    The scope of the RI/FS investigation are the eight areas identified in the "Purpose" section, pp. 1-2. Midas Gold and EPA recognize that implementation of the PRO, once approved, may broaden the scope and EPA (Kathy Cerise) has proposed language to reflect this, to be added to the second paragraph of the Purpose section, which would read as follows:

    > *In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider potential mining activities in the PRO, any modifications and subsequent remediation.. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.*

    We believe that EPA's proposed language addresses your comment. With respect to the request for "some time to review the PRO in its entirety," Midas Gold of course has no objection and is happy to facilitate your review.

    - Role of the Tribe in Review Process

    In several places, the comments include clarification as to the role of the Tribe (and presumably the other Participants) in reviewing documents submitted under the SOW. The Tribe is correct in concluding that all documents will be submitted for review by the Participants. We understand this to be the understanding of all Participants, and will ask to confirm this on Monday.

    - Human Health Risk Assessment

    The Tribe has asked to confirm that the human health risk assessment will include "a tribal scenario." Midas Gold has no objection.

    - Uranium and Daughter Products

    We will defer to EPA on this comment

    - Vegetation Results

    Seems fine to include these, but we defer to EPA.

- State Comments

We read these as largely consistent with the Tribe's comment on its role in the review process, and have the same understanding as above, to be confirmed on Monday.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 4/1/2019 2:34:56 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Michael Bogert [mbogert@midasgoldinc.com]; Laurel Sayer [lsayer@midasgoldinc.com]
Subject: Midas Gold/Stibnite Mine

Elizabeth:

I am pulling together some of the records you requested when we met a few weeks ago, and the slides from the December presentation that Midas Gold made to EPA. I understand you have a Tuesday call with EPA Headquarters and would like to have that material (at least the slides). As we discussed, some of this information is Confidential Business Information ("CBI") and some of it reflects positions Midas has taken relevant to its status as a BFPP. I left our last meeting with the understanding that any materials provided by Midas to EPA would be considered by the agency to be exempt from disclosure by EPA under Exemption 4 of the FOIA regulations, and that EPA would take that position if a request for the information were received. https://www.justice.gov/oip/foia-guide-2004-edition-exemption-4

Can you confirm that understanding on behalf of EPA?

From: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Date: Friday, March 29, 2019 at 4:13 PM
To: Bradley Marten <bmarten@martenlaw.com>
Subject: RE: Stibnite Mine

Great. Thanks Brad!

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, March 29, 2019 4:08 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Subject: Re: Stibnite Mine

We can do that. Will give you a call on Monday morning. Have a good weekend.

Sent from my iPhone

On Mar 29, 2019, at 1:53 PM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

> Hi Brad. A few months ago Michael and Lauren gave a power point presentation to EPA in response to some of the questions EPA has asked Midas regarding its mining plan and proposal for a CERCLA cleanup agreement. Michael agreed to provide a copy of the power point to us, but we have not received it. I have a call on Tuesday with EPA HQ and it would be helpful if I had a copy of the presentation before that meeting. Would it be possible for you to obtain the slides for me before Tuesday? Thanks very mush.

Elizabeth

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-0016
Cell: (206) 402-9963

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Jill Grant [jgrant@jillgrantlaw.com]
Sent: 11/18/2019 3:52:46 PM
To: Bradley M. Marten [bmarten@martenlaw.com]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Michael Bogert [mbogert@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]; Laurel Sayer [lsayer@midasgoldinc.com]; Jonathan E. Rackoff [rackoff@martenlaw.com]
Subject: RE: Agenda for Nov 18 call

Good morning all,

What is the call-in number for our conference call today?

I agree that it makes sense to go through everyone's comments, and I appreciate Brad taking the time to address some of the Shoshone-Bannock Tribes' comments in advance (below). However, not all of the Tribes' comments are addressed – not just the technical comments, but also comments regarding tribal community meetings, location of administrative record, and some proposed edits related to consistency with the NCP – so I think it would be helpful to go through them.

Thanks,

Jill

Jill Grant & Associates, LLC
1319 F Street NW
Suite 300
Washington, DC 20004
Tel: 202-821-1950
Fax: 202-459-9558
jgrant@jillgrantlaw.com
www.jillgrantlaw.com

From: Bradley M. Marten [mailto:bmarten@martenlaw.com]
Sent: Sunday, November 17, 2019 5:07 PM
To: Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Lisa.O'Hara@deq.idaho.gov; McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Jill Grant <jgrant@jillgrantlaw.com>
Cc: Michael Bogert <mbogert@midasgoldinc.com>; John Meyer <JMeyer@midasgoldcorp.com>; Laurel Sayer <lsayer@midasgoldinc.com>; Jonathan E. Rackoff <rackoff@martenlaw.com>
Subject: Agenda for Nov 18 call

Elizabeth, Jill, Gary and Lisa:

My thought for the call tomorrow at 10 am is to go through the comments filed by the Shoshone Bannock Tribe, the State of Idaho and the US Forest Service one by one, and to get any comments from EPA and from Midas out on the table and resolved. We should also set up a call to review any additional comments, if any, received from the Nez Perce Tribe. My understanding is that they have been promised, but not before Nov. 26th, which is essentially the end of the

short Thanksgiving holiday week. Perhaps we can set a call for Monday, December 2 with the goal of finalizing the SOW. Please advise of your availability, at 10 am PST.

Midas will be prepared to have an attorney call next week to discuss the AOC Elizabeth circulated late Friday night. Please let me know your availability Thanksgiving week and we will coordinate schedules.

For ease of reference, I attach the three sets of comments received (as revised or updated), and Midas's comments (sent Saturday, Nov. 16) below. The attachments are from the Forest Service (titled "Stibnite SOW"), the State (titled 2019-07-25 Draft)" and the Shoshone Bannock Tribe (titled 2019-11-13 SBT Comments").

Talk to you tomorrow.

Jill and Lisa:

Thanks for your comments on the Statement of Work we have been working on with you, EPA and the US Forest Service. In advance of our call on Monday, I am providing these preliminary responses, in order to expedite our call. I anticipate that we can complete the call in an hour or less.

- Shoshone Bannock Tribe comments:

    - Scope

    The scope of the RI/FS investigation are the eight areas identified in the "Purpose" section, pp. 1-2. Midas Gold and EPA recognize that implementation of the PRO, once approved, may broaden the scope and EPA (Kathy Cerise) has proposed language to reflect this, to be added to the second paragraph of the Purpose section, which would read as follows:

    > *In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider potential mining activities in the PRO, any modifications and subsequent remediation.. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.*

    We believe that EPA's proposed language addresses your comment. With respect to the request for "some time to review the PRO in its entirety," Midas Gold of course has no objection and is happy to facilitate your review.

    - Role of the Tribe in Review Process

    In several places, the comments include clarification as to the role of the Tribe (and presumably the other Participants) in reviewing documents submitted under the SOW. The Tribe is correct in concluding that all documents will be submitted for review by the Participants. We understand this to be the understanding of all Participants, and will ask to confirm this on Monday.

    - Human Health Risk Assessment

    The Tribe has asked to confirm that the human health risk assessment will include "a tribal scenario." Midas Gold has no objection.

    - Uranium and Daughter Products

We will defer to EPA on this comment

- Vegetation Results

Seems fine to include these, but we defer to EPA.

- State Comments

We read these as largely consistent with the Tribe's comment on its role in the review process, and have the same understanding as above, to be confirmed on Monday.

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Cerise, Kathy [Cerise.Kathryn@epa.gov]
Sent: 7/16/2019 12:16:43 PM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: 'Aaron.Scheff@deq.idaho.gov' [Aaron.Scheff@deq.idaho.gov]; Zamba, Kathy -FS [kathy.zamba@usda.gov]; Albert Crawshaw [Albert.Crawshaw@deq.idaho.gov]; Maley, Timothy [maley.timothy@epa.gov]; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Philip, Jeffrey [Philip.Jeff@epa.gov]; Terry T. Uhling [tuhling@martenlaw.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]; Merissa A. Moeller [mmoeller@martenlaw.com]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Lisa.Carlson@deq.idaho.gov; Laurel Sayer [lsayer@midasgoldinc.com]; Andy Koulermos [akoulermos@formationenv.com]; Jonathan E. Rackoff [rackoff@martenlaw.com]
Subject: RE: EPA response to Midas draft SOW

Yes I am available. Will you be sending out an invite?

Kathryn Cerise
Region 10 Remedial Project Manager
1200 6th Ave,
Seattle, WA 98101
Mail Code: 12 D12 1
Phone: 206-553-2589

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Monday, July 15, 2019 6:59 PM
To: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Cc: 'Aaron.Scheff@deq.idaho.gov' <Aaron.Scheff@deq.idaho.gov>; Zamba, Kathy -FS <kathy.zamba@usda.gov>; Albert Crawshaw <Albert.Crawshaw@deq.idaho.gov>; Maley, Timothy <maley.timothy@epa.gov>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Philip, Jeffrey <Philip.Jeff@epa.gov>; Terry T. Uhling <tuhling@martenlaw.com>; 'Michael Bogert' <mbogert@midasgoldinc.com>; Merissa A. Moeller <mmoeller@martenlaw.com>; McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Lisa.Carlson@deq.idaho.gov; Laurel Sayer <lsayer@midasgoldinc.com>; Andy Koulermos <akoulermos@formationenv.com>; Jonathan E. Rackoff <rackoff@martenlaw.com>
Subject: RE: EPA response to Midas draft SOW

Thanks for forwarding Elizabeth's e-mail, Kathy. It makes a number of good points. We look forward to continuing to work with you, the USFS and the State this week toward that goal. Can you confirm your availability for a call on Wednesday, the 17th?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: Cerise, Kathy <Cerise.Kathryn@epa.gov>
Sent: Monday, July 15, 2019 10:23 AM

To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: 'Aaron.Scheff@deq.idaho.gov' <Aaron.Scheff@deq.idaho.gov>; Zamba, Kathy -FS <kathy.zamba@usda.gov>; Albert Crawshaw <Albert.Crawshaw@deq.idaho.gov>; Maley, Timothy <maley.timothy@epa.gov>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Philip, Jeffrey <Philip.Jeff@epa.gov>
Subject: EPA response to Midas draft SOW

Brad,

Please see Elizabeth's response below. USFS has concurred. The State has not yet had the opportunity to review this language.

Thanks

Kathy

From: McKenna, Elizabeth
Sent: Saturday, July 13, 2019 4:13 PM

Hello, Brad. EPA has reviewed Midas' July 10th markup of EPA's July 3rd draft SOW for the Stibnite Mine Site. EPA is interested in pursuing conversations with Midas to come to an understanding of the scope of the remedial investigation and feasibility study (RI/FS). EPA is willing to consider narrowing the scope of the RI/FS to the eight areas identified in the Nez Perce's Clean Water Act Notice of Intent.

Both Midas and EPA have an interest in addressing the releases of hazardous substances at the Site. Midas' goal is to avoid CWA litigation over unpermitted discharges at the Site. To achieve that goal, it must evaluate potential response actions that would address those discharges. The purpose of the RI is to characterize the nature and extent of risks posed by hazardous substances for evaluating potential response actions. Midas' proposal to conduct only an RI, without a risk assessment and concurrent feasibility study would not achieve its own goal of developing a solution to the discharges and releases that could result in avoiding CWA litigation. A scope of work that includes an RI, baseline risk assessment, treatability studies, and evaluation of alternatives is necessary to meet Midas' objectives and to have a CERCLA compliant agreement.

The RI/FS Guidance outlines the tasks that must be performed during the RI/FS and the EPA's draft SOW incorporates these tasks. The determination of the nature and extent of surface and subsurface contamination must include an assessment of all potential source area(s) and contaminants of concern potentially affecting surficial soil, subsurface soil, surface water, sediment, air, groundwater, and subsurface structures. The RI/F Guidance also outlines a process in which the RI and FS are conducted concurrently such that the data collected during the RI influences the development of remedial alternatives in the FS, which in turn affects the scope and additional data needs related to treatability studies and reducing data gaps. We understand that Midas' planned mining and reclamation activities will need to be considered in designing an RI/FS.

EPA would like to work with Midas to develop an approach that meets the needs of all parties involved. We are available to meet next week to continue our discussions.

Elizabeth McKenna
Assistant Regional Counsel
U.S. EPA
1200 Sixth Avenue
Seattle, WA 98101

(206) 553-0016
Cell: (206) 402-9963

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Jill Grant [jgrant@jillgrantlaw.com]
Sent: 11/20/2019 2:07:43 PM
To: Bradley M. Marten [bmarten@martenlaw.com]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: RE: Stibnite Mine Meeting

I'd already crossed the call off my calendar! I thought that Elizabeth was going to send a revised draft of the AOC (as well as the SOW) by Friday, and then Brad was going to email us with a suggested date for getting back with comments and then having a call. I was waiting to review the AOC until receiving the updated draft.

Anyway, the week of Dec. 2 for a call sounds good.

Jill

From: Bradley M. Marten [mailto:bmarten@martenlaw.com]
Sent: Tuesday, November 19, 2019 9:17 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Jill Grant <jgrant@jillgrantlaw.com>
Cc: L. Michael Bogert <mbogert@midasgoldinc.com>
Subject: Stibnite Mine Meeting

Let's put this over until I can get you some comments on the AOC from the Midas side next week. It may be best to plan for an AOC call the week of December 2, the week after the Thanksgiving holiday. In the meantime, perhaps, as we discussed, you can aim for circulating by Friday a new draft of the SOW, and circulate it to all Participants as well as the Tribe, Make sense?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com Let's
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Tuesday, November 19, 2019 4:08 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Jill Grant <jgrant@jillgrantlaw.com>
Subject: Stibnite Mine Meeting

I now have a conflict on Friday for the start time of our discussion. An issue has come up in another case and I need to attend a briefing for the RA from 10:00 a.m. to 11:00 a.m. Is there any chance that we rearrange the time of the meeting a bit? We can talk at 9:00 for an hour or meet at 11:00 a.m. for longer than an hour. Otherwise, we can look at next week. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 11/20/2019 5:31:20 PM
To: Jill Grant [jgrant@jillgrantlaw.com]; Bradley M. Marten [bmarten@martenlaw.com]; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: RE: Stibnite Mine Meeting

Sorry – I must have had a memory lapse. Thanks.

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Jill Grant <jgrant@jillgrantlaw.com>
Sent: Wednesday, November 20, 2019 6:08 AM
To: Bradley M. Marten <bmarten@martenlaw.com>; McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>
Cc: L. Michael Bogert <mbogert@midasgoldinc.com>
Subject: RE: Stibnite Mine Meeting

I'd already crossed the call off my calendar! I thought that Elizabeth was going to send a revised draft of the AOC (as well as the SOW) by Friday, and then Brad was going to email us with a suggested date for getting back with comments and then having a call. I was waiting to review the AOC until receiving the updated draft.

Anyway, the week of Dec. 2 for a call sounds good.

Jill

From: Bradley M. Marten [mailto:bmarten@martenlaw.com]
Sent: Tuesday, November 19, 2019 9:17 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Jill Grant <jgrant@jillgrantlaw.com>
Cc: L. Michael Bogert <mbogert@midasgoldinc.com>
Subject: Stibnite Mine Meeting

Let's put this over until I can get you some comments on the AOC from the Midas side next week. It may be best to plan for an AOC call the week of December 2, the week after the Thanksgiving holiday. In the meantime, perhaps, as we discussed, you can aim for circulating by Friday a new draft of the SOW, and circulate it to all Participants as well as the Tribe, Make sense?

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com Let's
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Tuesday, November 19, 2019 4:08 PM
To: Bradley M. Marten <bmarten@martenlaw.com>; Lisa.O'Hara@deq.idaho.gov; Fremerman, Gary - OGC, Washington, DC <gary.fremerman@usda.gov>; Jill Grant <jgrant@jillgrantlaw.com>
Subject: Stibnite Mine Meeting

I now have a conflict on Friday for the start time of our discussion. An issue has come up in another case and I need to attend a briefing for the RA from 10:00 a.m. to 11:00 a.m. Is there any chance that we rearrange the time of the meeting a bit? We can talk at 9:00 for an hour or meet at 11:00 a.m. for longer than an hour. Otherwise, we can look at next week. Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Laurel Sayer [lsayer@midasgoldinc.com]
Sent: 5/12/2020 9:47:57 PM
To: Hladick.christopher@epamail.epa.gov
CC: Gahner, Pamela [gahner.pamela@epa.gov]; L. Michael Bogert [mbogert@midasgoldinc.com]; Bodine, Susan [bodine.susan@epa.gov]; Wright, Peter [wright.peter@epa.gov]; Stephen Quin [SQuin@midasgoldcorp.com]; L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: Midas Gold AOC Offer
Attachments: 2020-05-12 MG-Hladick Ltr-FINAL.pdf; MGII Proposed AOC (May 12 2020 Draft).pdf

Mr. Hladick:
Please see the attached.

Regards,

Laurel Sayer
President & CEO
Midas Gold Idaho

JOIN US TODAY. WWW.SUPPORTSTIBNITE.COM

MIDAS GOLD

MIDAS GOLD IDAHO
405 S 8th St. Boise, ID 83702
T: 208.901.3050
M: 208.521.2987
E: lsayer@midasgoldinc.com

MAX.TSX / MDRPF.OTCQX
www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this email is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended receipient you must not use, disclose, disseminate, copy or print its contents. If you receive this email in error, please notify the sender by reply e-mail and delete and destroy this message.

MIDAS GOLD

405 S. 8th Street #201
Boise, ID USA 83702
info@midasgoldidaho.com

MAX.TSX
MDRPF.OTCQX

www.midasgoldidaho.com

May 12, 2020

Mr. Christopher W. Hladick
Regional Administrator
U.S. Environmental Protection Agency, Region X
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

Via: USPS and Email: Hladick.Christopher@epamail.epa.gov

RE: Stibnite Gold Project

Dear Mr. Hladick:

This letter follows up on my April 28, 2020 letter regarding the CERCLA negotiations with respect to the Stibnite Gold Project (SGP). We greatly appreciate the time and attention you and the Region's staff have given this matter over the past several months. Our teams have been engaged in significant discussions on many important CERCLA issues and, based on these discussions, it is my hope that the negotiations should soon successfully conclude.

Several days ago, Administrator Wheeler spoke with various mining industry representatives, including me, about the EPA's work. In response to a question I posed, the Administrator emphasized that protection of human health and the environment could peacefully coexist with job creation efforts, including those in the mining sector. He further noted the importance of developing domestic sources of critical minerals. Of course, job creation opportunities are even more critical now, as the COVID-19 pandemic has so severely impacted the Country.

Midas Gold's Stibnite Gold Project exemplifies all of the objectives Administrator Wheeler spoke to: It will provide jobs, address pre-existing source contamination on the Site, develop the only source of domestically mined antimony in the United States, and all in parallel with extracting significant precious metal resources. But critical steps to moving this forward lie within EPA's effective control and we need your assistance to move this forward.

As you may know, Midas Gold Idaho, Inc. (MGII) is proposing to invest approximately $1 billion to create more than 1,000 direct and indirect jobs in rural Idaho over an estimated 15 to 20-year period of mine redevelopment, operations and land restoration in the historic Stibnite Mining District. The Stibnite Mining District's history presents certain challenges to the Project that we want to work with EPA, the U.S. Forest Service, the State of Idaho and the Shoshone-Bannock Tribes to overcome so that we can make this job creation plan a reality.

The Stibnite Mining District was abandoned in the 1990s after decades of mining activity by prior operators, including a period during World War II when it was one of the leading critical mineral producers in the United States, leaving behind various conditions of environmental concern. In addition, the District contains various features and facilities created pursuant to earlier EPA-supervised clean-up efforts. And while those past efforts made some progress towards clean-up, the area's habitat, water quality and fish passage still need help. Unfortunately, no federal or state agency, or other private entity, has identified any pathway or commitment to further address these historical conditions and there are no resources available to address these issues other than through the plan MGII has proposed.

As you know, MGII is seeking a CERCLA Administrative Order on Consent (AOC) to formalize its commitments to address legacy contamination, including contamination existing outside of its proposed project footprint. The AOC work would initiate this effort starting with "early actions" and an evaluation the site's large-scale issues that can be addressed once the project is permitted and funded. Put simply, MGII is willing to evaluate and clean up contamination that it did not cause, including in areas where it does not intend to mine, and for which there are currently no other parties available to shoulder the burden. But MGII doing so unilaterally, without benefit of an AOC, is not realistic: MGII simply does not have the capital resources and, further, doing so would significantly increase MGII's liability risks due to the potential to disturb historic contamination others left behind. It would also risk intruding on prior EPA supervised remedial actions in place, even if they are imperfect.

In light of all of these considerations, I nonetheless directed our technical team to develop the enclosed good faith proposal providing timely and meaningful environmental benefits that are within MGII's means. I am tendering this offer as the CEO of a start-up junior mining company with limited resources, *even though the Federal government has not provided* the permissions that will be required to begin active mining operations. Our proposed AOC provides a path to comprehensively assess the Stibnite Site's legacy contamination issues and develop a plan to address the Site's needs through a site-wide Remedial Investigation/ Feasibility Study (RI/FS), as well as requiring three "early actions" designed to improve the Site's water quality in the short term.

While such a site-wide RI/FS is a common starting point for addressing legacy contamination, simultaneously undertaking early actions that begin to immediately mitigate contamination impacts is not. We are therefore proposing to make a unique and significant commitment to undertake such early actions contemporaneously with the RI/FS work process and before we begin construction or mine operations *or even receive permits to operate*. In short, we are proposing much more than CERCLA parties typically undertake at this stage in the CERCLA process.

While these immediate commitments are already extraordinary for a company in our position, being one that did not cause the historic contamination and having limited funds, they are only the beginning of the restoration that could be possible if the Project is permitted and begins operations. Once mining begins, larger scale restoration efforts, funded through operations,

will also be available. MGII designed its project proposal with the vision that mining can bring the resources to restore the site and is committed to cleaning up legacy contamination funded through the project. All of this is documented in the Plan of Restoration and Operations that has been filed with the U.S. Forest Service.

In sum, the moment is at hand for job creation, production of critical mineral and environmental restoration for the Stibnite Site and we will never have a better chance to succeed in the vision the Administrator expressed when we recently spoke. Further delays would seriously imperil the project's overall viability. We are like any start-up in that sense – we cannot continue on indefinitely in hope, but without meaningful project progress. The AOC is one part of that concrete progress.

I hope you and your team will promptly move to finalize the AOC we propose. As you know, there is a limited work season in Idaho, and we hope that we can partner with EPA soon so that we can begin undertaking this important work this year.

Sincerely,
MIDAS GOLD IDAHO, INC.

Laurel Sayer
President and CEO

Enclosure (Proposed AOC)

cc: The Honorable Susan Bodine
The Honorable Peter Wright
The Honorable James Hubbard (USDA)

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 10

IN THE MATTER OF:	)	
	)	
Stibnite Mine Site,	)	CERCLA Docket No.
Midas Gold Corp.,	)	
Idaho Gold	)	
Resources	)	
Company, LLC,	)	
Stibnite Gold	)	
Company, and	)	
Midas Gold Idaho,	)	
Inc.	)	
	)	
Respondents	)	
	)	
	)	

DRAFT

ADMINISTRATIVE ORDER ON CONSENT FOR
REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AND REMOVAL ACTIONS

TABLE OF CONTENTS

I. JURISDICTION & GENERAL PROVISIONS 3
II. PARTIES BOUND 4
III. DEFINITIONS 4
IV. FINDINGS OF FACT 8
V. CONCLUSIONS OF LAW 11
VI. SETTLEMENT AGREEMENT & ORDER 12
VII. CONTRACTOR, PROJECT COORDINATOR, & REMEDIAL PROJECT MANAGER 12
VIII. WORK TO BE PERFORMED 13
IX. SUBMISSION & APPROVAL OF DELIVERABLES 15
X. HEALTH & SAFETY 17
XI. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS 17
XII. PROPERTY REQUIREMENTS 20
XIII. ACCESS TO INFORMATION 21
XIV. RECORD RETENTION 21
XV. COMPLIANCE WITH OTHER LAWS 22
XVI. EMERGENCY RESPONSE & NOTIFICATION OF RELEASES 23
XVII. PAYMENT OF PARTICIPATING PARTIES' RESPONSE COSTS 23
XVIII. DISPUTE RESOLUTION 25
XIX. STIPULATED PENALTIES 25
XX. FORCE MAJEURE 27
XXI. COVENANTS BY THE PARTICIPATING PARTIES 28
XXII. RESERVATIONS OF RIGHTS BY THE UNITED STATES 29
XXIII. COVENANTS BY RESPONDENTS 30
XXIV. OTHER CLAIMS 31
XXV. EFFECT OF SETTLEMENT/CONTRIBUTION 31
XXVI. INDEMNIFICATION 32
XXVII. INSURANCE 32
XXVIII. FINANCIAL ASSURANCE 33
XXIX. MODIFICATION 35
XXX. NOTICE OF COMPLETION OF WORK 35
XXXI. PUBLIC COMMENT 36
XXXII. INTEGRATION & APPENDICES 36
XXXIII. HEADINGS 36
XXXIV. EFFECTIVE DATE 36
XXXV. DISCLAIMER 36
XXXVI. NOTICES & SUBMISSIONS 36

DRAFT

ED_004715A_00002540-00002

I. JURISDICTION & GENERAL PROVISIONS

1. This Settlement is entered into voluntarily by Participating Parties, and Respondents. The Settlement provides for the performance by Respondents of a RI/FS and for certain Early Actions.

2. Respondents assert that pursuant to the provisions of the 2002 Brownfield Amendments (Pub. L. No. 107-118, enacted January 2002) Respondents qualify as a BFPP of land they have acquired at the Site, and that they therefore are relieved from liability at the Site. CERCLA Sec. 107(r) and 101(40). For purposes of this Settlement, the Parties agree that resolving the Respondent's BFPP status is not necessary, because Respondents have agreed, solely for the limited purpose of carrying out the terms of this Settlement, not to challenge the jurisdiction of the Participating Parties to enter into it, and have further agreed to comply with and be bound by the terms of this Settlement. Respondents further agree not to contest the legal basis or validity of this Settlement or any of its terms.

3. This Settlement is issued under the authority vested in the President of the United States under Sections 104, 106, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9606, 9607, and 9622, as amended. This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923-26 (1987), and to the Secretary of the United States Department of Agriculture ("Secretary") by Executive Order 12580, 52 Fed. Reg. 2926 (January 23, 1987), 3 C.F.R. 13308, 1987 Compilation, p. 193. It was then further delegated to EPA Regional Administrators on September 13, 1987, in and through EPA Delegation Nos. 14-14-A, 14-14-B, 14-14-C and 14-14-D. This authority has since been redelegated by the Regional Administrator, EPA Region 10, to the Office of Superfund Environmental Management Division Director. The Agriculture Secretary's authority has likewise been delegated to the Chief of the USFS by 7 C.F.R. § 2.60(a)(39), and then re-delegated by the Chief of the USFS to the USFS Region 4 Regional Forester.

4. This Settlement has been negotiated in good faith, and actions undertaken in accordance with this Settlement do not constitute an admission of any liability by any Party.

5. The purposes of this Settlement are to guide the conduct of (1) a RI/FS of the Site not inconsistent with the NCP and (2) certain Early Actions, as collectively identified and described in the SOW attached as Appendix B.

6. Consistent with Executive Order 12580 and the NCP, EPA is the lead agency for response actions involving the privately owned/operated portions of the Site, while the USFS is the lead agency for response actions involving the USFS portions of the Site. Notwithstanding that division, the parties agree that it is appropriate, given fiscal and efficiency priorities, for EPA to take principal responsibility for implementation of the entire response action. The State enters into this Settlement pursuant to Sections 120(f) and 121(f) of CERCLA, 42 U.S.C. §§ 9620(f) and 9621(f), and will serve as Support Agency under this Settlement. It will review response data and documents and consult with EPA and the USFS on decisions and approvals made under the Settlement. Likewise, the Tribes, which are federally recognized and have a governing body known as the Fort Hall Business Council that is asserting exercise of authority pursuant to inherent sovereign power, the Fort Bridger Treaty (15 Stat. 673), and the Constitution and By-Laws of 1936—will serve as a support agency under this Settlement. The Tribes will review response data and documents and consult with the EPA and USFS regarding decisions or approvals made under this Settlement.

ED_004715A_00002540-00003

II. PARTIES BOUND

6. ***Effect on Heirs, Successors, Agents, and Assigns.*** This Settlement is binding upon the Parties and their heirs, successors, agents, and assigns until such time as the terms of this agreement are fully met. Any change in ownership or corporate status of Respondents, including, but not limited to, any transfer of assets or real or personal property, shall not alter their responsibilities under this Settlement.

7. Each undersigned representative of Respondents certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute this Settlement. Respondents agree that each of them is jointly and severally liable for carrying out all activities required by this Settlement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement, the remaining Respondents shall complete all such requirements.

8. MGII, as the Site Operator for purposes of this Settlement, shall act on behalf of Respondents in carrying out the terms of this Settlement and has been designated to act on their behalf. When the term "Respondents" is used in this Settlement, the Parties understand that MGII is acting on behalf of all Respondents, and that all Respondents will be bound by MGII's actions.

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

DRAFT

III. DEFINITIONS

10. Unless otherwise expressly provided in this Settlement, terms used herein are defined in and by CERCLA or implementing regulations promulgated thereunder shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply. Singular form shall be construed to include the plural and vice versa, unless the context requires otherwise:

> "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.
>
> "Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.
>
> "Effective Date" shall mean the effective date of this Settlement as provided in Section XXXIV.
>
> "EFSFSR" shall mean the East Fork of the South Fork of the Salmon River.

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

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

"Early Actions" shall mean the accelerated response actions to be taken at the Site described in Task 7 of Appendix B.

"Existing Contamination" shall mean:

a. any hazardous substances, pollutants, contaminants or Waste Materials present or existing on or under the Site as of the Effective Date;

b. any hazardous substances, pollutants, contaminants or Waste Materials that migrated from the Site prior to the Effective Date; and

c. any hazardous substances, pollutants, contaminants or Waste Materials presently at the Site that migrate onto or under or from the Site after the Effective Date.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, not inconsistent with the NCP, that the Participating Parties incur after the Effective Date in reviewing or developing deliverables submitted pursuant to this Settlement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs.

"IDEQ" shall mean the Idaho Department of Environmental Quality and any successor departments or agencies of the State.

"IGRCLLC" shall mean Idaho Gold Resources Company, LLC.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Applicable dates are available at *http://www.epa.gov/superfund/superfund-interest-rates.*

"MGC" shall mean Midas Gold Corp.

"MGII" shall mean Midas Gold Idaho, Inc.

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

DRAFT

"Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper- or lower-case letter.

"Participating Parties" shall mean EPA, USFS, IDEQ, and Tribes.

"Parties" shall mean the Participating Parties and Respondents.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, incurred by the Participating Parties at or in connection with the Site through the Effective Date, plus Interest on all such costs that has accrued pursuant to 42 U.S.C. § 9607(a) through such date.

"PRO" shall mean the Plan of Restoration and Operations filed by MGII with USFS to redevelop portions of the Stibnite Mining District.

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

DRAFT

"Records" shall mean records, reports, documents, and other information, including in electronic form.

"Respondents" shall mean Midas Gold Corp., Idaho Gold Resources Company, LLC, Stibnite Gold Company, and Midas Gold Idaho, Inc.

"RI/FS" shall mean Remedial Investigations and Feasibility Studies under CERCLA and the work described in Tasks 1-6 of Appendix B.

"RPM" shall mean the Remedial Project Manager as defined in 40 C.F.R. § 300.5.

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

"Settlement" shall mean this Administrative Order on Consent for the Remedial Investigation/Feasibility Study and Removal Actions and all appendices attached hereto (listed in Section XXXII (Integration & Appendices)).

"SGC" shall mean Stibnite Gold Company.

"Site" encompasses all areas within the Stibnite Mining District within the following legal description all within the Boise Meridian:

T19N, R9E
Sec 34 – S ½ of SE ¼
SEC 35 – S ½ of SW ¼, NE ¼ of SW ¼, SW ¼ of NE ¼, W ½ of SE ¼

T18N, R9E
Sec 2 – N ½, N ½ of SE ¼, N ½ of SW ¼, SW ¼ of SW ¼
Sec 3 – E ½
Sec 10 – E ½

Sec 11 – S ½, W ½ of NW ¼
Sec 14 – NW ¼, N ½ of SW ¼, N ½ SE ¼, N ½ of NE ¼, SW ¼ of NE ¼
Sec 15 – E ½, S ½ of SW ¼, NE ¼ of SW ¼, SE ¼ of NW ¼
Sec 16 – SE ¼ of SE ¼
Sec 21 – NE ¼ of NE ¼
Sec 22 – N ½ of NW ¼, N ½ of NE ¼

in which any Respondent has ownership interest in land or holds patented or unpatented mining claims, including for purposes of this Settlement, the locations identified as the Yellow Pine Pit (also referred to as the Glory Hole), Bradley Tailings Pile, Keyway Dam, Hecla Heap (also referred to as the Hangar Flats Tailings Pile), Bailey Tunnel, DMEA Adit, DMEA Waste Rock Dump, Bonanza Adit, Cinnabar Tunnel, and the Meadow Creek Adit, as well as the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for response action implementation and materials handling. The Site is further depicted as designated on the CERCLA AOC RI/FS boundary on the map attached as Appendix A. In the event that there is a conflict between the legal description and the map attached as Appendix A, the legal description in this definition shall control.

"State" shall mean the State of Idaho.

"Statement of Work" or "SOW" shall mean Appendix B to this Settlement, the document describing the activities MGII must perform pursuant to this Settlement, including any modifications made thereto in accordance with this Settlement.

"Stibnite Mining District" is the area of historically significant mining located in Stibnite, Valley County, Idaho, approximately 98 miles northeast of Boise, 40 miles east of McCall, and 10 miles east of the community of Yellow Pine in the EFSFSR drainage basin, where Respondents hold patented and unpatented mining claims.

"Stibnite Special Account" shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

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

"Tribes" shall mean the Shoshone Bannock Tribes.

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

"USFS" shall mean the United States Forest Service, an agency of the United States Department of Agriculture, and its successor departments, agencies, offices, or instrumentalities.

DRAFT

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any hazardous wastes as defined in the Idaho Hazardous Waste Management Act, Idaho Code 39-4403(8); (e) "pollutants" as defined in IDAPA 58.01.02.010.731; (f) "contaminants" as defined in IDAPA 58.01.11.007.10; (g) "hazardous materials" as defined in IDAPA 58.01.02.010.40; or "deleterious materials" as defined in IDAPA 58.01.02.010.16.

"Work" shall mean all activities and obligations MGII commits to on behalf of Respondents and that Respondents are required to perform under this Settlement, except those required by Section XIV (Record Retention).

"Work Plan" shall mean any plan to be approved by EPA for performance of the Work.

IV. FINDINGS OF FACT

DRAFT

11. MGII is a wholly owned subsidiary of MGC. Pursuant to the PRO and 36 C.F.R. § 228.3(b), MGII is an "operator," as defined by the regulation, which is "[a] person conducting or proposing to conduct operations" on the Site.

12. The majority of the mining and processing activity proposed by Respondents will take place is on patented claims.

13. Historical mining in the Stibnite Mining District mostly occurred in three general areas named Meadow Creek (Hangar Flats), Yellow Pine, and West End. Mining operations began in the Stibnite Mining District in the 1920s and expanded rapidly and extensively starting in 1939 during Strategic Minerals Investigations when large deposits of antimony were discovered by the U.S. Bureau of Mines and again in 1941 when tungsten was discovered by U.S. Geological Survey and continued through the 1950s. During this initial period of mining activity, the mining of gold, silver, antimony, and tungsten mineralized materials was achieved by both underground and, later, open-pit mining methods.

14. During World War II, the Site is estimated to have produced more than 90% of the Nation's antimony and 65% of the Nation's tungsten, materials that were used in advancing the war effort, including munitions, steel, fire retardants, and other purposes. In November 1952, the Defense Minerals Exploration Administration ("DMEA") awarded the Bradley Mining Company ("Bradley") two contracts to explore and develop metals deposits at the Yellow Pine and Meadow Creek mines. Strategic mining operations continued through much of the Korean War, and antimony, gold, and tungsten mining and milling ceased in 1952, near the end of the Korean War.

15. A second major period of activity at the Site began with exploration activities in 1972 and was followed by open-pit mining and seasonable on-off heap leaching on five contiguous leach pads between 1982-1998 and one-time heap leaching on an isolated pad from 1987 to 1992. With ore provided by multiple operators from a number of locations, and processed in adjacent heap-leaching facilities, over 10 million tons of ore were mined and processed. During the years of production, millions of cubic yards of mine tailings were

deposited at locations within the Site, and in some cases, spent ore was permanently placed over historical mill tailings that had previously been discarded.

16. The Site has been subject to substantial cost recovery litigation under CERCLA, and several consent decrees emerged from these actions including *Mobil Oil v. United States*, Civ. No. 99-1467-A (D. Virginia) (consent decree filed June 26, 2000); *United States v. Oberbillig* (D. Idaho) (consent decree filed March 18, 2004); and *United States v. Bradley Mining Company*, Case No. 3:08-CV-03968 TEH and *United States v. Bradley Mining Company*, Case No. 3:08-CV-05501 TEH (N.D. Ca.) (consent decree filed April 19, 2012). In some of the above-noted cost recovery litigation, the Site has been alleged to be a CERCLA "facility" as defined by Section 101 (9) of CERCLA, 42 U.S.C. § 9601 (9). In *Bradley Mining Company*, the EPA extended CERCLA covenants not to sue to the USFS, United States Department of Defense, United States Department of the Interior, EPA, and United States General Services Administration.

17. The United States provided public notice of the above-noted consent decrees before they were entered by the court.

18. The prior mining activity at the Site resulted in CERCLA remedial actions by EPA, the USFS and the IDEQ. Among other actions, minor quantities of legacy tailings were removed, Meadow Creek was re-channelized in 2005, and certain legacy tailings impoundments were covered with clean fill in 2009. Past additional events at the Site include building removal, equipment removal, the 1965 failure of a hydropower dam on the East Fork of Meadow Creek (commonly referred to as "Blowout Creek"), and the creation and storage of Waste Materials deposited at locations within the Site. Notwithstanding multiple completed response actions, legacy tailings and contamination remain buried over much of the Site.

19. Beginning in 1982, IDEQ began monitoring the Site. IDEQ sampled surface water and groundwater for hazardous substances generated by mining operations. Sampling results showed exceedances of cyanide for the EPA quality criteria for water for fresh-water aquatic organisms.

20. On September 25, 1991, the EPA placed the Yellow Pine Mine Area on the Federal Facilities Docket. The Yellow Pine Mining Area site is located along the EFSFSR, 10 miles southeast of the town of Yellow Pine in Valley County, Idaho, in the Payette National Forest, where antimony and gold mining operations took place from the early 1900s until the late 1990s. The USFS initiated a CERCLA Section 104 and 107 response and enforcement action at the Site.

21. Between 1982 and 1999 several diversions of Meadow Creek were completed.

22. In 1999, the USFS completed a time-critical removal action at the pilot plant. The action consisted of covering and capping ponds constructed by Canadian Superior Mining (U.S.) Limited in connection with a gold-processing pilot test. The pilot test used cyanide-leaching technology for ore extracted from the site. By the end of 1999, most of the facilities and haul roads associated with former owner/operator Stibnite Mine, Inc. were reclaimed under a reclamation plan approved and executed by the USFS and IDEQ. Reclamation and closure continued in 2000.

ED_004715A_00002540-00009

23. In 2002-2003, the USFS completed two time-critical removal actions ("TCRAs"). The first was to remove tailings from the Poison Pond area. The Poison Ponds were located along Meadow Creek south of Hecla's heap leach pad. Approximately 2,500 cubic yards were removed and placed in a repository cell located on the northwest Bradley waste dump on private land. The second TCRA was in the smelter stack area. This action consisted of removing the wood flume and ash to an off-site EPA approved facility. This TCRA also included removal and placement of 400 cubic yards of soil in the same repository cell located on Respondents' patented lands in the northwest Bradley waste dump. The soil was removed from below the smelter stack flume and placed in an unlined trench.

24. In 2003, IDEQ identified areas of high arsenic concentrations of arsenic in the northwest Bradley Waste Rock Dump, which was an unsecured area with unrestricted public access. In 2004, EPA through its contractor, Environmental Quality Management ("EQM"), implemented a removal action which included excavation of contaminated waste, regrading of the removal area, and placement of clean soil on top.

25. In 2003, a Meadow Creek Engineering Evaluation/Cost Analysis ("EE/CA") was completed under a USFS contract by Science Applications International Corporation ("SAIC"), including specifications and design of the recommended alternative. Also, in 2004, a Biological Assessment was completed, as required by the Endangered Species Act, and submitted to the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

26. In 2004-2005, the USFS completed a CERCLA non-time critical removal action in lower Meadow Creek between Blowout Creek and its confluence with the EFSFSR. Legacy tailings that were contributing elevated levels of arsenic to the stream were excavated from a 19-acre area and placed in an engineered unlined repository covered with waste rock in the Spent Ore Disposal Area ("SODA") and 3,500 feet of stream channel was reconstructed, providing habitat potentially suitable for salmonid spawning.

27. Elevated arsenic, antimony, and mercury levels have been detected in sampling locations located near the DMEA Waste Rock Dump area associated with tunnel construction by Bradley pursuant to a contract and loan by the United States and supervised by the DMEA during the 1950s.

28. Alluvial groundwater sampled in groundwater wells immediately downgradient of the repository referenced in paragraph 23 and wells downgradient of the repository referenced in paragraph 26 regularly show elevated arsenic and antimony concentrations.

29. Respondents have never constructed or operated a mine on the Site. As set forth in the PRO, MGII is currently seeking a mine operating permit and approval through the National Environmental Policy Act ("NEPA") process, with the USFS as the lead agency that proposes to develop and operate a mining operation that produces gold and silver doré, and antimony concentrates from ore deposits in the project area.

30. Activities proposed in the PRO will disturb legacy areas at the Site. As set forth in the PRO, MGII will undertake cleanup and reclamation at the Site before, during, and after the proposed mining. By entering into this Settlement, the Parties understand that it is the intent of MGII to remove and then productively mine certain legacy tailings that have been previously deposited in areas of the Site. In some cases, such as the spent heap leach ore disposal area SODA/Bradley tailings, remediation has previously been undertaken under CERCLA.

DRAFT

31. In general, MGII proposed development of the mineral resources would include construction of fish passage around legacy blockage of the Yellow Pine Pit; removal of the spent ore and tailings from the SODA area, removal of the Hecla heap, placement of tailings in a composite-lined tailings storage facility ("TSF"); removal of a significant portion of the Bradley waste rock dumps around Yellow Pine Pit, placement of development rock in engineered and designed facilities; and reclamation and restoration of the Site, including backfill of the Yellow Pine Pit and subsequent reestablishment of the surface waters of the EFSFSR and various other removal, remediation, and restoration activities.

32. The general sequence of mining will be guided by the restoration aspects of the PRO, which includes backfilling the Yellow Pine Pit with West End development rock to restore the approximate original gradient of the EFSFSR, to provide permanent fish passage, and facilitate aquatic habitat enhancement, and removal of the spent ore and tailings from the SODA area prior to construction of the new tailings facility and development rock storage facility.

33. The estimates for direct employment from the activity described in the PRO are 594 construction jobs; 583 operations jobs; 160 reclamation jobs; and 44 monitoring jobs.

DRAFT

V. CONCLUSIONS OF LAW

34. Based on the Statement of Facts set forth above, EPA has determined that:

a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. The conditions described in the Statements of Facts above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

d. The actions required by this Settlement are necessary to protect the public health, welfare, or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

e. The Work required by this Settlement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement, will not be inconsistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

f. EPA has determined that Respondents are qualified to conduct the Work within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement.

VI. SETTLEMENT AGREEMENT & ORDER

35. Based upon the Findings of Fact and Conclusions of Law set forth above, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

VII. CONTRACTOR, PROJECT COORDINATOR, & REMEDIAL PROJECT MANAGER

36. All Work performed under this Settlement shall be under the direction and supervision of qualified personnel. Respondents may retain one or more contractors or subcontractors to perform the Work and shall notify EPA of the names, titles, addresses, telephone numbers, email addresses, and qualifications of such contractors or subcontractors within seven (7) days after the Effective Date or such date on which a contractor or subcontractor is proposed for selection, whichever date is later.

37. If, after the commencement of Work, Respondents retain additional contractors or subcontractors, Respondents shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors.

38. The qualifications of the persons undertaking the Work shall be subject to EPA's review for verification based on objective assessment criteria (*e.g.*, experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

39. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected contractor or subcontractor, Respondents shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications as soon as practicable after EPA's disapproval.

40. With respect to any proposed contractor performing activities related to the Work, Respondents shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs - Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, Reissued May 2006) or equivalent documentation as determined by EPA.

41. Within thirty (30) days after the Effective Date of this Settlement, Respondents shall designate a Project Coordinator who shall be responsible for administration of the Work required by this Settlement and shall submit to EPA the designated Project Coordinator's name, title, address, telephone number, email address, and qualifications.

42. Respondents have designated, and EPA has approved, [_____] as its Project Coordinator, who shall be responsible for administration of all actions by Respondents required by this Settlement. To the greatest extent possible, Respondents' Project Coordinator shall be present on Site or readily available during Site work.

DRAFT

43. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within seven (7) days following EPA's disapproval or such date on which a different Project Coordinator is proposed for selection, whichever date is later. Notice or communication relating to this Settlement from EPA to Respondents' Project Coordinator shall constitute notice or communication to Respondents.

44. EPA has designated Helen Bottcher of the Superfund Emergency Management Division in EPA Region 10 as its Remedial Project Manager ("RPM"). EPA will notify Respondents of a change of its RPM. Communications between Respondents and EPA, and all documents concerning the activities performed pursuant to this Settlement, shall be directed to the EPA RPM.

45. EPA and Respondents shall have the right to change their respective designated RPM or Project Coordinator. Respondents shall notify EPA seven (7) days before such a change is made. The initial notification by Respondents may be made orally but shall be promptly followed by formal written notice.

46. The RPM shall be responsible for overseeing Respondents' implementation of this Settlement. The RPM shall have the authority stated in the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement, or to direct any other response action undertaken at the Site. Absence of the RPM from the Site shall not be cause for stoppage of work unless specifically directed by the RPM.

VIII. WORK TO BE PERFORMED

47. Respondents shall conduct the RI/FS and prepare all plans in accordance with the provisions of this Settlement, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance"), OSWER Directive # 9355.3-01 (October 1988), available at https://semspub.epa.gov/src/document/11/128301, "Guidance for Data Usability in Risk Assessment (Part A), Final," OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at http://semspub.epa.gov/src/document/11/156756, and guidance referenced therein, and guidance referenced in the SOW. The Remedial Investigation ("RI") shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study ("FS") shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, 40 C.F.R. § 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and 40 C.F.R. § 300.430(e).

48. All written documents prepared by Respondents pursuant to this Settlement shall be submitted by Respondents in accordance with Section IX (Submission and Approval

DRAFT

of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and approved by EPA in accordance with Section IX (Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally-approved, or modified deliverables.

49. Respondents shall also perform Early Action response actions to expedite cleanup and will do so in accordance with approved Work Plans. A description of the response Early Action as set out in the SOW includes the following: (1) Bradley Dumps and Hennessy Creek Area; (2) DMEA Adit and Waste Rock Dump Area; (3) Former Bradley Mill and Smelter Area.

50. ***Work Plan and Implementation***. Within thirty (30) days after the Effective Date, Respondents shall submit to EPA for approval a draft Work Plan describing the Work to implement the SOW. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement.

a. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify EPA's RPM by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the Work Plan, EPA shall modify the Work Plan in writing accordingly or direct Respondents to modify and submit the modified Work Plan to EPA for approval. Respondents shall perform the RI/FS Work Plan as modified.

b. EPA may approve, disapprove, require revisions to, or modify each draft Work Plan in whole or in part, provided such disapproval is reasonable and not arbitrary and capricious. If EPA requires revisions, Respondents shall submit a revised draft Work Plan within seven (7) days of receipt of EPA's notification of the required changes but such 7-day limit may be extended by EPA for good cause related to the extent and scope of matters addressed in the Work Plan. MGII shall implement the Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement.

c. Upon approval or approval with modifications of the Work Plan, Respondents shall, upon notification to EPA that appropriate funding and other preparation pursuant to this Settlement is in place, commence implementation of the Work in accordance with the schedule included therein. Respondents shall not commence or perform any Work except in conformance with the terms of this Settlement.

d. Unless otherwise provided in this Settlement, any additional deliverables that require EPA approval under the SOW and/or Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph.

e. Nothing in the foregoing shall be construed to limit EPA's authority to require performance of further response actions at the Site consistent with law.

51. ***Off-Site Shipments and Waste***. Respondents may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. §

DRAFT

300.440. Respondents will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondents obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). Respondents may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility's state and to EPA's Project Coordinator. This notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondents shall also notify the state environmental official referenced above and EPA's Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondents shall provide the written notice after the award of the contract for the RI/FS and before the Waste Material is shipped. Respondents may ship Investigation Derived Waste ("IDW") from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

52. ***Meeting Participation***. Respondents shall make presentations at, and participate in, meetings at the request of EPA during the preparation of the Work Plan. Topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

53. ***Progress Reports***. In addition to the deliverables set forth in this Settlement, Respondents shall submit written monthly progress reports to EPA by the 15th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall: (1) describe the actions that have been taken to comply with this Settlement; (2) include all results of sampling and tests and all other data received by Respondents; (3) describe Work planned for the next two (2) months with schedules relating such Work to the overall project schedule for RI/FS completion; and (4) describe all problems encountered in complying with the requirements of this Settlement and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

IX. SUBMISSION & APPROVAL OF DELIVERABLES

54. ***General Requirements***. Unless otherwise provided in this Settlement, any additional deliverables that require EPA approval under the SOW and/or Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph. Except as otherwise provided in this Settlement, Respondents shall direct all submissions required by this Settlement to the RPM at 1200 6th Avenue, Seattle, Washington 98101, [phone], [email] and to the State at [ID contact information]. Respondents shall submit all deliverables required by this Settlement, the attached SOW, or any approved Work Plan in accordance with the schedule set forth in such plan. Respondents shall submit all deliverables in electronic form and paper copies of all final versions of reports, Sampling and Analysis Plan ("SAP"), Quality Assurance Project Plan ("QAPP"), maps and figures shall also be submitted to EPA and the State. All other deliverables shall be submitted to EPA in the form specified by the

DRAFT

RPM. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5x11 inches, Respondents shall also provide EPA with paper copies of such exhibits.

55. ***Technical Specifications***. Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable format. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes. Spatial data, including spatially referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format; and (2) as un-projected geographic coordinates in decimal degree format using North American Datum 1983 or World Geodetic System 1984 as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor, complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/. Each file must include an attribute name for each site unit or sub-unit submitted. Respondents shall consult https://www.epa.gov/geospatial/geospatial-policies-and-standards for any further available guidance on attribute identification and naming. Spatial data submitted by Respondents does not, and is not intended to, define the boundaries of the Site.

56. ***Initial Submissions***. After review of any deliverable that is required to be submitted for EPA approval under this Settlement EPA shall: (1) approve, in whole or in part, the submission; (2) approve the submission upon specified conditions; (3) disapprove, in whole or in part, the submission; or (4) any combination of the foregoing. EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

57. ***Resubmissions***. Upon receipt of a notice of disapproval under Paragraph 56 ("Initial Submissions"), or if required by a notice of approval upon specified conditions under Paragraph 56, Respondents shall, within forty-five (45) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring Respondents to correct the deficiencies; or (5) any combination of the foregoing.

58. ***Implementation***. Upon approval, approval upon conditions, or modification by EPA under Paragraph 56 ("Initial Submissions") or Paragraph 57 ("Resubmissions"), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the Settlement; and (2) Respondents shall take any action required by such deliverable, or portion thereof. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for penalties under Section XIX ("Stipulated Penalties") for violations of this Settlement. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. In the event that EPA takes over some of the tasks, but not the preparation of the Remedial Investigation Report ("RI Report") or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into those reports. Respondents shall not proceed with any

ED_004715A_00002540-00016

activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan; Sampling and Analysis Plan; draft RI Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; Treatability Testing Health and Safety Plan; and draft FS Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondents shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement. For all remaining deliverables, Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the Work.

59. ***Material Defects***. If an initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and the plan, report, or other deliverable is disapproved or modified by EPA due to such material defect, Respondents shall be deemed in violation of this Settlement for failure to submit such plan, report, or other deliverable timely and adequately. Respondents may be subject to penalties for such violation. Neither failure of EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA.

X. HEALTH & SAFETY

60. In accordance with the schedule set forth in the SOW, Respondents shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-site work under this Settlement. This plan shall be prepared in accordance with "OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities," Pub. 9285.0-OIC (Nov. 2002), available on the NSCEP database at http://www.epa.gov/nscep, and "EPA's Emergency Responder Health and Safety Manual," OSWER Directive 9285.3-12 (July 2005 and updates), available at http://response.epa.gov/_HealthSafetyManual/index.htm. In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning for potential mine impacted water releases. EPA may comment and make recommendation to the Health and Safety Plan, however, Respondents assume full responsibility to adhere to applicable OSHA and Mine Safety and Health Administration ("MSHA") regulations, as appropriate. Respondents shall incorporate all changes to the plan recommended by EPA provided such recommendations are reasonable and not arbitrary and capricious and shall implement the plan during the pendency of the response action.

XI. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

61. ***Quality.***

a. Respondents shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all environmental samples collected related to the Work consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" EPA/240/B-01/003 (March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)" EPA/240/R-02/009 (December 2002), or "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A-900C (March 2005).

ED_004715A_00002540-00017

b. Within seven (7) days after the Effective Date or before commencing Work, Respondents shall submit a Sampling and Analysis Plan related to the Work to EPA for review and approval. This plan shall consist of a Field Sampling Plan ("FSP") and a QAPP that is consistent with the SOW, the NCP and applicable guidance documents, including, but not limited to, "Guidance for Quality Assurance Project Plans (QA/G-5)" EPA/240/R-02/009 (December 2002), "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" EPA 240/B-01/003 (March 2001, reissued May 2006), or "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A-900C (March 2005). Upon its approval by EPA, the Sampling and Analysis Plan shall be incorporated into and become enforceable under this Settlement.

c. Respondents shall ensure that Participating Parties' personnel and authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondents in implementing this Settlement. In addition, Respondents shall ensure that such laboratories shall analyze pursuant to this Settlement all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that environmental sampling and field activities are conducted in accordance with the Agency's "EPA QA Field Activities Procedure," CIO 2105-P- 02.1 (9/23/2014) available at http://epa.gov/irmpoli8/epa-qa-field-activities-procedures. Respondents shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions" available at http://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements and that the laboratories perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (http://www.epa.gov/clp), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (http://www.epa.gov/hw-sw846/sw-846-compendium), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org/). 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (https://www3.epa.gov/ttn/amtic/airtox.html).

d. However, upon approval by EPA, after a reasonable opportunity for review and comment by the USFS, IDEQ, and Tribes, Respondents may use other appropriate analytical method(s), so long as (1) quality assurance/quality control (QA/QC) criteria are contained in the method(s) and the method(s) are included in the QAPP, (2) the analytical method(s) are at least as stringent as the methods listed above, and (3) the method(s) have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, *e.g.*, EPA, ASTM, National Institute for Occupational Safety and Health ("NIOSH"), OSHA, MSHA, etc. MGII shall ensure that all laboratories they use for analysis of samples taken pursuant to this Settlement have a documented Quality System that complies with ASQ/ANSI E4:2014 "Quality management systems for environmental

DRAFT

information and technology programs - Requirements with guidance for use" (American Society for Quality, February 2014), and "EPA Requirements for Quality Management Plans (QA/R-2)" EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network ("ERLN") laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP"), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements. Respondents shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

62. ***Samples***. Upon request, Respondents shall provide split or duplicate environmental samples related to the Work to Participating Parties, or their authorized representatives. Respondents shall notify the parties not less than seven (7) days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA and the State shall have the right to take any additional samples related to the Work that the parties deem necessary. Upon request, EPA shall provide to Respondents split or duplicate samples of any samples its takes as part of EPA's oversight of their implementation of the Work. Other than resource related data associated with the exploration activities, mine production and mill operations assays, Respondents shall submit to EPA and the State results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondents with respect to the Site and/or the implementation of this Settlement.

63. ***Progress***. Respondents shall submit a quarterly written progress report to EPA and the State concerning actions undertaken pursuant to this Settlement, or as otherwise requested by EPA, from thirty (30) days after the Effective Date until issuance of Notice of Completion of Work pursuant to Section XXX, unless otherwise directed in writing by the RPM. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

64. ***Final Report***. Within sixty (60) days after completion of all Work required by this Settlement, other than continuing obligations listed in Section XXX (Notice of Completion of Work), Respondents shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement. The format of the final report or reports is included in the SOW. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP titled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant and material documentation generated during the Work (*e.g.*, manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a responsible corporate official of Respondents or their Project Coordinator:

DRAFT

"I certify under penalty of law that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this document and all attachments, the information submitted is true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

XII. PROPERTY REQUIREMENTS

65. If the Site, or any other property where access is needed to implement this Settlement, is owned or controlled by one of the Respondents, MGII agrees to provide the Participating Parties, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, as may be needed to implement this Settlement.

66. MGII shall require that assignees, successors in interest, and any other parties with rights to use the Site shall provide access and cooperation to the Participating Parties, and their authorized officers, employees, representatives, and all other persons performing response actions under EPA oversight. MGII shall require that assignees, successors in interest and other parties with rights to use the Site implement and comply with any land use restrictions and institutional controls on the Site in connection with the Work, and not contest EPA's authority to enforce any land use restrictions and institutional controls on the Site. MGII shall provide a copy of this Settlement to any current and other party with rights to use the Site as of the Effective Date.

67. EPA agrees to provide reasonable notice to Respondents of the timing of response actions to be undertaken at the Site and other areas owned or controlled by MGII.

68. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than the Parties, MGII shall use best efforts to secure an agreement, enforceable by Respondents and the United States, providing that such owner shall provide the Parties, and their representatives, contractors, and subcontractors with access at all reasonable times to such property to conduct any activity regarding the Settlement; and refrain from using such property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or unduly interfere with or adversely affect the implementation or integrity of the Work. MGII shall provide a copy of such access agreement(s) to EPA.

69. To the extent any action under this Settlement Agreement is to be performed in areas owned by or in possession of USFS, USFS shall cooperate with MGII to allow MGII to perform the Work, including by executing an agreement with MGII as described in Paragraph 68 agreeing to provide the Parties, and their representatives, contractors, and subcontractors with access at all reasonable times to such property to conduct any activity regarding the Settlement; and refrain from using such property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or unduly interfere with or adversely affect the implementation or integrity of the Work.

70. Notwithstanding any provision of this Settlement, EPA retains all of their access authorities and rights, as well as all of its rights to require land, water or other resource use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statute or regulations.

DRAFT

XIII. ACCESS TO INFORMATION

71. Respondents shall provide to EPA, upon request, copies of all Records within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondents shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

72. Respondents may assert that all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record. If Respondents assert such a privilege or protection, they shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (*e.g.*, company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondents shall provide the Record to EPA and the State in redacted form to mask the privileged or protected portion only. Respondents shall retain all Records that they claim to be privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondents' favor.

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

74. Except for business confidential claims, Respondents may make no claim of privilege or protection regarding: (1) any data, other than non-environmental data, regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondents are required to create or generate pursuant to this Settlement.

75. Notwithstanding any provision of this Settlement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIV. RECORD RETENTION

76. Until ten (10) years after EPA provides Respondents with notice that all Work has been fully performed in accordance with this Settlement, Respondents shall preserve and retain all non-identical copies of Records now in their possession or control, or

DRAFT

that come into their possession or control, that relate in any manner to Respondents' representations of the BFPP provisions of CERCLA §§ 101(40)(A)-(H) and 107(r)(l), 42 U.S.C. §§ 9601 (40)(A)-(H) and 9607(r)(l), with regard to the Site, provided, and, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Respondents must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records now in their possession or control or that come into their possession or control that relate in any manner to the performance of the Work, provided, however, that Respondents (and their contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

77. At the conclusion of the document retention period, Respondents shall notify EPA at least ninety (90) days prior to the destruction of any such Records, and, upon request by EPA, and except as otherwise provided, Respondents shall deliver any such Records to EPA.

78. Respondents certify that, as of the Effective Date and to the best of their knowledge and belief, after reasonably diligent inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to the Site and that it has fully complied with any and all EPA and State requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and state law.

XV. COMPLIANCE WITH OTHER LAWS

79. Nothing in this Settlement limits Respondents' obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Settlement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondents shall identify ARARs in the Work Plan subject to EPA approval.

80. Notwithstanding the above paragraph, pursuant to Section 4 of the Idaho Pollutant Discharge Elimination System [IPDES] User's Guide to Permitting and Compliance (April, 2017), MGII will request Clean Water Act permitting compliance assistance for the Site from IDEQ for all activities other than the Work performed under this Settlement.

81. No local, state, or federal permit shall be required for any portion of the Work performed under this Settlement and conducted on the Site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondents may seek relief under the provisions of Section XX (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals.

ED_004715A_00002540-00022

This permit exemption is inapplicable to mining activities conducted outside the Work performed under this agreement. Moreover, this Settlement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XVI. EMERGENCY RESPONSE & NOTIFICATION OF RELEASES

82. ***Emergency Response***. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondents shall take these actions in accordance with all applicable provisions of this Settlement, including, but not limited to, the Health and Safety Plan. Respondents shall also immediately notify the RPM or, in the event of his/her unavailability, the Regional Duty Officer of the incident or Site conditions. Respondents shall also notify the State in accordance with Section XXXVI (Notices & Submissions). In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA for all costs of such response action not inconsistent with the NCP pursuant to Paragraph 85 (Payment of Sum for Future Response Costs).

83. ***Release Reporting***. Upon the occurrence of any event during performance of the Work that Respondents are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11004, Respondents shall immediately orally notify the RPM or, in the event of her unavailability, the Regional Duty Officer at (303) 293-1788, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

84. For any event covered under this Section, Respondents shall submit a written report to EPA within seven (7) days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

XVII. PAYMENT OF PARTICIPATING PARTIES' RESPONSE COSTS

85. ***Payment of Sum for Future Response Costs***. On a periodic basis EPA will send Respondents a bill requiring payment that includes a cost summary for Future Response Costs incurred by Participating Parties. Within sixty (60) days of receipt, Respondents shall make all payments as follows:

a. [$] to EPA by Fedwire Electronic Funds Transfer (EFT) to: "Federal Reserve Bank of New York, ABA = 021030004, Account = 68010727, SWIFT address = FRNYUS33, 33 Liberty Street, New York, NY 10045, Field Tag 4200 of the Fedwire message should read 'D 68010727 Environmental Protection Agency' and shall reference Site/Spill ID Number [____] and the EPA docket number for this action." At the time of payment, MGII shall send notice that payment has been made to [insert names and mailing addresses of Regional Financial Officer and any other receiving officials at EPA].

DRAFT

b. [$] to USFS by [_____]. At the time of payment, Respondents shall send notice that payment has been made to [insert names and mailing addresses of receiving officials at USFS.] At the time of payment, Respondents shall send notice that payment has been made to [insert names and mailing addresses of Regional Financial Officer and any other receiving officials at EPA.]

c. [$] to IDEQ by [_____]. At the time of payment, MGII shall send notice that payment has been made to [insert names and mailing addresses of receiving officials at IDEQ.]

d. [$] to The Tribes by [_____]. At the time of payment, MGII shall send notice that payment has been made to [insert names and mailing addresses of receiving officials at the Tribes.]

86. ***Interest***. In the event that any payment for Future Response Costs is not made by the date required, Respondents shall pay Interest on the unpaid balance, beginning to accrue as of the date of the bill. The Interest shall accrue through the date of Respondents' payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties.

87. ***Return of Excess***. After the Notices of Completion are issued pursuant to Section XXX and the Parties have performed their final accounting, they shall each remit and return to MGII any unused amount of the funds paid by Respondents.

88. ***Contesting Future Response Costs***. Respondents may initiate the procedures of Section XVIII (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 85 (Payment of Sum for Future Response Costs) if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate such dispute, Respondents shall submit a Notice of Dispute in writing to the RPM within thirty (30) days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If MGII submits a Notice of Dispute, MGII shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 85, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation ("FDIC") and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the RPM a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within five (5) days after the resolution of the dispute, the escrow agent shall release the sums due (with accrued Interest) to EPA in the manner described in Paragraph 85. If Respondents prevail concerning any aspect of the contested costs, the escrow agent shall release that portion of the costs (plus associated accrued Interest) for which they did not prevail to EPA in the manner described in Paragraph 87. Respondents shall be

DRAFT

disbursed any balance of the escrow account within five (5) days after the resolution of the dispute. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVIII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XVIII. DISPUTE RESOLUTION

89. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement. The Parties shall attempt to resolve any disagreements concerning this Settlement expeditiously and informally.

90. ***Informal Dispute Resolution***. If Respondents object to any EPA action taken pursuant to this Settlement, including providing Notice of Completion of Work or matters pertaining to Future Response Costs, it shall send EPA a written Notice of Dispute describing the objection(s) within fourteen (14) days after such action or on the date Respondents first became aware of such action, whichever is later. EPA and Respondents shall have thirty (30) days from EPA's receipt of their Notice of Dispute to resolve the dispute through informal negotiations (the Negotiation Period). The Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

91. ***Formal Dispute Resolution***. If the Parties are unable to reach an agreement within the Negotiation Period, Respondents shall, within twenty (20) days after the end of the Negotiation Period, submit a statement of position to the RPM. EPA may, within twenty (20) days thereafter, submit a statement of position. Thereafter, an EPA management official at the Supervisory level or higher will issue a written decision on the dispute to Respondents. EPA's decision shall be incorporated into and become an enforceable part of this Settlement. Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

92. Except where contesting future response costs or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondents under this Settlement. Except as provided in Paragraph 100, stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement. In the event that Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XIX (Stipulated Penalties).

XIX. STIPULATED PENALTIES

93. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth below for failure to comply with the obligations specified herein, unless excused under Section XX (Force Majeure).

94. "Comply," as used in the previous paragraph, includes compliance by Respondents with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

DRAFT

95. ***Stipulated Penalty Amounts***.

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 14th day
$2,500	15th through 30th day
$5,000	31st day and beyond

96. ***Obligations***. Respondents are obligated to pay any sum properly due under Paragraph 85 (Payment of Sum for Future Response Costs); to establish and maintain financial assurance in accord with Section XXVIII; establish an escrow account to hold any disputed Future Response Costs under Paragraph 88 (Contesting Future Response Costs); and achieve major deliverables and milestones under the SOW.

97. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 117 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of [$_____].

98. Stipulated penalties under this Paragraph are in addition to other remedies available to EPA under Paragraphs 117 (Work Takeover) and 137 (Access to Financial Assurance).

99. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period and shall be paid within fifteen (15) days after the agreement or the receipt of EPA's decision.

100. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission or during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondents of any deficiency; and (b) with respect to a decision by the appropriate EPA Management Official, under Paragraph 91 (Formal Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this Settlement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.

101. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement, EPA may give Respondents written notification of the failure and describe the noncompliance. EPA may send Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondents of a violation.

102. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days after Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the Dispute Resolution procedures under Section XVIII (Dispute Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 85 (Payment of Sum for Future Response Costs).

103. If Respondents fail to pay stipulated penalties when due, Respondents shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondents have timely

DRAFT

invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 99 until the date of payment; and (b) if Respondents fail to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 99 until the date of payment. If Respondents fail to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.

104. The payment of penalties and Interest, if any, shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement.

105. Nothing in this Settlement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek civil penalties pursuant Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement, except in the case of willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 117 (Work Takeover).

106. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

XX. FORCE MAJEURE

107. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondents or Respondents' contractors that delays or prevents the performance of any obligation under this Settlement despite Respondents' best efforts to fulfill the obligation—including disruptions arising from the 2020 COVID-19 pandemic and related U.S. Government and Idaho state crisis response actions taken thereto. The requirement that Respondents exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or increased cost of performance.

108. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement for which Respondents intend or may intend to assert a claim of force majeure, Respondents shall notify EPA's RPM orally or, in their absence, EPA Region 10, within ten (10) days of when Respondents first knew that the event might cause a delay. Within five (5) days thereafter, Respondents shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondents shall

DRAFT

include with any notice all available documentation supporting their claim that the delay was attributable to a force majeure. Respondents shall be deemed to know of any circumstance of which Respondents or their contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondents from asserting any claim of force majeure regarding that event; provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 107 and whether Respondents have exercised their best efforts under Paragraph 107, EPA may, in its unreviewable discretion, excuse in writing Respondents' failure to submit timely or complete notices under this Paragraph.

109. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, the time for performance of the obligations under this Settlement that are affected by the force majeure will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a force majeure, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure.

110. If Respondents elect to invoke the dispute resolution procedures set forth in Section XVIII (Dispute Resolution), it shall do so no later than fifteen (15) days after receipt of EPA's notice. In any such proceeding, Respondents shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondents complied with the requirements of Paragraphs 107 and 108. If Respondents carry this burden, the delay at issue shall be deemed not to be a violation by Respondents of the affected obligation of this Settlement identified to EPA.

111. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents MGII from meeting one or more deadlines under the Settlement, Respondents may seek relief under this Section.

XXI. COVENANTS BY THE PARTICIPATING PARTIES

112. Except as provided in Section XXII (Reservations of Rights by the United States), the Participating Parties covenant not to sue or to take administrative action against Respondents for the Work or for Past Response Costs, including pursuant to Sections 106 or 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a).

113. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement. These covenants are also conditioned upon the veracity of the information provided to EPA by Respondents relating to Respondents' Work at the Site and the certification made by Respondents in Paragraph 64. This covenant extends only to Respondents and does not extend to any other persons.

114. Nothing in this Settlement constitutes a covenant not to sue or to take action or otherwise limits the ability of the United States, including EPA, or the IDEQ to seek or obtain further relief from Respondents, if the information provided to EPA by Respondents

DRAFT

relating to Respondent's Work at the Site, or the certification made by Respondents in Paragraph 64, is false or in any material respect, inaccurate.

XXII. RESERVATIONS OF RIGHTS BY THE UNITED STATES

115. Except as specifically provided in this Settlement, nothing in this Settlement shall limit the power and authority of the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, except as specifically provided in this Settlement, nothing in this Settlement shall prevent the United States from seeking legal or equitable relief to enforce the terms of this Settlement, or from taking other legal or equitable action as it deems appropriate and necessary.

116. The covenants set forth in Section XXI (Covenants by Participating Parties) do not pertain to any matters other than those expressly identified therein. The United States reserves, and this Settlement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to: (1) liability for failure by Respondents to meet a requirement of this Settlement; (2) criminal liability; (3) liability for violations of federal or state law that occur during or after implementation of the Work; (4) liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; (5) liability not associated with the Work by Respondents, its successors and assigns; and (6) liability arising from the disposal, release or threat of release of Waste Materials outside of the Site.

117. ***Work Takeover.***

a. In the event EPA determines that Respondents: (1) have ceased implementation of any portion of the Work, (2) are seriously or repeatedly deficient or late in their performance of the Work, or (3) are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondents. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondents a period of fifteen (15) days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

b. If, after expiration of the 15-day notice period specified in Paragraph 117.a. Respondents have not remedied or begun to remedy to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary. EPA will notify Respondents in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph.

c. Respondents may invoke the procedures set forth in Paragraph 91 (Formal Dispute Resolution) to dispute EPA's implementation of a Work Takeover under Paragraph 117.b. However, notwithstanding Respondents' invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 117.b. until the earlier of (1) the date that Respondents remedy, to EPA's satisfaction, the circumstances giving rise to

DRAFT

EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a written decision terminating such Work Takeover is rendered in accordance with Paragraph 91 (Formal Dispute Resolution).

d. Notwithstanding any other provision of this Settlement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXIII. COVENANTS BY RESPONDENTS

118. Respondents agree not to assert any claims or causes of action against Participating Parties or their contractors or employees, with respect to the Work—including, but not limited to:

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

b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the State of Idaho Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law; or

c. any claim pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding, the Work and this Settlement.

119. These covenants not to sue shall not apply in the event the Participating Parties bring a cause of action or issues an order pursuant to any of the reservations set forth in Section XXII (Reservations of Rights by the United States), other than in Paragraph 116(2) (criminal liability), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

120. Nothing in this Settlement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

121. Respondents reserve, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of MGII's deliverables or activities.

ED_004715A_00002540-00030

122. Respondents reserve, and this Settlement is without prejudice to, arguments that any claim or cause of action, or part thereof, is attributable solely to Existing Contamination and that Respondents have complied with all of the requirements of 42 U.S.C. §§ 9601(40)(A)-(H) and 9607(r)(l).

XXIV. OTHER CLAIMS

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

124. Except as expressly provided in Section XXI (Covenants by the Participating Parties), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

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

XXV. EFFECT OF SETTLEMENT/CONTRIBUTION

126. Nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XXIII (Covenants by Respondents), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2) and (3), to pursue any such persons to obtain additional response costs or response actions and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

127. If a suit or claim for contribution is brought against Respondents with respect to Existing Contamination at the Site (including any claim based on the contention that Respondents are liable as a result of response actions taken in compliance with this Settlement or at the direction of EPA's RPM), the Parties agree that this Settlement constitutes an administrative settlement pursuant to which Respondents have, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C.§§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement. The "matters addressed" in this Settlement are the Work, Existing Contamination, Past Response Costs and Future Response Costs.

128. Respondents shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA in writing no later than sixty (60) days prior to the initiation of such suit or claim. Respondents shall, with respect to any suit or claim brought

DRAFT

against it for matters related to this Settlement, notify EPA in writing within ten (10) days after service of the complaint or claim upon it. In addition, Respondents shall notify EPA within ten (10) days after service or receipt of any Motion for Summary Judgment and within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

XXVI. INDEMNIFICATION

129. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondents as EPA's authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. § 300.400(d)(3). Respondents shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondent's behalf or under their control, in carrying out activities pursuant to this Settlement. Further, Respondents agree to pay the United States all costs it incurs, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement. The United States shall not be held out as a party to any contract entered into by or on behalf of MGII in carrying out activities pursuant to this Settlement. Neither Respondents nor any such contractor shall be considered an agent of the United States or the State.

130. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

131. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

132. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXVII. INSURANCE

133. No later than fourteen (14) days before commencing any on-site Work, Respondents shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section XXX (Notice of Completion of Work), commercial general liability insurance with limits of $1 million per occurrence, and automobile liability insurance with limits of liability of $1 million per accident, and umbrella liability insurance with limits of liability of $5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with

ED_004715A_00002540-00032

respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Settlement. In addition, for the duration of the Settlement, Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, Respondents need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondents shall ensure that all submittals to EPA under this Paragraph identify the Stibnite Mine Site name and the EPA docket number for this action.

XXVIII. FINANCIAL ASSURANCE

134. In order to ensure completion of the Work, Respondents shall secure financial assurance, initially in the amount of $[_____]. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from the "Financial Assurance" category on the Cleanup Enforcement Model Language and Sample Documents Database at https://cfpub.epa.gov/compliance/models/, and satisfactory to EPA. Respondents may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, and/or insurance policies.

a. A surety bond guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. An irrevocable letter of credit, payable to or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;

c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;

d. A policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency.

135. Respondents shall diligently monitor the adequacy of the financial assurance. If Respondents become aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, Respondents shall notify EPA of such information within seven (7) days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify Respondents of such determination. Respondents shall, within thirty (30) days after notifying

DRAFT

EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for Respondents, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed sixty (60) days. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Settlement.

136. Respondents shall submit such mechanisms and documents to the Regional financial assurance specialist at the following address: [____]

137. ***Access to Financial Assurance.***

a. If EPA issues a notice of implementation of a Work Takeover under Paragraph 117, then in accordance with any applicable financial assurance mechanism EPA is entitled to: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid.

b. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel such mechanism, and Respondents fail to provide an alternative financial assurance mechanism in accordance with this Section at least thirty (30) days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation.

c. If, upon issuance of a notice of implementation of a Work Takeover, either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism, whether in cash or in kind, to continue and complete the Work; or (2) the financial assurance is provided under Paragraph 134, then EPA may demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondents shall, within seven (7) days of such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph shall be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA may deposit the payment into the EPA Hazardous Substance Superfund or into the Stibnite Mine Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

e. All EPA Work Takeover costs, not inconsistent with the NCP, and not paid under this Paragraph must be reimbursed as Future Response Costs.

138. ***Modification of Amount, Form, or Terms of Financial Assurance.*** Respondents may submit, on any anniversary of the Effective Date or at any other time agreed to by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to EPA in accordance with Paragraph 136 and must include an estimate of the cost of the remaining Work, an

DRAFT

explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondents of its decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Respondents may reduce the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) if there is a dispute, the agreement or written decision resolving such dispute under Section XVIII (Dispute Resolution). Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall be made in EPA's sole and unreviewable discretion, and such decision shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum. Within thirty (30) days after receipt of EPA's approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Respondents shall submit to EPA documentation of the reduced, revised, or alternative financial assurance mechanism.

139. ***Release. Cancellation, or Discontinuation of Financial Assurance.*** Respondents may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Section XXX (Notice of Completion of Work); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation, or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XVIII (Dispute Resolution).

XXIX. MODIFICATION

140. EPA's RPM may modify any plan or schedule or the SOW in writing or by oral direction. Any modification will not be arbitrary and capricious and will be of fair cost. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the RPM's oral direction. Any modification will be subject to modification that may be required of the PRO or other agency authorization for the Work concerned. Any other requirements of this Settlement may be modified in writing by mutual agreement of the Parties.

141. If Respondents seek permission to deviate from any approved Work Plan or schedule or the SOW, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from EPA's RPM.

142. No informal advice, guidance, suggestion, or comment by the RPM or other EPA representatives regarding any deliverable submitted by Respondent shall relieve it of its obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

XXX. NOTICE OF COMPLETION OF WORK

143. When EPA, in consultation with the State, determines, after review of the Final Report, that all Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, EPA will provide written notice to Respondents. If EPA determines that any such Work has not been completed in accordance with this Settlement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the Work Plan if appropriate in order to correct such deficiencies. Respondents shall implement the modified and approved Work

ED_004715A_00002540-00035

Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified Work Plan shall be a violation of this Settlement.

XXXI. PUBLIC COMMENT

144. This Settlement shall be subject to a thirty (30) day public comment period, after which EPA may modify or withdraw its consent to this Settlement if comments received disclose facts or considerations which indicate that this Settlement is inappropriate, improper or inadequate.

XXXII. INTEGRATION & APPENDICES

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

a. Appendix A is a map of the Site.

b. Appendix B is the SOW.

XXXIII. HEADINGS

146. The headings and captions in this Settlement have been inserted for convenience of reference only and shall not define or limit any of the terms or provisions hereof.

XXXIV. EFFECTIVE DATE

147. The effective date of this Settlement shall be the date upon which EPA issues written notice to MGII that EPA has fully executed the Settlement after review of and response to any public comments received. Notwithstanding any other provision in this Settlement, EPA agrees that the performance obligations under this Settlement cannot proceed in the absence of applicable required permits and other authorizations issued by the appropriate government agencies.

XXXV. DISCLAIMER

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

XXXVI. NOTICES & SUBMISSIONS

149. Any notices, documents, information, reports, plans, approvals, disapprovals, or other correspondence required to be submitted from one party to another under this Settlement, shall be deemed submitted either when an email is transmitted and received, it is hand-delivered or as of the date of receipt by certified mail/return receipt

DRAFT

requested, express mail, or facsimile. Submissions to Respondents shall be addressed in care of:

Midas Gold Idaho, Inc.
405 South 8th Street, Suite 201
Boise, ID 83702 with copies to:

With Copies To:

Midas Gold Corp:
#890-999 West Hastings Street
Vancouver, B.C., V6C 2W2, Canada

Idaho Gold Resources Company, LLC
13181 HWY 55, P.O. Box 429
Donnelly ID 83615

Stibnite Gold Company
13181 HWY 55, P.O. Box 429
Donnelly ID 83615
With electronic copies to

DRAFT

IT IS SO AGREED:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BY:

_____ _____

Date

DRAFT

IT IS SO AGREED:

STATE OF IDAHO

BY:

_____ _____

Date

DRAFT

The undersigned representative of each Respondent certifies that they are fully authorized to enter into the terms and conditions of this Settlement and to bind the party represented to this document.

IT IS SO AGREED:

BY:

Midas Gold Idaho, Inc	Date
Midas Gold Corp.	Date
Idaho Gold Resources Company LLC	Date
Stibnite Gold Company	Date

DRAFT

CERTIFICATE OF SERVICE

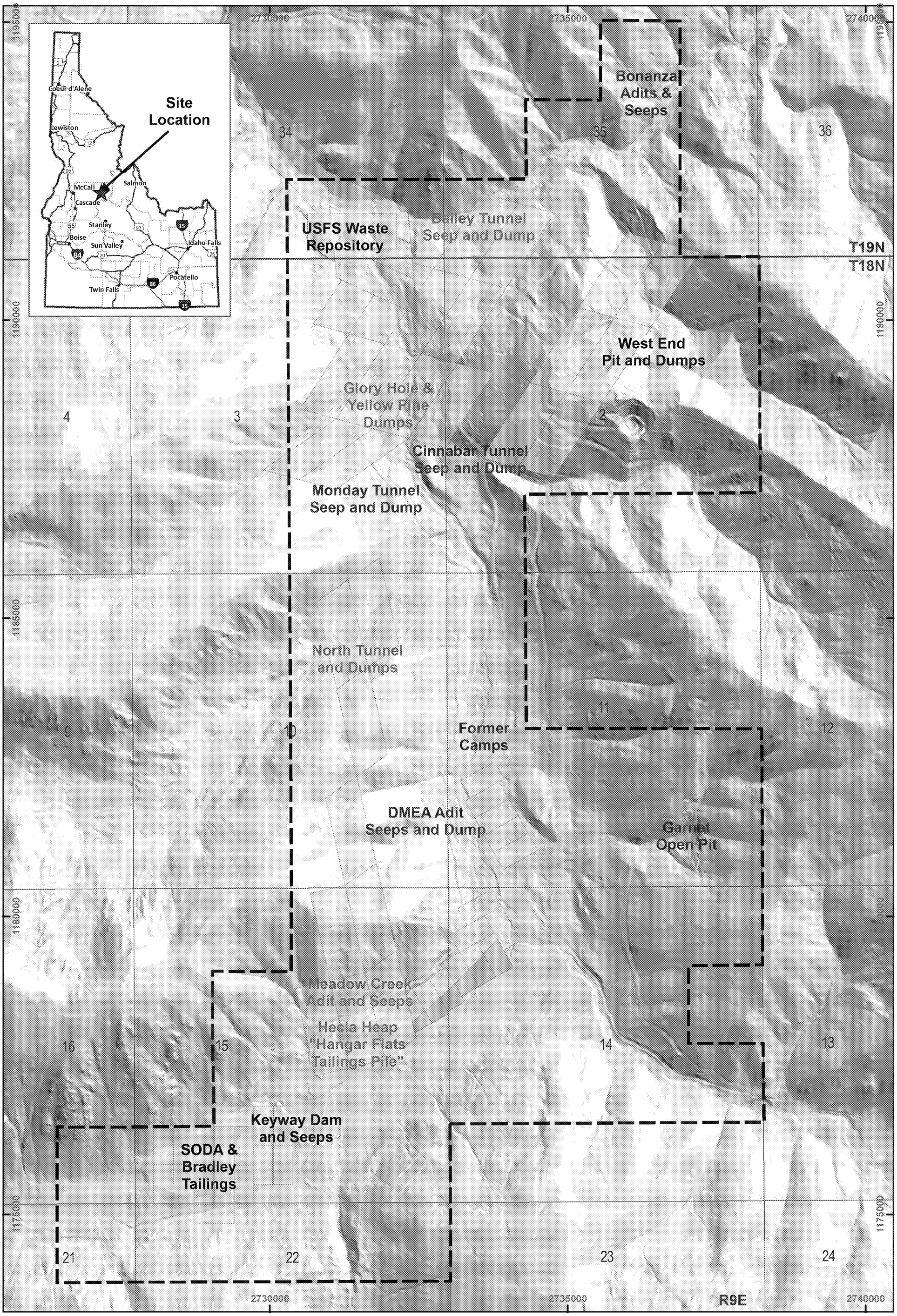
The undersigned hereby certifies that a true and correct copy of the foregoing was served on the following parties listed below by United States mail, postage prepaid, this ___ day of_____, [INSERT].

DRAFT

DRAFT

APPENDIX A

PROJECT SITE



Projection: NAD 1983 State Plane Idaho West FIPS (US Feet)

Legacy Features
- Mixed Ownership (Private Land - Public Land - USFS) (black text)
- Public Land (red text)
- Private Land (blue text)

- CERCLA AOC RI/FS Boundary
- Hecla Mining Company - Surface Rights
- IGRCLLC-SGC Patented Private Land

N

0 1,000 2,000 3,000 4,000
Feet

CERCLA AOC RI/FS Boundary
Stibnite Mining District
Valley County, Idaho
05/11/2020

APPENDIX B
STATEMENT OF WORK FOR THE STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY AND EARLY ACTIONS
TABLE OF CONTENTS

SECTION **PAGE**

1 PURPOSE 3
2 SCOPE 3
3 OVERSIGHT 3
4 SCHEDULE 4
5 GUIDANCE 4
6 ROLES AND RESPONSIBILITIES 4
7 REMEDY REQUIREMENTS 4
8 TASK 1 – SCOPING 5
8.1 Site Background 5
8.2 Project Planning 6
8.3 Scoping Deliverables 7
9 TASK 2 – COMMUNITY RELATIONS 12
10 TASK 3 – SITE CHARACTERIZATION 13
10.1 Field Investigation 13
10.2 Data Analyses 14
10.3 Data Management Procedures 15
10.4 Site Characterization Deliverables 16
11 TASK 4 – TREATABILITY STUDIES 17
11.1 Determination of Candidate Technologies and of Need for Testing 17
11.2 Treatability Testing and Deliverables 18
12 TASK 5 – FEASIBILITY STUDY 19
12.1 Remedial Alternative Development 19
13 TASK 6 – DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES 20
13.1 Detailed Analysis of Alternatives 20
13.2 Detailed Analysis Deliverables 21
14 TASK 7 – EARLY ACTIONS 21
14.1 Description and Scope of Early Actions 22
14.2 Design 23
14.3 Early Action Implementation 27
14.4 Project Completion and Close Out 27
15 REFERENCES FOR CITATION 28
ATTACHMENT A – SUGGESTED RI/FS WORK PLAN FORMAT 36
ATTACHMENT B – SUGGESTED FORMAT FOR SAMPLING AND ANALYSIS PLAN 37

DRAFT

ATTACHMENT C – SUGGESTED REMEDIAL INVESTIGATION REPORT FORMAT.....38
ATTACHMENT D – SUGGESTED FORMAT FOR FEASIBILITY STUDY REPORT.....40
ATTACHMENT E – STIBNITE MINE RI/FS STATEMENT OF WORK SCHEDULE 42

DRAFT

ED_004715A_00002540-00045

1 PURPOSE

This Statement of Work (SOW) sets forth the requirements for conducting an RI/FS at the Site located in northwest Idaho approximately 10 miles from the town of Yellow Pine as well as the Early Actions described in Task 7. The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of work that will be carried out by Midas Gold Idaho, Inc. (MGII or Respondent) as it implements the RI/FS at the Site.

In September 2016, MGII filed a Plan of Restoration and Operations (PRO) with USFS for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider existing field data and analyses, mining activities proposed in the PRO, and any modifications and subsequent remediation. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

This RI/FS and Early Actions SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language. This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan, commonly calledthe National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the "AOC." Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

2 SCOPE

The specific RI/FS activities to be conducted at the Site are set forth in six separate tasks. The Early Actions are set forth in Task 7.

Task 1 – Scoping
Task 2 – Community Relations
Task 3 – Site Characterization
Task 4 – Treatability Studies
Task 5 – Feasibility Study
Task 6 – Detailed Analysis of Remedial Alternatives
Task 7 – Early Actions

3 OVERSIGHT

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code§§ 39-101 to 39-130; the Hazardous Waste Management Act of Idaho, Idaho Code§§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code§§ 39-3601 et seq.

As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

4 SCHEDULE

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

5 GUIDANCE

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

6 ROLES AND RESPONSIBILITIES

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS and Early Actions, except as otherwise specified in the AOC. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

7 REMEDY REQUIREMENTS

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health

ED_004715A_00002540-00047

and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

8 TASK 1 – SCOPING

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by the Respondent as a function of the project planning process.

8.1 Site Background

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

8.1.1 Collect and analyze existing data and document the need for additional data

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA. Guidance on systematic planning using the data quality objectives

ED_004715A_00002540-00048

process (EPA QA/G-4). Washington, D.C.: 121. http://www.epa.gov/quality/qs-docs/g4-final.pdf, U.S. EPA (2006).

8.1.2 Conduct site visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

8.2 Project Planning

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

8.2.1 Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

ED_004715A_00002540-00049

8.2.2 Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

8.2.3 Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

8.2.4 Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

8.3 Scoping Deliverables

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

8.3.1 RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan will take into consideration for the timing and scope of potential mining and processing activities associated with the PRO. This could include a phased approach to focus on issues of most concern or requiring early action. The Work Plan shall be developed in conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

8.3.2 Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP,and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision) and specifically should contain the twenty-four elements specified in Table 11 – List of QA Project Plan Elements, EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

8.3.3 Potential Target Analytes

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

Chemicals/Analytes of Potential Concern for Surface Water

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Boron
- Cadmium
- Calcium
- Chloride
- Chromium (III)
- Chromium (VI)
- Cobalt
- Copper
- Cyanide
- Hardness
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrogen (TKN)
- Phosphorus
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium
- Tungsten
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Uranium
- Vanadium
- Zinc

Field Analyses

- Conductivity
- Dissolved Oxygen
- Flow
- pH
- Temperature

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Chemicals/Analytes of Potential Concern for Sediments:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for sediment sampling stations.

Laboratory Analyses

- Aluminum
- Antimony
- Arsenic
- Cadmium
- Chromium
- Copper
- Cyanide
- Iron
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

ED_004715A_00002540-00053

Chemicals/Analytes of Potential Concern for Soils/Waste Rock:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for soils/waste rock sampling.

Laboratory Analyses

- Aluminum
- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Cyanide
- Iron
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Uranium
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Vegetation:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for vegetation sampling stations.

Laboratory Analyses

- Aluminum
- Antimony
- Arsenic
- Boron
- Cadmium
- Chromium
- Cobalt
- Copper
- Cyanide
- Iron
- Lead
- Manganese
- Mercury
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Tungsten
- Vanadium
- Zinc

Chemicals/Analytes of Potential Concern for Groundwater

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

DRAFT

Laboratory Analyses

- Alkalinity
- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chloride
- Chromium (III)
- Chromium (VI)
- Cobalt
- Copper
- Cyanide
- Hardness
- Iron
- Magnesium
- Manganese
- Mercury
- Molybdenum
- Nickel
- Nitrate/nitrite as N
- Nitrogen (TKN)
- Orthophosphate
- Potassium
- Selenium
- Silver
- Sodium
- Sulfate
- Thallium
- Total Dissolved Solids
- Total Organic Carbon
- Total Suspended Solids
- Tungsten
- Uranium
- Vanadium
- Zinc

Field Analyses

- Conductivity
- Dissolved Oxygen or ORP
- Ferric Iron
- Ferrous Iron
- Nitrite
- pH
- Temperature

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

9 TASK 2 – COMMUNITY RELATIONS

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of Cascade, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

ED_004715A_00002540-00055

10 TASK 3 – SITE CHARACTERIZATION

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology to the extent that it has not already been determined through existing data. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

10.1 Field Investigation

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

10.1.1 Implement and document field support activities

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. The Respondent shall also notify the RPM upon completion of field support activities.

10.1.2 Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan, to the extent that it has not already been determined through existing data. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

10.1.3 Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

10.1.4 Delineate the nature and extent of contamination

The Respondent shall gather information to delineate the nature and extent of contamination as a final step during the field investigation to the extent that it has not already been determined through existing data. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

10.2 Data Analyses

10.2.1 Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport to the extent that it has not already been determined through

ED_004715A_00002540-00057

existing data. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

10.3 Data Management Procedures

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

10.3.1 Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

10.3.2 Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

10.3.3 Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by

ED_004715A_00002540-00058

uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See www.epa.gov/storet/wqx.hmtl)

10.4 Site Characterization Deliverables

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

10.4.1 Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

10.4.2 Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

10.4.3 Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action, but will consider implementation of the PRO. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

Contaminant Identification – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).

Exposure Assessment – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

ED_004715A_00002540-00059

Toxicity Assessment – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity). EPA has prepared chemical screening tables with updated toxicity values and Preliminary Remediation Goals for various land uses available from: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables

Risk Characterization – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

11 TASK 4 – TREATABILITY STUDIES

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

11.1 Determination of Candidate Technologies and of Need for Testing

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the range of technologies required for the development and analysis of alternatives (Task 5 and 6) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

11.1.1 Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

11.1.2 Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating

ED_004715A_00002540-00060

conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

11.2 Treatability Testing and Deliverables

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

11.2.1 Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

11.2.2 Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

11.2.3 Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

11.2.4 Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

ED_004715A_00002540-00061

12 TASK 5 – FEASIBILITY STUDY

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

12.1 Remedial Alternative Development

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

12.1.1 Refine and document remedial action objectives

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

12.1.2 Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

12.1.3 Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

12.1.4 Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

12.1.5 Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

13 TASK 6 – DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

13.1 Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

ED_004715A_00002540-00063

13.1.1 Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative, the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

13.1.2 Compare alternatives against each other and document the comparison of alternatives

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

13.2 Detailed Analysis Deliverables

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

13.2.1 Feasibility Study report

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

14 TASK 7 – EARLY ACTIONS

EPA and the Respondent have identified three Early Actions (EAs) to be performed at the Site. It is the common goal to implement these actions in 2020, if possible.

ED_004715A_00002540-00064

14.1 Description and Scope of Early Actions

The three Early Actions are as follows:

14.1.1 Bradley Dumps and Hennessy Creek Area

The Northwest Bradley Dumps consist of extensive legacy waste rock dumps covering over 30 acres situated along the East Fork of the South Fork of the Salmon River (EFSFSR) southwest of the confluence with Sugar Creek. The Early Action will entail lining and rerouting the Hennessy Creek diversion to a more direct route into the EFSFSR. This would eliminate the majority of the water (0.72 square miles catchment area, lowest measured baseflow 0.15 cubic feet per second, estimated 25-year runoff peak 11 cubic feet per second) that presently leaks from the existing ditch system and flows in the subsurface through the dumps west of the Yellow Pine open pit and the Northwest Bradley Dumps. Without the perennial flow from Hennessy Creek, wet- and dry-season metals loading to the EFSFSR associated with the Northwest Bradley Dumps would decrease. Additional wet season decreases in loading would be accomplished by rerouting and piping the existing ditch in the vicinity of the USFS Smelter Debris Repository to reduce the infiltration of water from the remaining catchment (0.16 square miles catchment area, estimated baseflow 0.03 cubic feet per second, estimated 25-year runoff peak 2.5 cubic feet per second) through the dump and/or repository. Rerouting the main Hennessy Creek diversion (Figures 1 and 2) would be accomplished with a pipeline leading from the present water collection pond along the Stibnite Road, into the Yellow Pine pit to discharge into the existing pit lake (into deep water to avoid causing turbidity). Route options include a direct route eastward down the highwall directly into the lake, or a longer but flatter route along a historical conveyor corridor and roads.

The pipe intake structure would allow overflow into the existing ditch system in the event of a plugged pipe or extreme flood event. An existing earthen diversion dam upgradient of the proposed pipeline intake would continue to manage most debris and bedload, though the pipe intake structure includes a trash rack to prevent either from plugging the pipe. After the main Hennessy Creek diversion rerouting is accomplished, the existing ditch near the repository would be rerouted west of the Stibnite Road in a pipe, to discharge to another existing, unlined diversion ditch beyond the point at which re-infiltrated water could interact with the dump.

14.1.2 Defense Minerals Exploration Administration (DMEA) Adit and Waste Rock Dump Area

The DMEA Adit and Waste Rock Dump Area consists of a portal to an underground exploration drift and associated waste rock dumps and access roads located on the western side of the EFSFSR valley approximately 0.75 miles south of Fiddle Creek. The EA will consist of separation of upgradient water (0.11 square miles catchment area, lowest measured baseflow 0.0004 cubic feet per second, estimated 25-year runoff peak 1.6 cubic feet per second) from the DMEA dump by installation of a culvert alongside the dump, generally along the alignment of the present high-flow channel (Figure 3). The culvert intake would include a trash rack to prevent the pipe plugging with debris, and the upstream end of the pipe installed trenched-in sufficiently deep to prevent backwater from the culvert entrance from forcing water into the dump materials. The remainder of the pipe would be laid within or along the present surface channel, with ballast as needed to fix the pipe in place. The outlet would feature riprap erosion protection.

14.1.3 Former Bradley Mill and Smelter Area

The Bradley Mill and Smelter Area is the site of former legacy mineral processing activities in Meadow Creek valley approximately 0.75 miles southwest of the EFSFSR confluence and is adjacent to Hecla heap leach pad. The Early Action will entail installation of a geosynthetic lined ditch and pipe to divert upgradient water around mineralized backfill materials west of Hecla's former heap leach pad (Figure 4). A ditch at the upstream end of the new diversion would allow collection of the principal catchments (0.16 square miles catchment area, estimated baseflow 0.006 cubic feet per second, estimated 25-year runoff peak 2.4 cubic feet per second) draining to this area. The lower portion of the diversion would utilize a pipeline for more effective containment, faster construction, and avoidance of excavating potentially contaminated materials in the vicinity of the old smelter stack. Together, the ditch and pipe system would re-establish the effective diversion system that was backfilled in 2009-2010. The pipe outfall would report to an existing ditch that leads to a culvert, which then drains to the Keyway Marsh – with a potential ancillary benefit of providing additional water to support wetland function.

14.2 Design

14.2.1 Draft Early Action Design Report/Early Action Work Plan

Within 60 days after the Effective Date of the Settlement Agreement/CO the Respondent will submit a Draft Early Action Design Report (EADR)/Early Action Work Plan (EAWP) for each of the three Early Actions documenting the complete draft design. The reports will contain, at a minimum, the following:

1. A statement of the problem(s) and potential problem(s) posed by the Early Action Project Area.
2. A background summary setting forth: (a) a brief description of the Project Area including the geographic location and a description of the physiographic, hydrologic, geologic, demographic, ecological, cultural, and natural resource features of the Site; (b) a brief synopsis of the history of the Project Area including a summary of past disposal practices and a description of previous responses that have been conducted by local, State, Federal, or private parties; and (c) a summary of the existing data including physical and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Project Area
3. A cultural resource survey for the areal extent of the Project Area which shall include: A cultural resource review of records on file at the Idaho State Historic Preservation Office (SHPO) to determine potential locations of prior cultural resources inventories and previously recorded cultural resource sites in the Project Area vicinity; and an on-the-ground identification of potential cultural resources within the Project Area. Respondent shall coordinate the cultural resource survey with the Agencies.
4. A Bird Nest Survey, Mitigation, and Monitoring Plan for the areal extent of the Project Area, if needed, based on the following:

   To avoid impacts to migratory birds and their nesting, ground clearing of vegetation should be completed before or after the nesting period for the site (approximately May 15th through August 15th). The EPA may grant exceptions to this if erosion, sedimentation, weed

ED_004715A_00002540-00066

infestation, important timing conflicts, or other unacceptable impacts would occur. If an exception is granted a, Bird Nest Survey, Mitigation, and Monitoring Plan would be required and additional mitigation measures would apply in the event active nests are present.

5. The technical parameters upon which the design will be based. Specifically, the design assumptions and parameters, including (1) waste characterization for hazardous waste that leaves the Site; (2) performance standards for diversion structures; (3) compliance with ARARs, pertinent codes, and standards; (4) technical factors of importance to the design and construction, including use of currently accepted environmental control measures, constructability of the design, and use of currently acceptable construction practices and techniques.

In addition, the Draft EADR will include:

a. Preliminary Construction Schedule appropriate to the size and complexity of the project.

b. Plans, Drawings, and Specifications. A complete set of construction drawings, including Project Area representations, engineering drawings for grading, structural, and cover construction, including a detailed topographic map of the Project Area and specifications (general specifications, drawings, and schematics), shall be submitted. Plans and specifications shall conform to acceptable standards. All specifications shall conform to CSI format. Plans and specifications shall include specifications for construction, installation, Project Area preparation, and field work standards. General correlation between drawings and technical specifications is a basic requirement of any set of working construction plans and specifications. The design plans and specifications must be consistent with the technical requirements of all ARARs identified for this project. Before submitting the project specifications, Respondent shall coordinate and cross-check the specifications and drawings and complete the proofing of the specifications and the cross-checking of all drawings and specifications. The submittals shall include a complete set of construction drawings and specifications, as well as a set of one-half size reduction of drawings.

c. Basis of Design Section including a detailed description of the evaluations conducted to propose the design approach. This section shall include a Summary and Detailed Justification of Assumptions. This summary shall include (1) calculations supporting the assumptions; (2) a detailed evaluation of how all ARARs identified for this project will be met; (3) a plan for minimizing environmental and public impacts; and (4) a plan for satisfying permitting requirements.

d. Health and Safety Plan (HASP). Prepare a Site-specific HASP that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120 (l)(1) and (l)(2).

e. Quality Assurance Project Plan (QAPP). The QAPP will specify all sampling and chemical analyses to be and shall meet the requirements of EPA's National Functional Guidelines for Inorganic Data Review, (EPA 540-R-10-011, OSWER 9240.1-51, January 2010) and shall be consistent with the requirements of EPA's Contract Laboratory Program (CLP) for laboratories proposed outside of the CLP. The QAPP shall contain third party data validation procedures to ensure data is of known quality.

f. Sampling and Analyses Plan (SAP). Prepare a SAP that defines the sampling and data

ED_004715A_00002540-00067

collection methods that shall be used for the project. The SAP shall include sampling objectives; sample locations and frequency; sampling equipment and procedures; disposal of investigatory derived waste; sample shipment; sample handling and analyses; and a breakdown of samples to be analyzed through a Contract Laboratory Program (CLP)-equivalent laboratory, as well as the justification for those decisions. The SAP shall consider the use of all existing data and shall justify the need for additional data whenever existing data will meet the same objective. The SAP shall be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and field information required.

g. Storm Water Pollution Prevention Plan (SWPPP). The EAWP will include a description of the applicable BMPs that will be implemented to maintain surface water quality during the Early Action construction.

h. Construction Quality Assurance Plan. The Respondent shall submit as part of the EAWP a Construction Quality Assurance (CQA) Plan. The CQA Plan shall include, but not be limited to, the inspection of the installation of any pipe, turf reinforcement mat, silt fence and other erosion-control devices, seed and mulch, precast concrete structures, grout, geotextiles, and other miscellaneous materials, required geotechnical testing of earthwork and various materials, and construction reporting and communications. The CQA Plan shall include but not be limited to construction inspection, verification sampling and testing of earthwork and various materials, review of material submittals, and reporting and communications pertaining to the CQA process. At a minimum, the CQA Plan shall provide requirements for the following elements:

    i. Responsibility and authority of Respondent and all contractors involved in the Early Action construction.

    ii. CQA Personnel Qualifications. The Respondent shall establish the minimum qualifications of the CQA Officer and supporting inspection personnel.

    iii. Inspection Activities. The Respondent shall establish the observations and tests that will be required to monitor the construction and/or installation of the components of the EA. The plan shall include the scope and frequency of each type of inspection to be conducted. Inspections shall be required to verify compliance with environmental requirements. Inspections shall also ensure compliance with all health and safety procedures.

    iv. Sampling requirements. The Respondent shall establish proposed requirements for sampling activities, sample size, sample locations, frequency of testing, criteria for acceptance and rejection, and plans for correcting problems as addressed in the project specifications.

    v. Documentation. The Respondent shall describe the reporting requirements for CQA activities. This shall include such items as daily summary reports and inspection data sheets.

i. Preliminary Cost Estimate of the costs of all the elements of the Early Action.

The EAWP shall include a detailed description of the technical approach for the construction activities. The necessary procedures, inspections, deliverables, and schedules shall be specified. A comprehensive construction management schedule for completion of each major activity and

ED_004715A_00002540-00068

deliverable shall also be included. It is intended to serve as a field reference for both the Respondent and Agencies' personnel as the Early Action is implemented. The EAWP will include:

1. The Respondent's technical approach to each task to be performed, including a detailed description of each task; the assumptions used; the information needed for each task; any information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the Agencies.
2. Construction schedule.
3. An organizational structure which outlines the responsibilities and authority of all organizations and key personnel involved in the EA. A description of Respondent's key project personnel's qualifications (Project Coordinator, Resident Engineer, quality assurance official, etc.) shall also be provided. The organizational structure shall include the Respondent, the Agencies and their respective contractors.
4. Statement of qualifications for Respondent's subcontractors. The Respondent will provide written acknowledgement that any subcontractors working on the RA have received and read a copy of the Settlement Agreement and this SOW at least 15 days prior to onset of work.
5. Best Management Practices (BMPs) shall be implemented during construction to minimize erosion, sedimentation, and dust generation. The BMPs shall include, but not be limited to silt fences, straw bales, fuel storage/handling and/or waste staging/storage areas, temporary sedimentation ponds, and watering to control dust generation, as needed.
6. Process for requesting and obtaining approval for any modifications to the final design prior to initiation of such modifications.
7. Process for documenting approved modifications to the final design.
8. Waste Management Procedures that outline the process, procedures, and safeguards that will be used to ensure hazardous substances, pollutants, or contaminants are not released on- or off-Site during the implementation of the EA. Any plans and procedures prepared during the design should be referenced or adapted whenever possible (i.e. sediment and erosion control plan).
9. Procedure for addressing any unexpected archaeological and/or paleontological discoveries encountered during construction.
10. Inspection Activities. The Respondent shall establish the observations and tests that will be required to monitor the construction and/or installation of the components of the EA. The plan shall include the scope and frequency of each type of inspection to be conducted. Inspections shall be required to verify compliance with environmental requirements and include, but not be limited to, air quality and emissions monitoring records, and waste disposal records. Inspections shall also ensure compliance with all health and safety procedures and BMPs.
11. Identification of post-construction Operations, Maintenance and Monitoring requirements.
12. Schedule and content of weekly progress reports.

14.2.2 Final Early Action Design Report/Early Action Work Plan

Respondent shall submit a proposed Final EADR/EAWP within 45 days after receipt of the Agencies' comments on the draft report. If the Agencies require revisions to the proposed Final

ED_004715A_00002540-00069

EADR/EAWP, Respondent shall resubmit a proposed Final EADR/EAWP within 30 days after receipt of the Agencies' comments. EPA will notify Respondent of the approval of the EADR/EAWP and authorization to implement the EA.

14.3 Early Action Implementation

Respondent shall implement the Early Actions in accordance with the specifications, plans, and schedule set forth in the approved EADR/EAWP. The Respondent shall notify the Agencies no less than 5 Working Days prior to initiating construction activities. Other notifications may be requested by the EPA project manager (i.e. stop work, etc.).

14.4 Project Completion and Close Out

The purpose of the project completion and close-out activities is for the Respondent to conduct the necessary inspections to verify completed work and prepare a Final Early Action Report. In addition, the post-construction monitoring and effectiveness evaluation requirements are established. Project completion and close-out will consist of the following activities:

1. Removal of Temporary facilities. The Respondent shall dismantle, pack up, and move off-Site any temporary facilities (i.e. trailers) or equipment installed and used during the course of the EA.
2. Site Restoration. The Respondent shall restore the physical appearance of the Site according to the approved design (i.e. road restoration, fence removal, reseeding with approved seed mix, etc.).
3. Make Pre-Final/Final Construction Inspection. The Respondent shall conduct a Pre-final Construction Inspection with the Respondent's Project Coordinator, Design Engineer, the contractor, Third Party Oversight Engineer, EPA, and Support Agency representatives. The Pre-Final Construction Inspection shall occur 30 days prior to Respondent's projected date for construction completion. This Pre-Final Construction Inspection will be used to develop a punch list of outstanding construction items and deficiencies. The Respondent shall prepare and submit a Pre-Final Construction Inspection Technical Memorandum (TM) which includes the list of outstanding construction items, deficiencies, completion dates for outstanding items and deficiencies, and the date for the Final Inspection to determine if punch list and all terms of the design have been satisfied. The Pre-Final Construction Inspection TM shall be submitted within 30 days after the Pre-Final Construction Inspection. The Final Construction Inspection shall occur within 30 days after completion of outstanding items identified by the Pre-Final Construction Inspection. The Construction Inspection Report shall be submitted within 90 days after completion of the Final Construction Inspection.
4. The Draft Early Action Report shall be submitted within 90 days after the submittal of the Construction Inspection Report. The Draft Final Early Action Report shall be submitted within 30 days after receipt of the Agencies' comments. The Final Early Action Report shall be submitted within 30 days after receipt of the Agencies comments on the Draft Early Action Report.
5. An addendum to the RI work plan will be submitted to describe the effectiveness monitoring required for each EA, which will be operated and maintained for the duration of the RI/FS. The performance will be assessed in the FS to support identification of a Site remedy.

15 REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA - 330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008. "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

DRAFT

FIGURES

DRAFT

ED_004715A_00002540-00073

Figure 1 – Early Action Water Diversion Plan for Hennessy Creek

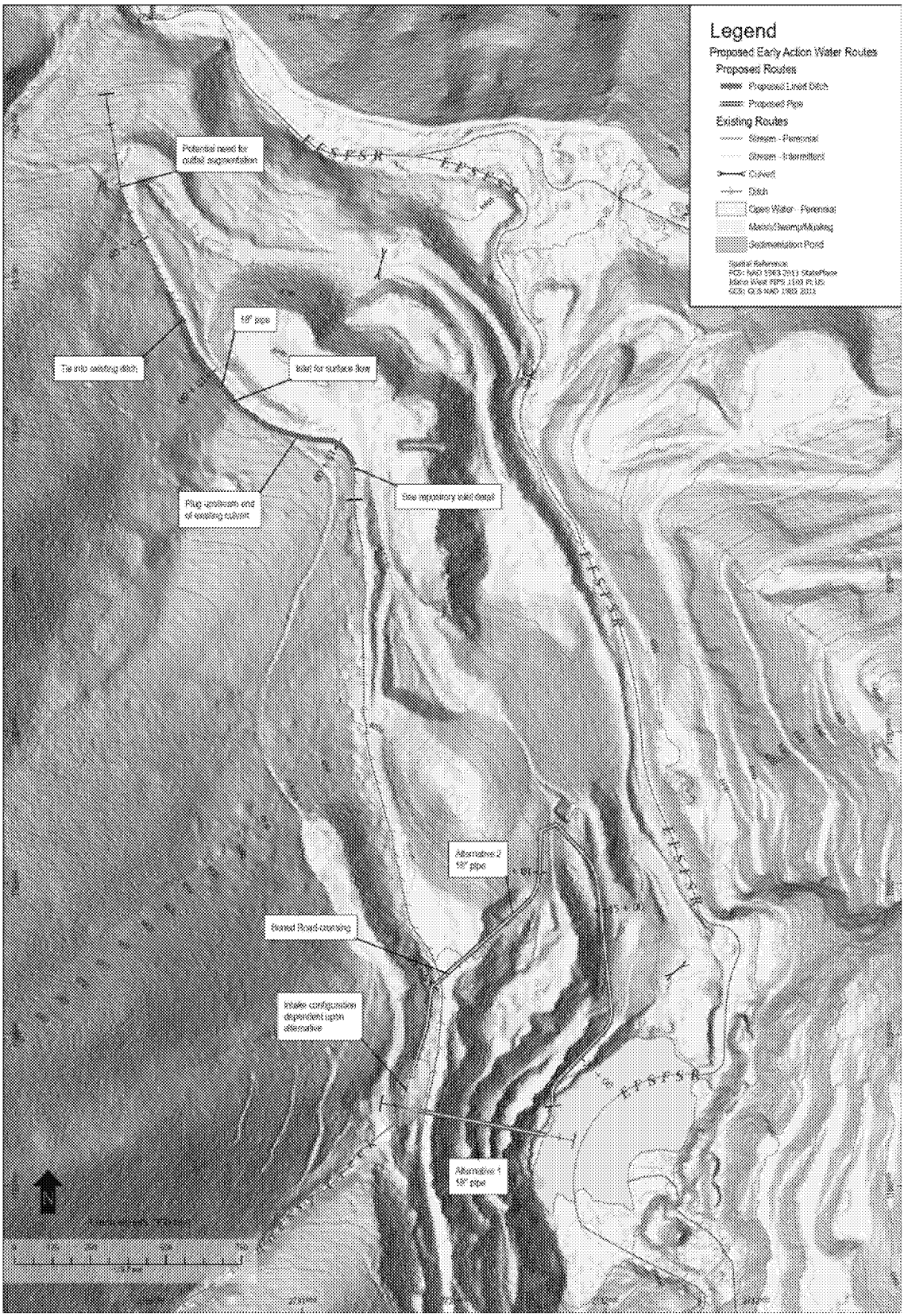
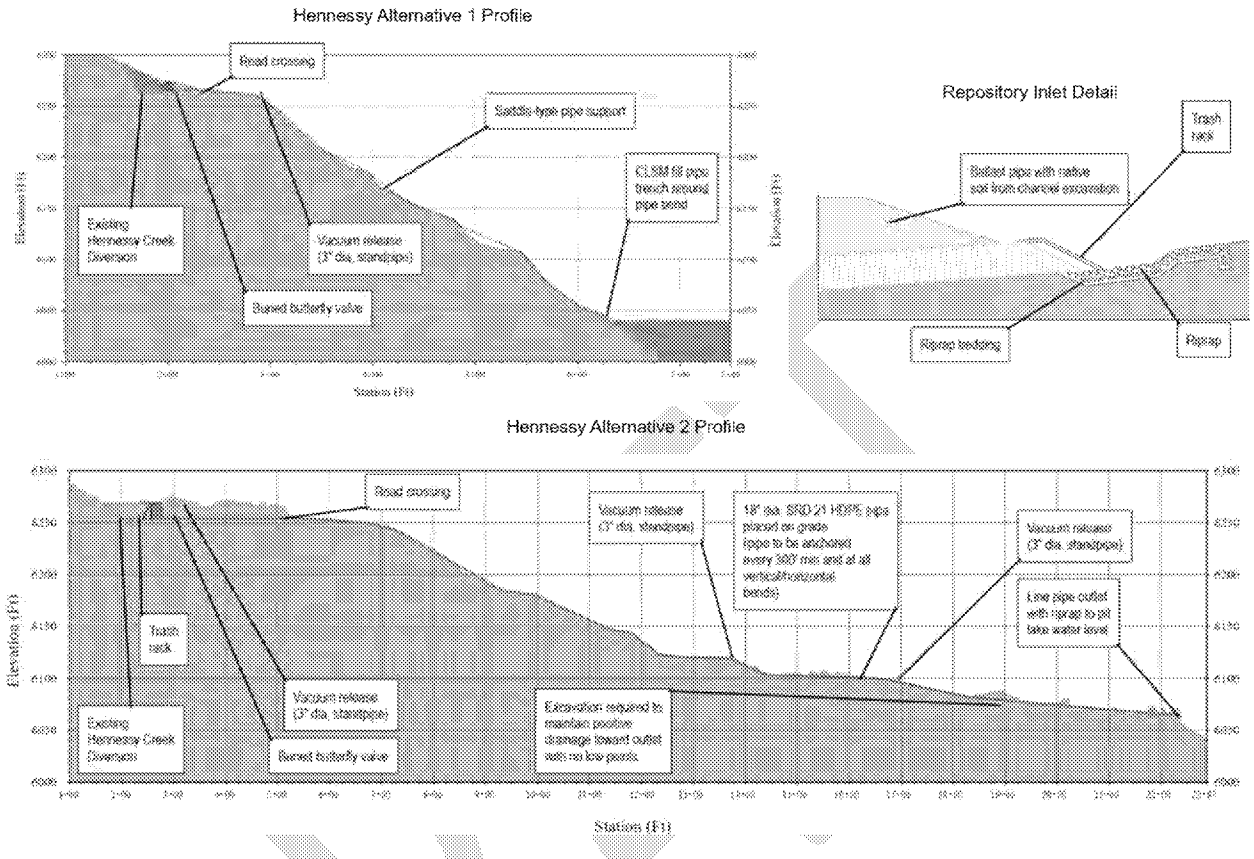


Figure 2 – Early Action Water Diversion Details for Hennessy Creek



ED_004715A_00002540-00075

Figure 3 – Early Action Water Diversion Design for DMEA Waste Rock Dump Area

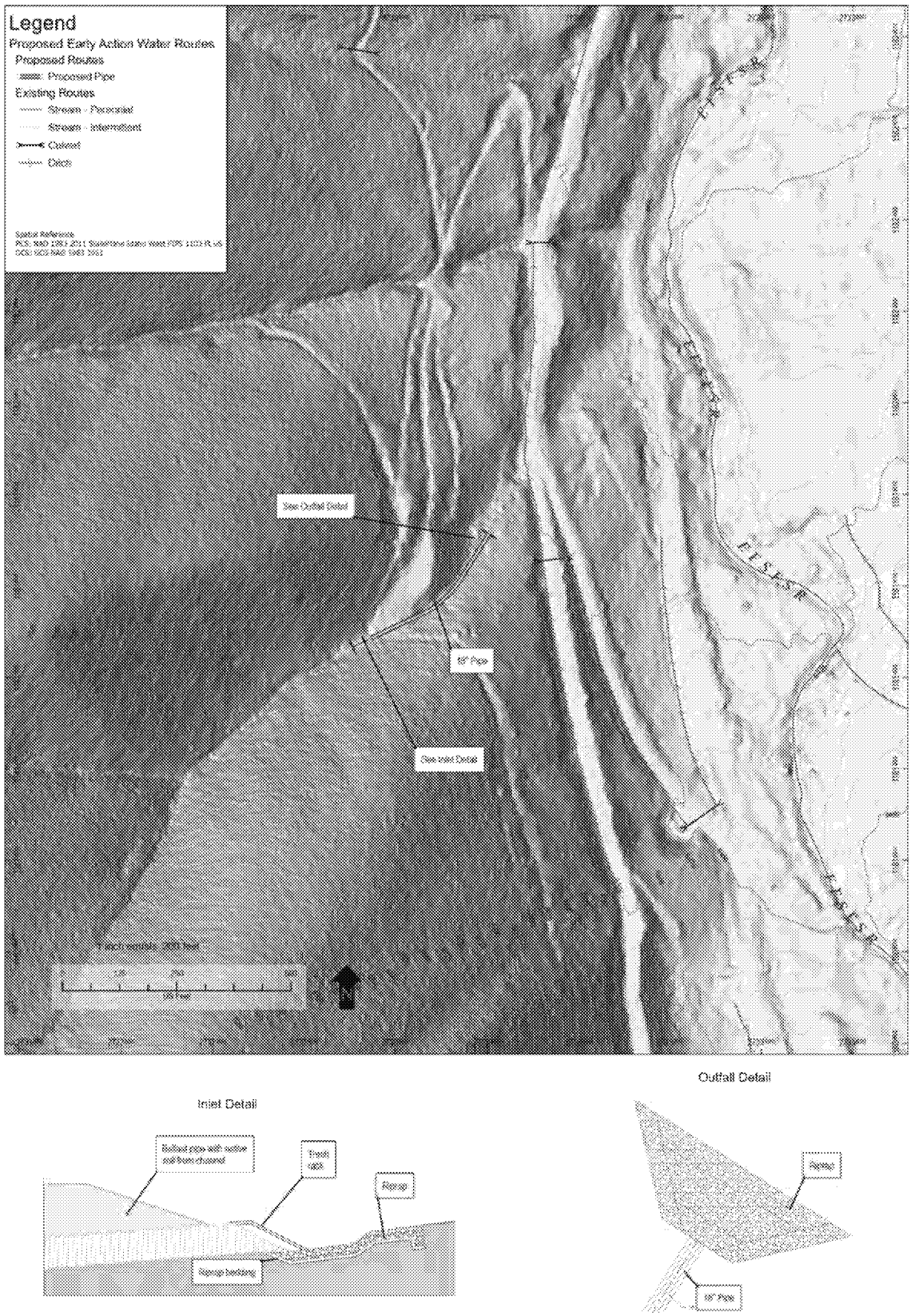
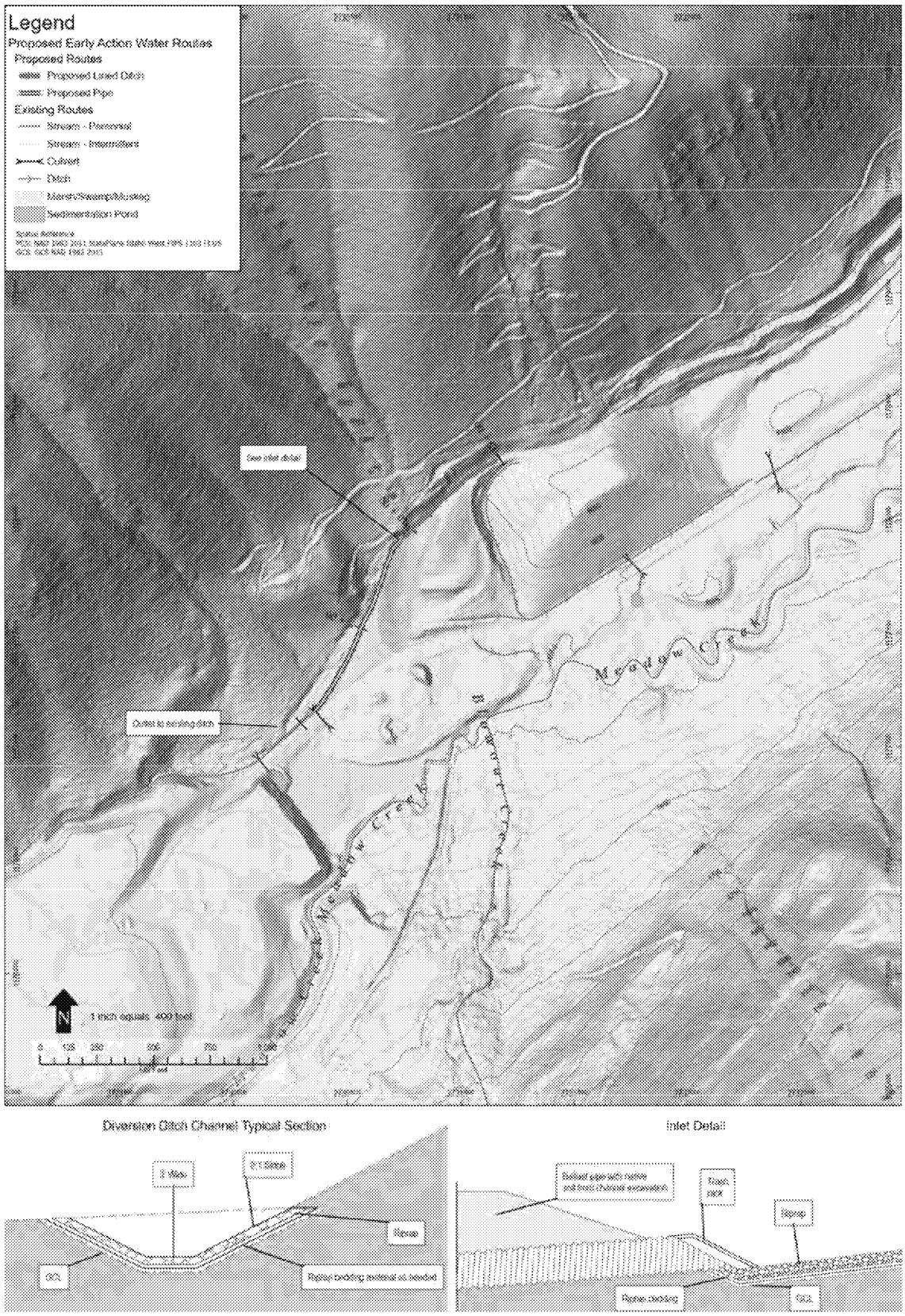


Figure 4 – Early Action Water Diversion Plan for Former Bradley Mill and Smelter Area



ATTACHMENTS

DRAFT

ED_004715A_00002540-00078

Attachment A – Suggested RI/FS Work Plan Format

Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
   - Types and volumes of waste present
   - Potential pathways of contaminant migration/preliminary public health and environmental impacts
   - Preliminary identification of operable units
   - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
   - DQO needs
   - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
   - Staffing
   - Coordination
9. References

Appendices

DRAFT

Attachment B – Suggested Format for Sampling and Analysis Plan

Field Sampling Plan (FSP)

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

Quality Assurance Project Plan (QAPP)

Project Management

A1 Title and Approval Sheet
A2 Table of Contents
A2 Distribution List
A4 Project/Task Organization
A5 Problem Definition/Background
A6 Project/Task Description
A7 Quality Objectives and Criteria
A8 Special Training/Certifications
A9 Documentation and Records

Data Generation and Acquisition

B1 Sampling Process Design (Experimental Design)
B2 Sampling Methods
B3 Sample Handling and Custody
B4 Analytical Methods
B5 Quality Control
B6 Instrument/Equipment Testing, Inspection, and Maintenance
B7 Instrument/Equipment Calibration and Frequency
B8 Inspection/Acceptance of Supplies and Consumables
B9 Non-direct Measurements
B10 Data Management

Assessment and Oversight

C1 Assessments and Response Actions
C2 Reports to Management

Data Validation and Usability

D1 Data Review, Verification, and Validation
D2 Verification and Validation Methods
D3 Reconciliation with User Requirements

DRAFT

Attachment C – Suggested Remedial Investigation Report Format

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization
2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology
4. Nature and Extent of Contamination
   - 4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:

ED_004715A_00002540-00081

4.1.1 Sources (lagoons, sludges, tanks, etc.)
4.1.2 Soils and Vadose Zone
4.1.3 Ground Water
4.1.4 Surface Water and Sediments
4.1.5 Air

5. Contaminant Fate and Transport
   5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)
   5.2 Contaminant Persistence
      5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest
   5.3 Contaminant Migration
      5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)
      5.3.2 Discuss modeling methods and results, if applicable
6. Baseline Risk Assessment
   6.1 Human Health Evaluation
      6.1.1 Exposure Assessment
      6.1.2 Toxicity Assessment
      6.1.3 Risk Characterization
   6.2 Environmental Evaluation
7. Summary and Conclusions
   7.1 Summary
      7.1.1 Nature and Extent of Contamination
      7.1.2 Fate and Transport
      7.1.3 Risk Assessment
   7.2 Conclusions
      7.2.1 Data Limitations and Recommendations for Future Work
      7.2.2 Recommended Remedial Action Objectives

Appendices
   A. Technical Memorandum on Field Activities (if available)
   B. Analytical Data and QA/QC Evaluation Results
   C. Risk Assessment Methods

DRAFT

Attachment D – Suggested Format for Feasibility Study Report

Executive Summary

1. Introduction
   - 1.1 Purpose and Organization Report
   - 1.2 Background Information (Summarized from RI Report)
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Nature and Extent of Contamination
     - 1.2.4 Contaminant Fate and Transport
     - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
   - 2.1 Introduction
   - 2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
     - Contaminants of interest
     - Allowable exposure based on risk assessment (including ARARs) Development of remediation goals
   - 2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
   - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:
     - 2.4.1 Identification and Screening of Technologies
     - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
   - 3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
   - 3.2 Screening of Alternatives (if conducted)
     - 3.2.1 Introduction
     - 3.2.2 Alternative 1
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.2 Alternative 2
       - 3.2.2.1 Description
       - 3.2.2.2 Evaluation
     - 3.2.3 Alternative 3

3.2.3.1 Description
3.2.3.2 Evaluation

4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Evaluation
4.2.2 Alternative 2
4.2.2.1 Description
4.2.2.2 Evaluation
4.2.3 Alternative 3
4.2.3.1 Description
4.2.3.2 Evaluation
4.3 Comparative Analysis

DRAFT

Attachment E – Stibnite Mine RI/FS Statement of Work Schedule

Early Actions (separate documents will be submitted for each Early Action)

- Draft Early Action Design Report / Early Action Work Plan due within 30 days after the Effective Date of the Settlement Agreement/CO.
- Proposed Final Early Action Design Report/Early Action Work Plan due within 45 days after receipt of consolidated Agency comments on the draft.
- Final Early Action Design Report/Early Action Work Plan due within 30 days after receipt of consolidated Agency comments on the proposed final.
- Early Action construction: notify the Agencies 5 working days before start of construction
- Pre-Final Construction Inspection: 30 days prior to projected Project Completion.
- Pre-Final Construction Inspection TM due within 30 days after the Pre-Final Construction Inspection
- Final Construction Inspection due within 30 days after completion of outstanding items identified by the pre-final construction inspection.
- Construction Inspection Report due within 90 days after the Final Construction Inspection
- Draft Early Action Report due within 90 days of Agency comments on the Construction Inspection Report
- Draft Final Early Action Report due within 30 days of Agency comments on the Draft Early Action Report
- Final Early Action Report due within 30 days of Agency comments on the Draft Final Early Action Report
- Performance Monitoring – to be submitted as an RI Work Plan Addendum due concurrently with the Final Early Action Design Report/Early Action Work Plan

<u>RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):</u>

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

ED_004715A_00002540-00085

Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

[1] Documents may initially be released as "draft final" pending final resolution of issues.

DRAFT

Appointment

From: Bottcher, Helen [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=097ADE740AA247288ACF3D056E29F49D-BOTTCHER, HELEN]
Sent: 4/7/2020 10:47:17 PM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]; Albert Crawshaw (Albert.Crawshaw@deq.idaho.gov) [Albert.Crawshaw@deq.idaho.gov]; ally_turner@fws.gov; Clabaugh, Charles D. [clabaugh.charles@epa.gov]; Derek Young (derek.young@deq.idaho.gov) [derek.young@deq.idaho.gov]; Elizabeth McKenna [Mckenna.Elizabeth@epa.gov]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Jeremy Moore (jeremy_n_moore@fws.gov) [jeremy_n_moore@fws.gov]; Jill Grant (jgrant@jillgrantlaw.com) [jgrant@jillgrantlaw.com]; Kathy Zamba (kathy.zamba@usda.gov) [kathy.zamba@usda.gov]; Kelly Wright (kwright@sbtribes.com) [kwright@sbtribes.com]; Lisa O'Hara (lisa.ohara@deq.idaho.gov) [lisa.ohara@deq.idaho.gov]; Maley, Timothy [maley.timothy@epa.gov]; McGrath, Patricia [mcgrath.patricia@epa.gov]; Nathalie Doherty (Nathalie.Doherty@sol.doi.gov) [Nathalie.Doherty@sol.doi.gov]; Susan Hanson (susanthanson9@icloud.com) [susanthanson9@icloud.com]; Todd Leeds (todd.leeds@usda.gov); John Meyer [meyer@midasgoldinc.com]; Austin Zinsser [zinsser@midasgoldinc.com]
CC: John Meyer [JMeyer@midasgoldcorp.com]; Hendricks, Kathleen [Kathleen_Hendricks@fws.gov]; Fisher, Sandi [sandi_fisher@fws.gov]; Koda Merkley [kmerkley@midasgoldinc.com]; Chris Dail [Dail@midasgoldinc.com]; Gene Bosley [bosley@midasgoldinc.com]; Andy Koulermos [akoulermos@formationenv.com]; L. Michael Bogert [mbogert@midasgoldinc.com]; Bradley M. Marten [bmarten@martenlaw.com]

Subject: Stibnite: Midas response to Gov't Parties Table
Location: Zoom meeting

Start: 4/9/2020 11:00:00 PM
End: 4/10/2020
Show Time As: Busy

Hi, everyone. Sorry for scheduling so late in the day, but this time worked best for most of the team. Guess we're all busy with Skype and Zoom calls these days. John Meyer will explain Midas' additions to the table of early actions that we sent. Austin Zinsser will be on the call to explain Midas' loading estimates, and they'll both be happy to take our questions. If you have a specific question or there's something you hope is covered, please let John and Austin know.

EPA staff – please sign off the agency's VPN before joining the Zoom meeting.

Here are the Zoom meeting instructions:

As discussed, a Zoom video conference has been setup for this Thursday afternoon. To connect to the call, please use the following information:

Join Zoom Meeting
https://zoom.us/ Ex. 6 Personal Privacy (PP)

Meeting ID: 282 208 9706

One tap mobile
Ex. 6 Personal Privacy (PP) US (Houston)
+ Ex. 6 Personal Privacy (PP) US (San Jose)

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 4/10/2020 10:14:45 PM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Austin Zinsser [zinsser@midasgoldinc.com]; Gene Bosley [bosley@midasgoldinc.com]; Koda Merkley [kmerkley@midasgoldinc.com]; Kyle Fend [fend@midasgoldinc.com]; Chris Dail [Dail@midasgoldinc.com]; Andy Koulermos [akoulermos@formationenv.com]; Bradley Marten [bmarten@martenlaw.com]
Subject: Revised Early Actions Table
Attachments: ATT00001.txt

Helen,

As promised, we have updated the ***Stibnite Mine Legacy Areas Early Action Table*** with details concerning the arsenic load calculations for each candidate site. This document has been uploaded to the Stibnite Mining District RIFS SharePoint site and can be access via:

https://midasgold.sharepoint.com/:f:/r/sites/StibniteAreaDataLibrary/Investigation_Results/06_Analysis_of%20Remedial_Actions/20200410%20Early%20Proposed%20Actions%20Table%20Loading%20Calculation%20Response?csf=1&web=1&e=W3y6ra

We have also uploaded the MS Excel workbook developed to calculate the loading terms, ***Sample event loads for AOC group,*** which may be of interest to Don Clabaugh and Todd Leeds and others in their efforts to validate our loading estimates.

If you have any questions or comments contact us anytime.

Regards,

John

John Meyer, P.Eng.
Vice President, Development

MAX.TSX / MDRPF.OTCQX
405 South 8th Street, Suite 201
Boise, Idaho 83702

T: 208.901.3063
M: 208.608.3543
E: meyer@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 4/10/2020 8:23:39 PM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]; Gene Bosley [bosley@midasgoldinc.com]; Austin Zinsser [zinsser@midasgoldinc.com]; Andy Koulermos [akoulermos@formationenv.com]; Bradley Marten [bmarten@martenlaw.com]
Subject: EFSRSF load reduction calculation

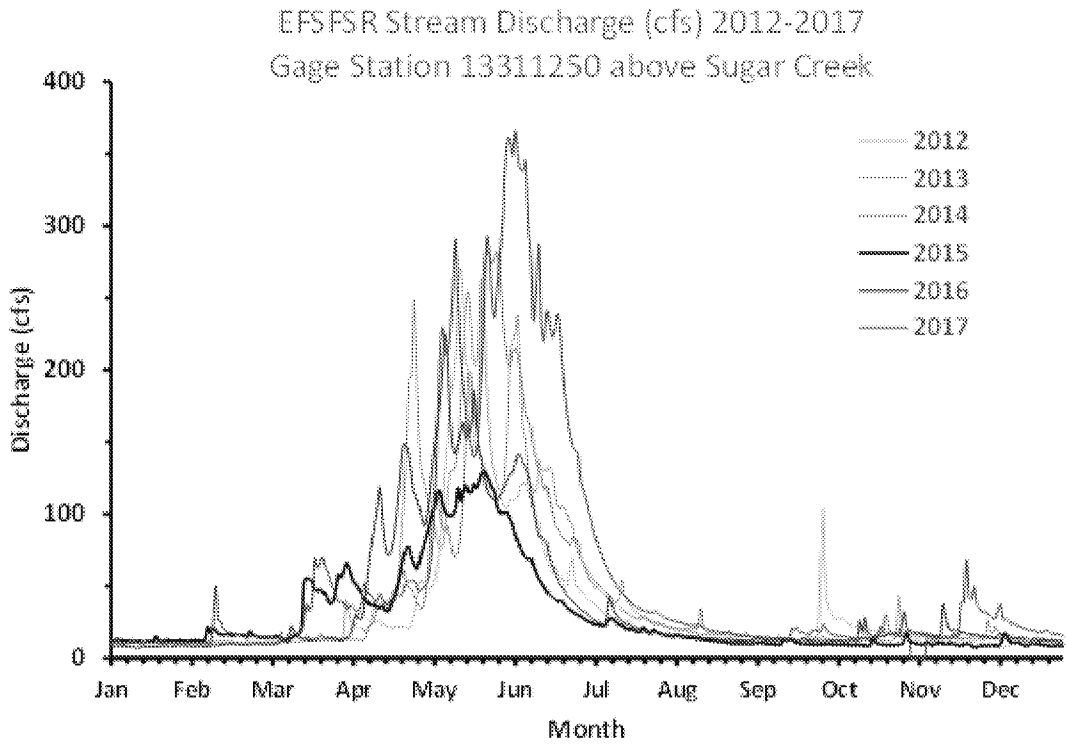
Helen,
We are just putting the finishing touches on a revised Early Actions table. I plan to send it to you by the end of day today.
We thought it would be useful to provide a response to Don's question regarding treating the EFSFSR pit lake. Gene Bosley developed a response, and it is provided below.
Feel free to distribute this to Don and the other Stibnite Mine AOC Participants.
If you have any questions let me know.
Regards,
John

Don,

Regarding your question on treating ~20 gpm from the pit lake, we did a quick back of the envelope load calculation for the potential load reduction, based on our surface water quality baseline program measured flow and concentration at YP-SR-6 (sampling point and SRK SWWC model node, just upstream of the lake). The lowest measured flow from the water sampling program was 8.0 cfs, on 2/4/2016, which had 0.59 kg/day of total arsenic. By coincidence this flow happens to be the 95% exceedance flow during the Chinook salmon/bull trout migration window established for tunnel fishway design. 100% removal of the load from 20 gpm of this flow equates to about 0.56% of the total load. Removal percentages are of course lower over the rest of the sampled flow range. On the highest-load day, removal was only 0.03%. Below is a summary table, spanning YP-SR-6 data from 2012 through 2017.

Statistic (N=42)	Flow, cfs	Total As load, kg/day	As Removal, by treating 20 gpm
Minimum	8.00	0.59	0.02%
Maximum	215.96	16.40	0.56%
Average	50.84	3.37	0.22%
Median	19.23	1.70	0.23%

To provide an idea of flow seasonality, below is a figure we developed a couple years ago using the USGS gage data from the EFSFSR just above Sugar Creek and below Yellow Pine pit. It's a cleaner presentation than what you'll get directly from NWIS, but is the same data they have:



Most of the salmon and the larger bull trout tend to arrive in July and August, when flows are still falling from spring high above 100 cfs, dropping to between 10 and 15 cfs towards the end of the migration period. 1Q10 and 7Q10 for this gage are 5.3 and 5.9 cfs, respectively, but flow approaching those values isn't seen until late fall or winter. We see salmon occasionally in the EFSFSR below the lake, and in the lake, but generally these appear to be strays from Sugar Creek that later spawn there. Due to gradient and substrate size, there isn't much spawning habitat in the EFSFSR itself, from Sugar Creek confluence up to the box culvert just below Meadow Creek. Even post-project, we're expecting this to be principally a migration corridor to access spawning habitat in Meadow Creek and the EFSFR above Meadow Creek, though of course we'll create some pockets of spawning throughout. Current salmon spawning on site is mostly planted fish when surplus fish are available from the South Fork hatchery (2 out of 3 years at most, lately none) in lower Meadow Creek.

Gene Bosley, P.E.
Senior Civil Engineer

MIDAS GOLD

MAX.TSX / MDRPF.OTCQX
405 South 8th Street, Suite 201
Boise, Idaho 83702

T: 208.901.3097
M: 385.444.6912
E: bosley@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 3/31/2020 2:13:47 AM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: Re: Stibnite - additional considerations for CERCLA settlement discussions
Attachments: ATT00001.txt; 2020-03-30 Stibnite Mine Legacy Areas Proposed Early Actions.xlsx; Table_Response_Figure1_20200330.pdf

Helen,

We have reviewed the table you provided on March 17. We converted the Adobe file into an MS Excel file, and it is included as Columns A through I in the attached file. We have included some minor proposed edits to your table, and they are shown in red text.

From your table, we have attempted to provide a roadmap of commitments to early action that we think are feasible and cost-effective. To develop this roadmap, we compiled some summary-level surface water quality and flow information, area history, technical considerations and recommendations for each area of historical mining impacts, and that information is provided adjacent to your table in columns K through Y. To complement the table, we have attached a figure that we hope you find useful, that illustrates the historical mine features referenced in the table.

We will post these files to the SharePoint site tomorrow, but wanted to get the information to you first. We can distribute the files to the rest of the AOC Participants via SharePoint, or you can distribute if you prefer. Just let me know.

Once you and your team have had a chance to review this information, we would like to take you up on your offer to review the table in detail via video conference at your first available opportunity. We can host the video conference.

As with my previous early action proposal to you in late January, I am advised by our lawyers that while this document is intended to be distributed to the AOC Participant Group, nothing presented in the action or accompanying narrative constitutes a concession by Midas Gold that it is a potentially responsible party ("PRP") under CERCLA. We are attempting to work through technical issues on potential actions on Site and, fortunately, we will leave the liability discussions to our legal counsel.

Contact me anytime.

Regards,

John

John Meyer, P.Eng.
Vice President, Development

MAX.TSX / MDRPF.OTCQX
405 South 8th Street, Suite 201
Boise, Idaho 83702

T: 208.901.3063
M: 208.608.3543
E: meyer@midasgoldinc.com

www.facebook.com/midasgoldidaho
@MidasIdaho
W www.midasgoldidaho.com

The information contained in this e-mail is intended only for the individual or entity to whom it is addressed. Its contents (including any attachments) are confidential and may contain privileged information. If you are not an intended recipient you must not use, disclose, disseminate, copy or print its contents. If you receive this e-mail in error, please notify the sender by reply e-mail and delete and destroy this message.

From: Helen Bottcher <Bottcher.Helen@epa.gov>
Date: Tuesday, March 17, 2020 at 5:15 PM
To: John Meyer <JMeyer@midasgoldcorp.com>
Cc: Albert Crawshaw <Albert.Crawshaw@deq.idaho.gov>, "ally_turner@fws.gov" <ally_turner@fws.gov>, Charles Clabaugh <clabaugh.charles@epa.gov>, "Derek Young (derek.young@deq.idaho.gov)" <derek.young@deq.idaho.gov>, "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>, "Fremerman, Gary - OGC, Washington, DC" <gary.fremerman@usda.gov>, "Jeremy Moore (jeremy_n_moore@fws.gov)" <jeremy_n_moore@fws.gov>, Jill Grant <jgrant@jillgrantlaw.com>, "Zamba, Kathy -FS" <kathy.zamba@usda.gov>, "kwright@sbtribes.com" <kwright@sbtribes.com>, "Lisa O'Hara (lisa.ohara@deq.idaho.gov)" <lisa.ohara@deq.idaho.gov>, "Maley, Timothy" <maley.timothy@epa.gov>, "McGrath, Patricia" <mcgrath.patricia@epa.gov>, "Nathalie Doherty (Nathalie.Doherty@sol.doi.gov)" <Nathalie.Doherty@sol.doi.gov>, Susan Hanson <susanthanson9@icloud.com>, "Leeds, Todd - FS" <todd.leeds@usda.gov>
Subject: Stibnite - additional considerations for CERCLA settlement discussions

Hi, John.

I am attaching a table listing areas of existing contamination that EPA and our government team partners have developed. We would like to focus our settlement discussions on addressing ongoing sources of contamination, rather than attempting to design an RI/FS over the life of the mine, because of the complexity of integrating an RI/FS with an active mine, and the financial uncertainty a long-term RI/FS would cause for Midas.

We want this to work for Midas, so we chose early actions that would not interfere with mining and in some cases would get a jump start on actions described in the PRO. This proposal would not result in permanent solutions for all the source areas of concern.

Our proposal also recognizes the extensive research that Midas has completed in order to develop the mine permit. This information, viewed through a CERCLA lens, should allow Midas to develop a site characterization and data gaps report, from which CERCLA workplans for RD/RA or area-specific removal actions could be developed in the future.

The basic technical elements of our new proposal for settlement are:

- Site Characterization and Data Gaps Report (site-wide)
    - Analyze and present available data on the site's physical features as well as contaminant source areas and contaminant fate and transport
    - Identify and describe data gaps that would need to be filled in a potential future site-wide remedial investigation
    - Provide all data available to Midas in electronic format (databased and GIS files, not just PDF files)
- No requirement in this agreement to conduct an RI/FS. Recognizing that a long-term RI/FS would create financial uncertainty for Midas for a long period of time, the negotiating parties are proposing to focus, instead, on concrete early actions that can be performed in a finite amount of time.
- Early actions:
    - Collect data and conduct evaluations necessary to develop designs for early actions
    - Complete designs for early actions
    - Implement early actions
    - Monitor effectiveness of early actions and implement any needed repairs

See the attached table for our full list of proposed early actions. This list includes the three early actions suggested by Midas in your January 23, 2020 memorandum. It also includes recommended studies and actions to address, or partially address, many of the other significant sources of metals to the EFSFSR. As stated above, we believe some of the work in the table aligns nicely with work that Midas has already proposed in the PRO. We also believe this proposal is consistent with Midas' public statements that Midas will clean up legacy contamination and that a majority of the cleanup will happen early in the life of the project.

Note that the Nez Perce Tribe has not yet had the opportunity to provide its input on the proposal. The Tribe expects to provide input to EPA by March 20th. The Tribe's input is important to the parties and may result in a modified approach.

There's a lot here to digest. I'd be happy to answer your immediate questions. EPA and the negotiating parties are ready to discuss the list of actions with you once you've had a chance to review it. I'm assuming we'll want to meet remotely, so I'll investigate VTC capabilities at EPA.

Regards,

Helen Bottcher | U.S. Environmental Protection Agency, Region 10
1200 Sixth Ave, Suite 155 (12-D12-1) | Seattle, WA 98101 | 206.553.6069 | bottcher.helen@epa.gov

Warning: This email originated externally. **DO NOT CLICK** links if the sender is unknown.

Location	Type	Feature	Relative Arsenic Load	Status under PRO Mining Permit	Year Modified (if mining occurs per PRO)	Land Status	Early Action Candidate Site Work Descriptions	Regulatory Mechanism	Stibnite Early Action ID	Historical Area Name(s)	MGII Sample Site ID	WQ Analyses (#)	Flow Measurements (#)	Estimated Total Arsenic Load, Concentration, & Flow in Surface Water: Average Annual Load as % of total in EFSFSR below Sugar Creek	Median Concentration (µg/L)	Median Flow Rate (gpm)	Area History (*primary source of information*)	Technical Considerations	Midas Gold Recommendations	Timing to Complete Interim Action	Timing to Complete Long-term Action	Timing to Complete Action (not including studies)	Acronyms and Symbols
Early Action Sites Suggested by Midas (Year 1)																							
Near EFSRFSR & Sugar Ck confluence	Waste (divert sfc water)	Bradley Dump	2	Partially removed by PRO	2-10	Mostly Unpatented	Divert Hennessy Creek around Bradley Dump (Midas, 2020).	CERCLA TCRA	SEA-01	Bradley Northwest Dump, Bradley West Upper Dump, Bradley West Middle Dump, Bradley West Lower Dump, Placer Plant Spoils Dump	YP-SR-2 YP-SR-4	90	42	36	NA	NA	- The NW BMC rock dump, generally located north of the historical BMC open pit mine and current pit lake, is the largest waste rock repository from the 1920s - 50s mining period. The dump initially developed slowly from small scale underground exploration and development activity by private interests and USBM/USGS, then grew more rapidly during WWII era mining of the YP pit after USBM discovered large deposits of antimony (1939) and tungsten (1941) through the federal strategic minerals program. - In early 1940s-50s a placer plant was built on the dump. The placer plant was built to recover tungsten from the Meadow Creek Mine tailings that had been deposited in the EFSFSR floodplain prior to installation of the tungsten flotation circuit. - In late 1980s-early 1990s Hecla Mining Co. used dumps for waste disposal, contractor staging, fuel and equipment storage, and a crushing/conveyor site during mining Homestake pit. - In 2003, USFS constructed a capped, but unlined, waste repository for former smelter stack, tailings and process pond wastes. - Additional "arsenic hot spots" were identified in 2003 by IDEQ and planned for removal in 2004, but MGII has no record of removal action. - Limited surface sampling during 1998-2000 Woodward-Clyde site investigation, MSE site investigations and subsurface (auger), surface water and monitoring well studies from 2012-present indicate high metal concentrations in dump materials and contact waters. - No past disturbance here by MGII other than monitoring well installation and maintenance of existing storm water management features and exploration drilling. - See SEA-13 for additional history and details on the NW Bradley Dump seeps.	- The existing Hennessy Creek diversion channel upgradient from the NW BMC Dump is a long, leaky diversion ditch that, along much of its length, behaves like an infiltration gallery. - Total estimated dump volumes from pit development are ±2.4 million cu yds excluding Monday Camp and Bailey Tunnel dumps and NE Oxide stockpiles. - Rock samples collected from the dump indicate that the material has elevated levels of arsenic, but documents also report some material in the dumps is glacial till. - Surface and ground water quality data collected downgradient from the NW BMC dump indicates that it is one of the highest anthropogenic sources of total arsenic in the district. - A significant portion of the dump will be removed as part of the proposed Stibnite Gold Project (SGP). - To reduce arsenic load from the dump before mining, MGII considered ways to reduce streamflow losses from the Hennessy Creek diversion. - Consideration was given to incorporating a low-permeability geosynthetic layer in the ditch, but that is a very costly and time consuming installation approach for an interim solution. - Installing pipes was deemed a more rapid, cost effective, and transparent solution to significantly reduce interaction of unimpacted surface water with mineralized rock. - It is feasible to design and execute this Early Action in 2020/21 for immediate benefit.	- Continue to monitor WQ upstream and downstream of NW BMC rock dumps. - Complete the EFSFSR synoptic study to better identify sources of metal loading through this reach. - Proceed with the planned early action. - Consider additional quarterly SW sampling at the outlet of the YP pit to better understand source of metal loading through reach with YP pit and BMC Dumps. - Determine if additional operational actions are required to reduce load from portions of NW BMC rock dumps not already slated for removal as part of SGP.	Post-AOC/Pre-Permit	Middle Operations	Interim: Post-AOC/Pre-Permit Long-term: Middle Operations	As - Arsenic Ag - Silver Au - Gold BMC - Bradley Mining Company BO - Biological Opinion CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act CN - Cyanide DMEA - Defense Minerals Exploration Administration EE/CA - Engineering Evaluation / Cost Analysis EFSFSR - East Fork of the South Fork of the Salmon River HF - Hangar Flats IDEQ - Idaho Department Environmental Quality IDL - Idaho Department of Lands IDWR - Idaho Department of Water Resources GLO - General Land Office MGII - Midas Gold Idaho, Inc. MSE - Millennium Science and Engineering, Inc. OSC - On-Scene Coordinator Sb - Antimony SGP - Stibnite Gold Project SMI - Stibnite Mines Inc. SODA - Spent Ore Disposal Area SRB - Sulfate Reducing Bacteria TCLP - Toxic Characteristic Leaching Procedure TCRA - Time Critical Removal Action USBM - U.S. Bureau of Mines USFS - U.S. Forest Service USGS - U.S Geological Survey WE - West End WQ - Water Quality YP - Yellow Pine ZVI - Zero Valent Iron
Meadow Creek above EFSFSR	Waste (divert sfc water)	BMC Meadow Creek Mill+Smelter Site	5	Removed by PRO	2-10	Patented	Divert upgradient water around mineralized backfill materials (Midas, 2020).	CERCLA TCRA	SEA-02	Mill & Smelter, Original Bradley Tailings Ponds	YP-T-23A	50	19	0.6	859.5	0.03	- Mill constructed in mid-1920s and operated through 1957 (in 1952 mining ceased in district, but material from other areas was periodically processed in mill). - Smelter built in late 1940s and entire site abandoned by 1958. Most facilities burned in 1980s and residues buried in area west and south of current leach pile. - Hecla constructed a heap leach facility here in 1987-88 which was reclaimed and bond released in 2005. - USFS contractor conducted EE/CA here in 2003 to evaluate options for smelter stack removal and a TCRA was completed for smelter wastes and surrounding soils in 2003. - USFS completed subsequent removal actions of former process ponds and other excavations and backfilling with material from East Fork Meadow Creek ("Blowout Creek") occurred in 2008-2010 including modifications to the Hecla heap water management system. - No past disturbance here by MGII other than monitoring well installation and maintenance of existing storm water management features and exploration drilling. - See SEA-5 for additional Meadow Creek Mine and Hecla heap leach facilities history.	- Surface water from the unimpacted upstream catchment flows over and also infiltrates the former BMC mill and smelter area footprint. - Portions of the smelter and old mill that were accessible and not buried were partially reclaimed, including backfill of previous surface water features. - Remaining smelter debris may require special handling (hazmat) during removal. - While this entire area falls within the future Hangar Flats (HF) pit and this surface water interaction will be fully addressed during mining operations, diverting the upstream flows around the former BMC mill and smelter area was deemed a simple, high-value, interim improvement. - This proposed Early Action uses a combination of pipes and low-permeability ditch lining to reduce the volume of upgradient surface water contacting the former Bradley Mill and Smelter area footprint. - This is a straightforward interim solution that is feasible to undertake in 2020/21 for immediate benefit. - High natural background levels that exceed WQ standards are present in the unimpacted streams above the former mill and smelter area.	- Continue to monitor WQ at existing monitoring sites. - Proceed as planned with recommended Early Action. - Potential hazardous materials buried in the former mill and smelter complex may require future characterization.	Post-AOC/Pre-Permit	Late Operations	Interim: Post-AOC/Pre-Permit Long-term: Late Operations	
EFSFSR above Fiddle Creek	Waste (divert sfc water)	SW flow from DMEA waste rock pile	13	N/A	2-10	Unpatented	Divert unnamed stream around DMEA waste rock pile (Midas, 2020).	CERCLA TCRA	SEA-03	DMEA Portal, DMEA Dump	YP-T-17	50	34	1.8	210	0.016	- Original surface prospecting in the area occurred in the 1930s by Bradley interests but there was insufficient work to justify patenting of the lode claims here. - The DMEA exploration adit was driven during the 1952 DMEA strategic minerals program and was abandoned by 1956. - Development work included excavation of approximately 4,900 feet of cross cuts, drifts and several short raises, drilling of 27 underground holes totalling 13,488 feet, construction of a compressor station, mine dry and a dump. - Woodward-Clyde in late 1990s and later MSE in 2010 sampled the adjacent stream and adit seep and MGII has subsequently collected surface water quality samples at the portal seep and adjacent stream locations since 2012 and these data indicate high As values and other metals are present in water and surficial materials. - Limited environmental sampling has been conducted here by state and federal agencies. - MGII has conducted no ground disturbing activity on the site.	- The rock dump engulfs an unnamed creek, and the creek flows through the rock dump. - The dump includes approximately 24,000 tons of sulfide-bearing rock. - The adit portal is collared in bedrock, but is collapsed and a small seep is present at the toe of the collapsed portal and dissipates into the dump. - An old road bed leads to the site from the northeast and crosses the dump and creek to the south. - The dump and adit are on USFS managed land, and are outside the footprint of the Stibnite Gold Project. - To reduce arsenic load from the dump, MGII considered ways to reduce interaction between unimpacted surface water and mineralized rock. Consideration was given to constructing a low-permeability diversion ditch, but installing pipes was deemed a more rapid, cost effective, and transparent solution. - This Early Action is possible to design and execute in 2020/21 for immediate benefit. - High natural background arsenic levels that exceed WQ standards are present in the unimpacted area above DMEA dump and rocks and soils data indicate the area surrounding the portal is likely at least locally mineralized and site specific water quality criteria may be appropriate to reflect natural conditions.	- Continue to monitor WQ in unnamed stream upgradient from DMEA dump and adit. - Proceed as planned with recommended Early Action. - Work with agencies to determine appropriate permanent mitigation strategy for rock dump and adit seep.	Post-AOC/Pre-Permit	TBD	Interim: Post-AOC/Pre-Permit Long-term: TBD	
Candidate Studies to Support Future Control of Adit Discharge (Year 1)																							
~~EFSFSR below Sugar Creek~~ Sugar Creek above EFSFSR	Adit Discharge	SW flow from Bailey Tunnel Adit Seep	8	Minimized by PRO dewatering	3	Patented	For bulkhead basis of design, monitor site weather station continuously, and collect continuous flow and water quality data. Use data to design collection system (sumps or interceptor trenches with transfer pumps to holding tanks for baseflow (minimum to average flowrates)) and to evaluate treatment options (haul to treatment plant, sulfate bioreactor or vertical wetlands). Evaluate adit for access and scope (Year 2) geotechnical study (Best Practices for Preventing Sudden, Uncontrolled Fluid Mining Waste Releases, EPA, 2017, OLEM 9200.3-118).		SEA-04	Bailey Tunnel, Bailey Tunnel dump	YP-AS-2	54	47	0.9	157	29	- The Bailey Tunnel was driven to facilitate diversion of EFSFSR around the open pit in 1943 as the pit began to reach the upper levels of the underground tungsten mining operations. Prior to that point and since 1938, the EFSFSR had been diverted into a ditch on the east side of the pit. - The tunnel was also used as an ore pass during low flow periods to facilitate more rapid recovery of tungsten ore during WWII operations. Materials from the tunnel excavation were placed downstream of the lower portal in the floodplain of Sugar Creek and some of the ore materials hauled through tunnel were likely placed or spilled in the dumps near the lower portal. - MGII have not conducted any ground disturbing activities related to the Bailey tunnel.	- The Bailey tunnel is physically and hydraulically connected to the existing YP open pit (and pit lake) through the legacy underground workings. - The tunnel passes through mineralization in several places along its length and also cuts across the trace of the Meadow Creek Fault Zone and several other major faults. - Sediment aggradation in the YP pit lake likely reduced tunnel outflows since the 2000s. - Historical reports from 1940s indicate the tunnel was heavily timbered (continuously from the lower portal over 1,200 feet to the south, with numerous other intervals lagged towards the upper inlet portal) and the lagged portions of the tunnel were reported to have collapsed regularly, which has implications for any attempts to reopen for closure. - Seepage into the open pit below the level of the Bailey Tunnel was estimated by Bradley to range from 100-400 gpm with the high flows at peak runoff. - Vehicular access to the tunnel portal will require road re-construction across USFS managed land adjacent to Sugar Creek at the base of a steep slope and below several large dumps. - The majority of the tunnel will be removed during operations as part of mining the YP pit. - Flow from the adit is expected to decrease as the YP pit is dewatered, and will likely cease altogether as mining activities remove the majority of the tunnel. - A hydraulic bulkhead will be installed in the tunnel, from the YP pit side, concurrent to mining reducing inflows, as opposed to on the downstream end, which would result in back-up in the tunnel above. - There are numerous old building remnants, concrete foundations, rails, piping and other materials here that may have cultural implications. - Estimates of the material present on the dumps specifically sourced from the tunnel are difficult due to placement in several adjacent dumps, but estimates suggest at least 10,000 cu yds remain. Water from the lower portal percolates through these materials.	- Continue to monitor tunnel flows and WQ through construction and operations. - Remove tunnel and connected underground workings via open pit mining operations in the Yellow Pine pit. - Install bulkhead in stable ground in tunnel during operations, concurrent to mining and prior to backfill of the YP pit, to eliminate the water source. - Additional geotechnical information will have to be collected during operations to support design and placement of the bulkhead. - Work with agencies to determine if an interim mitigation alternative is feasible.	Construction	Middle Operations	Interim: Construction Long-term: Middle Operations	
Meadow Creek above EFSFSR	Adit Discharge	SW flow from Meadow Creek Mine adit seep	9	N/A The adit and most of the historical Meadow Creek Mine workings will be mined and reclaimed as part of the HF pit.		Patented			SEA-05	Meadow Creek Mine, Meadow Creek Mine dumps	YP-AS-7	30	26	0.8	11,550	0.9	- The Meadow Creek Mine was developed in the 1920s and operated until 1938. - Workings on 6 levels (every 100 feet) with numerous sublevels and stopes and extend beneath valley bottom to south for several hundred feet and over 1500 feet to north into steep hillside. - Mine reopened, dewatered and retimbered with small production tungsten in 1943-44 along with underground drill campaign by USBM, but work abandoned due to collapsed and flooded workings. - Upper portal ('B-level') on steep landslide face and collared within 50 feet of bedrock surface, but now collapsed and covered with landslide debris and appears to be dry. Two lower portals collared at toe of slope in overburden and extended ~150 feet before intersecting bedrock; both now collapsed and buried. - MGII interviews with former Hecla staff noted easternmost portal was blasted shut prior to construction of heap leach facility in 1980s to prevent seepage into heap leach pad. - No ground disturbing activities by MGII related to the Meadow Creek Mine area other than exploration drilling, monitor well installation and BMP maintenance. Exploration holes were completed and sealed according to IDWR/IDEQ/IDL recommendations and best practices and consistent with permit requirements.	- The Meadow Creek Mine workings extend over 200 feet vertically above the adit and 300 feet below. - The tunnel portal is collared in sand, gravel and boulder-rich outwash and bedrock is ~150 feet into the hillside. - Dumps from these excavations are now located along the toe of the slope and contain materials that may be mineralized. - The adit is located just uphill from the reclaimed Hecla Heap Leach pad and is readily accessible by vehicles. - MGII drill pads were established and utilized south and north of the area and periodic maintenance of existing stormwater management features has been undertaken. - The Meadow Creek adit and much of the underground workings that supply water to it will be dewatered and mined-out as part of the HF pit. - Bulkheading the adit may make sense during mining but pit area dewatering may eliminate flow anyway; we will know more at that time.	- Continue to monitor adit flows and WQ. - Work with agencies to determine if an interim mitigation alternative is feasible. - During construction and operations, collect, consume or treat adit flows. - The Meadow Creek adit and much of the underground workings that supply water to it will be dewatered and mined-out as part of the HF pit. - Install one or more bulkheads (if required) during mining operations. - Additional geotechnical data will be required during operations to support bulkhead design and placement once workings are exposed in pit walls.	Construction	Late Operations	Interim: Construction Long-term: Late Operations	
EFSFSR above Yellow Pine Pit	Adit Discharge	SW flow from Cinnabar Tunnel adit seep	10	N/A		Unpatented		N/A - study informing NTCRA EE/CA	SEA-06	Cinnabar Tunnel	YP-AS-4	52	44	0.3	112	27	- Cinnabar Tunnel was driven in early 1930s to connect to the Hermes Mine farther east, but was abandoned short of the Hermes workings. - Available historical maps suggest the tunnel cut mineralized material in bedrock in several areas. - The tunnel was driven approximately 1,600 feet. - A small heavily overgrown area with wetlands are present where the former tunnel dumps may have been placed. - A subdivision of the town of Stibnite was located in the flat area east of the Cinnabar tunnel portal and the bedrock "island" and cultural features may have implications for excavation activity here. - In 1980s or early 1990s a former septic drain field was located to the east of the "bedrock island" in the area of the former subdivision after former drain field near man camps failed to function correctly; this drain field was never decommissioned. - MGII has not conducted any ground disturbing activities in the area associated with the Cinnabar tunnel.	- The adit portal collars in overburden, passes through bedrock and goes back into overburden (where it appears to likely have collapsed given surface expression) and then re-enters bedrock. - Collapse area (in overburden east of a large 'rouche montanee') is a wetland associated with Midnight Creek. - Approximately 4,500 cu yds were excavated from the tunnel, but the dump boundaries are difficult to define due to location and erosion by EFSFSR. - Arsenic concentration in Cinnabar Tunnel is very similar to concentration in overlying Midnight Creek, suggesting infiltration from Midnight Creek as the main source of seepage and metal content rather than in-situ mineralization - High natural background levels that exceed WQ standards are present in the unimpacted area above the tunnel in Midnight Creek and mineralization was noted in the tunnel historically and in surrounding surface exposures suggesting site specific water criteria may be appropriate for the portal and Midnight Creek to better reflect natural conditions. - The Cinnabar tunnel portal is on USFS managed land and is outside the footprint of the proposed Stibnite Gold Project. - The tunnel portal was historically accessed over a trestle from the Monday Camp, but current access is difficult and would require major earth moving work to establish equipment access. - To direct Midnight Creek flows to the future EFSFSR tunnel during mining operations, the creek will be diverted and we expect that diversion will reduce flows in the Cinnabar tunnel.	- Continue to monitor Cinnabar Tunnel and Midnight Creek flows and WQ. - Complete synoptic and/or dye tracer study to establish if Midnight Creek is source of water in Cinnabar Tunnel. - Construct Midnight Creek surface water diversion system during initial mine construction, concurrent to driving the EFSFSR tunnel. - Compare pre- and post-diversion flow and WQ data to understand relationship between Midnight Creek and Cinnabar tunnel. - Work with agencies to establish an appropriate mitigation strategy, if required.	Construction	TBD	Interim: Construction Long-term: TBD	
EFSFSR above Fiddle Creek	Adit Discharge	SW flow from DMEA Adit seep	18	N/A		Unpatented			SEA-07	DMEA Portal	YP-AS-6	48	43	0.05	230	1.8	- See SEA-3 for applicable DMEA area history.	- The DMEA adit is collared in bedrock and a hydraulic bulkhead may be technically feasible; however, USBM underground mapping indicate faults project to surface nearby, so a bulkhead may not be successful. - High natural background levels that exceed WQ standards are present in the unimpacted stream above the dump and portal and site specific water quality criteria may be appropriate to better reflect natural conditions. - No past or planned disturbance here by MGII other than the Early Action. - The DMEA tunnel portal and dump are on USFS managed land and outside the footprint of the proposed Stibnite Gold Project. -Vehicular access would require re-opening of existing roads on USFS managed land.	- Continue to monitor adit flows and WQ. - Implement piped diversion (MGII proposed Early Action) of unnamed creek around DMEA rock dump. - Assess effectiveness of Early Action stream diversion by monitoring WQ and flow. - Work with agencies to establish permanent solutions for DMEA rock dump and adit seep concurrently.	Post-AOC/Pre-Permit	TBD	Interim: Post-AOC/Pre-Permit Long-term: TBD	

~~EFSFSR below~~ Sugar Creek above West End Creek~~EFSFSR~~	Adit Discharge	SW flow from Bonanza Adit Seep	19	N/A		Unpatented			SEA-08	Bonanza area	YP-AS-1	46	26	0.005	81	0.9	- Early prospecting, but no development occurred in this area in the 1920s. - Excavation of 4 adits, several dozer trenches and at least 4 shallow drill holes were completed here during Strategic Minerals Investigations Project 101 in 1939 and 1940 (and possibly later) by the USBM. The stripped rock and soils materials were placed downslope adjacent to and possibly into the floodplain of Sugar Creek. - Exploration by Bradley in 1943 (drilling), Exxon in ±1960s (drilling) and Superior Oil in 1980s (surface sampling) all took place in this area. - Reportedly several hundred tons of antimony ore were removed from this site in 1963 by Oberbillig interests and processed at the Antimony Camp flotation mill on Johnson Creek. - MGII has not conducted any ground disturbing activities in this area, and has only conducted rock chip sampling and surface water sampling of a seep found within the open cut, which may be from an old drill hole, former adit or from natural fracturing and seepage. - Adit portals or traces are no longer evident and may have been removed in 1963 excavations.	- The Bonanza area is on USFS managed land and is outside the footprint of the proposed SGP. - The source of seepage from the area is likely a combination of adits, drill holes and excavations. - The adits are no longer intact, but excavated material appears to have been pushed downslope and into the floodplain of Sugar Creek. Approximately 9,000 cu yds of rock dump material may be present. - Mitigation activities may require reopening a closed road adjacent to Sugar Creek and would conflict with BO and USFS Road Management Plan. - Past sampling here by USBM and industry workers suggest significant mineralization (hundreds of feet averaging > 0.5% antimony, highly elevated mercury and arsenic) are present in the open cut and surrounding area and exposed in the creek bottom in outcrops that suggest water quality here may be naturally elevated in metals including antimony, arsenic and mercury over a much larger area than the seeps. - MGII soil surveys over the area above and around the former adit indicate a broad area (> 1 mile long and 2/3 mile wide) with highly anomalous As, Hg, and Sb soils in areas completely undisturbed and unimpacted by mining which has implications for local sourcing of backfill, topsoil and for any infiltration galleries. Stream sediment samples collected in unimpacted drainages in this same area also have highly elevated metal contents indicative of naturally high metal contents and may require site specific WQ criteria suitable for such highly mineralized areas.	- Continue to monitor surface water flows and WQ. - During 2020-2021 conduct evaluation of sources and fates of water and loads from the site. - Work with agencies to establish and implement an appropriate mitigation strategy, if required.	TBD	TBD	Interim: TBD Long-term: TBD	
EFSFSR above Yellow Pine Pit	Adit Discharge	SW flow from Monday Tunnel adit seep	20	N/A		Unpatented			SEA-09	Monday Tunnel, Monday Tunnel dumps	YP-AS-3	52	42	0.004	40	0.9	- Monday Tunnel was driven in late 1920s and early 1930s and abandoned by 1939. Waste materials from the excavations were deposited outside the portal within the floodplain of the EFSFSR. - Bedrock was not reached until 500 feet from the portal and then the tunnel was driven along the bedrock surface for an additional several hundred feet before hitting and staying in competent bedrock. At the point bedrock was reached in the tunnel, the distance to surface in overburden was over 200 feet. - The tunnel was reportedly timbered over most of its length due to poor ground conditions and was in fault gouge for over 3,500 feet with the gouge zone over 200 feet wide at the crosscut. - It was partially reopened by USBM in 1942-43 when it was reported that the first 2,000 feet of the tunnel was caved and a second drift was started but later abandoned sometime after 1944. - The tunnel portal is now collapsed and a small seep is present that dissipates into the old dumps, but may be unrelated to the portal given other mine related features surrounding the former opening. - MGII has completed a monitoring well and several exploration holes in this area, but no significant ground disturbing activity.	- The tunnel portal is collared in sand, gravel and boulder-rich outwash and bedrock is several hundred feet down from the ground surface and over 500 feet into the hillside. - The tunnel portal is completely collapsed. - Much of the tunnel was driven directly in the Meadow Creek Fault Zone and was timbered nearly 100% throughout due to soft and unstable ground conditions within the fault. - Adit flow infiltrates and does not contribute surface water to EFSFSR. - Vehicular access to the Monday Camp area would require re-opening of existing roads across USFS and private land and potential wetlands disturbance. - Given historical land use there, Monday Camp may have legacy materials requiring special handling. - Several hundred feet of the Monday tunnel will be removed during mining of the YP pit. - The tunnel will be bulkheaded before the pit is backfilled. - Past operators reported significant Sb subsurface samples from the underground workings and drill data from exploration in surrounding areas shows highly anomalous As, Sb and lessor Hg.	- Continue to monitor Monday Tunnel flows and WQ. - Characterization of legacy materials in the Monday camp area should be conducted prior to mining. - Several hundred feet of the Monday tunnel will be removed during mining of the YP pit as part of the SGP currently being permitted. - Additional geotechnical information will be collected during operations to support design and placement of a bulkhead. - The bulkhead, if deemed appropriate, would be installed before the pit is backfilled.	Middle Operations	Middle Operations	Interim: Middle Operations Long-term: Middle Operations	
Candidate Studies to Support Future In-Water Work (Year 1)																							
EFSFSR above Sugar Creek	Surface Water	SW flow from pond downgradient of Yellow Pine Pit	3	Mitigated during dewatering	3	Patented	Evaluate flow and water quality into and out of the pond.	N/A - study informing CERCLA TCRA	SEA-10	Bradley West Upper Dump, Bradley West Middle Dump, Bradley West Lower Dump	YP-M-9	1	No	2.0	582	NA	- This area is part of the Yellow Pine pit that opened in 1938 and operated through 1952. - Some of this area may have been source of former alluvial deposits that contained tailings from the 1930s Meadow Creek Mill that were later placer mined sometime after 1946 and processed on the NW BMC dump. - Several companies have conducted exploration drilling here during the 1970s through 1990s and drilled into highly mineralized rock. - Hecla utilized part of area for logistics and staging during late 1980s-early 1990s mining of the nearby Homestake pit. - No ground disturbance here by MGII. Some water monitoring well and exploration drilling adjacent to pond and former open pit.	- The wet area (ephemeral pond) north of the pit lake outlet and east of the Bradley rock dump is believed to result from snowmelt and rainfall; - Data concerning inflows and outflows of seepage and surface water from this pond is limited. - Seeps or springs reporting to this pond have not been identified, but seepage from legacy drill holes in the area is known. - This pond may be acting as an evaporative sink; we do not have evidence that it discharges to the EFSFSR. - This area is readily accessible by vehicles. - This area would be excavated during mining of the YP pit as a part of the SGP.	- Additional data collection regarding inflows and outflows, or dye trace tests, are recommended to provide additional information on potential hydraulic connections to EFSFSR. - Perform EFSFSR synoptic study to elucidate sources of metal loading through the NW BMC rock dump reach. - Consider additional WQ sampling of flows reporting into wet area to establish source of load (could be evapo-concentrating during dry months). - Work with agencies to establish and implement an appropriate interim mitigation strategy, if required.	TBD	Early Operations	Interim: TBD Long-term: Early Operations	
Meadow Creek above EFSFSR	Surface Water	SW flow from Keyway Marsh Outlet	7	N/A The marsh will be removed early in the mine life following the removal of the spent ore and Bradley tailings.		Mixed, mostly Unpatented.	Evaluate flow and water quality into and out of the marsh. Collect data necessary to characterize substrate, vegetation, groundwater exchange, hydraulic residence time and loading rate, evapotranspiration and water balance within the marsh. Evaluate whether marsh can be enhanced to treat effluent to target concentrations.	N/A - study informing CERCLA TCRA	SEA-11	Keyway Dam, Lower Meadow Creek tailings contaminated fluvial gravels, Original Bradley tailings ponds, Mill & Smelter	YP-S-10	50	38	7	88	48	- The keyway dam was developed during the early 1980s construction of the Spent Ore Disposal Area (SODA) to retain spent ore and tailings in upper Meadow Creek. - The keyway marsh is immediately downgradient from the keyway dam on lands previously part of the former (1930s-1950s) Bradley mill and smelter facilities and tailings disposal site that operated as a critical mineral facility throughout WWII and the Korean War. - A portion of area was excavated and later backfilled by contractors for Mobil in the upper Meadow Creek diversion; by contractors for URS in the lower Meadow Creek removal action; and by USFS contractors in the 2009-2010 smelter stack removal action. - No ground disturbance here by MGII.	- Previous incomplete studies by Stoller for SMI, and work by SMI under a cancelled AOC are similar to the proposed keyway marsh investigation work. - There are drill holes and piezometers here from Woodward-Clyde and MSE EE/CA among others that should allow for description of substrate material, etc. However, portion of area was excavated and later backfilled in several actions through 2010, by USFS contractors, and there is no geochemical data describing the backfill material, though agencies may have records. - The marsh will be removed early in the mine life as part of the SGP following the removal of the spent ore and Bradley tailings.	- Continue to monitor WQ from the keyway dam seeps and the keyway marsh. - Consider completing a tracer dye test to obtain accurate flow paths and determine hydraulic connectivity of keyway marsh seeps to Meadow Creek surface waters and/or infiltration through SODA. - Check agency records and past reports for data before instituting a subsurface investigation or materials testing. - Investigate feasibility of interim mitigation measures to reduce seepage, such as partial SODA raincoat or re-grading. - Review vegetation characterization completed during Woodward-Clyde site characterization studies and HDR wetlands mapping data.	Construction	Early Operations	Interim: Construction Long-term: Early Operations	
~~EFSFSR below Sugar Creek~~ Sugar Creek above EFSFSR	Waste Rock	Seepage from Lower West End DRSF	6	Minimized by PRO dewatering	3	Mixed	To support in-water work planning and engineering requirements: map wetlands and Ordinary High Water Mark around waste rock piles and stream; prepare vicinity map, plan view and cross-section view of waste rock removal project; prepare plans and specifications for protection of fish life; prepare wetlands mitigation table where necessary.	N/A - study informing CERCLA TCRA	SEA-12	Lower West End Dump 1, Lower West End Dump2, Northwest Pit backfill, West End "D" dump	YP-T-6	90	0	1.9	81	179	- Originally, West End Creek was routed through a French drain and culverts to bypass the upper (early 1980s) and lower dumps (early 1990s) during mining operations. - When Midas Gold optioned the property, West End Creek was flowing through the base of both the upper and the lower West End dumps with no flow occurring through the intended diversions. - No ground disturbance here by MGII.	- The network of connections and culverts have become disconnected and disused resulting in the creek running through the dumps at some point prior to MGII involvement. - Significant quantities of waste rock were placed by prior operators and/or agencies on some culverts and drain features, potentially causing damage or blockage. - The SGP will route WE Creek through a series of lined ditches (with low flow piping for temperature control) around the existing dumps, around and through the proposed open pit expansion and would discharge below the toe of the lower existing WE rock dump. - Past operator and MGII data indicate significant elevated As, Sb and lesser Hg in soils, rocks and stream sediments in areas unimpacted by mining activity surrounding the former pit, suggesting site specific water quality may be appropriate to reflect natural conditions.	- Continue to monitor WQ and flow in WE Creek. - Evaluate the integrity of the existing, unused diversion culverts to assess the viability to rehab and re-connect to reduce arsenic loading in WE Creek as an Early Action item. - Install a surface water diversion channel and pipe system routing WE Creek around WE pit, and upper and lower rock dumps during operations.	Construction	Active Closure/Reclamation	Interim: Construction, Long-term: Active Closure/Reclamation	
EFSFSR ~~below~~ above Sugar Creek	Waste Rock	Seepage from BMC NW DRSF …. i.e. the Bradley Dump	12	Partially Removed by PRO	2-10	Patented			SEA-13	Bradley Northwest Dump	YP-SR-2 YP-SR-4	90	42	36	NA	NA	- See SEA-01 for additional NW Bradley dump history. - Hennessy Creek was diverted around the YP pit at least as early as WWII during mining in the West Quarry (the portion of the YP open pit west of the EFSFSR) and likely was routed to the Sugar Creek hydroelectric power plant prior to grid power being established in 1943. - At an unknown time (at least prior to 1978), Hennessy Creek was diverted by prior operators, the county road crews and/or agencies around the upstream limit of this dump in an unlined ditch; the ditch is a losing stream reach and water losses likely percolate through the downgradient rock dump. - Wet areas on northwestern benches of the YP pit are at least locally sourced from water percolating through dumps or from water flow through old pipes buried in the fill for various purposes. - No ground disturbance here by MGII other than installation of water monitoring wells and boreholes to characterize dump materials. MGII conducted exploration drilling south of the dumps, adjacent to the pit.	- Monitoring well data indicates significant impacts to groundwater downgradient of the BMC rock dumps adjacent to the EFSFSR. - Groundwater flow through the dumps from the Hennessy Creek diversion, coupled with meteoric infiltration are postulated to displace impacted groundwater out of the dumps and into surface waters. - One of MGII's proposed Early Actions (see above) involves diverting Hennessy Creek in a pipe to reduce ongoing current infiltration through the ditch and subsequently into mineralized material in the dump. - A significant portion of the dump will be removed as part of the proposed SGP. - Hennessy Creek will be permanently re-routed as part of the SGP. - Removal of the northern portion of the dump would disturb the mill and smelter waste repository that is built on top of it by the USFS. MGII understands this repository was capped (GCL and soil) but not lined, and contains debris from removal actions in the BMC mill and smelter area, and possibly other waste. High As levels are expected, and special handling may be required. No detailed as-builts appear to be available.	- Complete recommended Early Action to reduce seepage through the NW BMC rock dumps. - Permanently re-route Hennessy Creek and remove portions of the dump as part of the SGP. - Continue to monitor WQ in Hennessy Creek, BMC rock dump seeps, and EFSFSR. - Additional quarterly SW sampling at the outlet of the YP pit is planned to better understand source of metal loading through reach with YP pit and Bradley Dumps - EFSFSR Synoptic study is proposed to better identify sources of metal loading through this reach. - If test results indicate loading is occurring from Bradley Dumps, and cannot be addressed through Hennessy Creek diversion, then initiate alternatives analysis study including feasibility of removing dumps during mining operations and incorporating area into planned restoration activities.	Post-AOC/Pre-Permit	Middle Operations	Interim: Post-AOC/Pre-Permit Long-term: Middle Operations	
EFSFSR above Fiddle Creek	Waste Rock	CSM-PMC-SM1 Upper Man Camp DRSF	16	N/A		Unpatented			SEA-14	Upper Man camp fill	none	0	0	9.1	NA	NA	- The floodplain backfilling and stream rerouting in this area originally occurred in the 1930s and the site was further backfilled on multiple occasions by past operators and state and federal agencies periodically between the 1980s and early 2000s. - Historical 1930s topography and early 1940s photography indicates the original channel meandered across the area currently backfilled. - The site has been used for a timber mill (1920s-40s), stockpiles (1940s-50s), staff housing (1940s-50s) and as a septic drain field and man camp (1980s-90s). - At least three ponds of unknown origin are visible adjacent to these fill areas on historical photos from the 1940s and include what appear to be former dam remnants. These ponds are downstream of late 1940s-early 1950s smelter worker housing and may be former septic ponds, related to the former saw mill, water capture and/or settling ponds. - MGII field observations suggest flood deposits of coarse sands and gravels (possible sourced from "Blowout Creek") intermixed with fine-grained iron-rich silts and fine-sand materials possible representing former tailings are present in the active floodplain in the area between the two piles and likely elsewhere along this reach. - Post 1997 reclamation operations (after SMI bond forfeiture) by state and federal agencies, included placement of an unknown amount of "spent ore" and other wastes as fill on top of previous fill. Replanting during these activities has had moderate success, but MGII observations indicate loss of fines adjacent to the active channel in some places. - Septic tanks, piping are still evident and Central District Health department noted in interview that this drain field failed and was replaced with another on east side EFSFSR. - There was limited sampling here during the Woodward-Clyde site investigations, but highly elevated arsenic and antimony were noted. - MGII ground geophysical surveys across the area in 2009-10 indicated a likely shallow geophysical anomaly potentially partly due to the large quantity of sulfides present in some of the fill and/or floodplain materials. - No ground disturbance in this area by MGII.	- Total estimated fill in the two piles along the EFSFSR combined is approximately 80,000-100,000 cubic yards. There are clearly smaller piles of fill or disturbed ground on the east side of the EFSFSR, adjacent to these piles, in at least one location that appear to have been ponds. - WQ monitoring at discrete points in the EFSFSR suggest that these historical rock dumps are contributing a diffuse load (via groundwater and surface runoff) to the EFSFSR. - Removal of the mineralized material would involve a large earthmoving operation in the floodplain and require haulage of large amounts of materials to a suitable location elsewhere; it would also require substantial backfill and topsoil to restore wetland habitat.	- Continue to monitor surface water flows and WQ. - Conduct post-peak (and possibly low) flow synoptic along EFSFSR to evaluate dumps as source of loading. - Depending upon results of synoptic, consider further subsurface characterization of material with auger/sonic rig/backhoe. - Depending upon results of synoptic, investigate connections between shallow groundwater and surface water within former channel and adjacent to stream to inform potential early actions. - Work with agencies to establish and implement an appropriate permanent mitigation strategy, if required, such as removal of material from floodplain.	TBD	TBD	Interim: TBD Long-term: TBD	
EFSFSR below Yellow Pine Pit	Waste Rock	Seepage from BMC NE Oxide stockpile #1	17	N/A		Unpatented			SEA-15	NE Oxide Stockpile #1, NE Oxide Stockpile #2	none	0	0	4.7	-		- This area includes 2 oxide rock stockpiles from the YP pit and was originally established by BMC during WWII and Korean War era operations. - Portions of NE Oxide Pile #1 (located on private ground) were excavated by Hecla and the material was placed and leached on their heap leach pad in the late 1980s-early 1990s. Hecla reportedly conducted additional regrading of the pile in the early 1990s. - Hecla did not control NE Oxide Stockpile #2 and it has remained intact since placement. - No ground disturbance in this area by MGII. - See SEA-01 for additional historical information and use of this stockpile.	- NE Oxide Pile #1 (western pile) does not impinge upon Sugar Creek, but Oxide Pile #2 (eastern pile) does. - This site was investigated for seeps during multiple field investigations and none were identified; however, snowmelt likely infiltrates and seeps into GW, which may enter Sugar Creek down gradient. - Eleven alternatives were analyzed in the 2003 MSE EE/CA and three alternatives were recommended, but no further action was implemented. - Area includes significant cultural resources (former Bradley waterworks) and numerous large foundations, cabins and old pipelines that would require major earth moving activity and potentially mitigation to remedy. - Greater than 90% of the NE #1 stockpile is on USFS managed public land, and all of the area is outside of proposed SGP footprint.	- Consider conducting mini-synoptic study in Sugar Creek above and below using conductivity as proxy for input of metals. - If results indicate loading is occurring then initiate alternatives analysis study including feasibility of removing stockpiles during mining operations and incorporating area into planned restoration activities.	TBD	TBD	Interim: TBD Long-term: TBD	
EFSFSR above Fiddle Creek	Seep	SW flow from Garnet pit seep	14	N/A		Unpatented	For vertical wetlands evaluation, monitor site weather station continuously, and install Modified Parshall Flume near ~~adit~~ (there is no adit intact here, just a partially backfilled open pit) and collect flow and water quality data.	N/A - study informing CERCLA TCRA	SEA-16	Garnet Pit, Garnet Pit Backfill	YP-S-3	40	30	0.1	192	8	- Several historical prospects here in 1920s; work included development of a short adit located in the creek bottom in area now encompassed by more recent, pre-MGII open pit. - Bradley explored the area in the 1940s via drilling and developed water wells and water works with a stream diversion to supply water to the EFSFSR area housing subdivisions during this period. Remnants of the water diversions are still present and may have implications for any excavation work from a cultural resources perspective and may require mitigation. - Oberbillig interests reportedly mined and shipped a small quantity of antimony ores from a prospect in the northern fork of Garnet Creek above the open pit in the 1960s and may have constructed or utilized various roads here to do so. - In the 1970s, El Paso Oil and Gas, and later Superior Mining conducted road construction, extensive trenching and drilling here. - SMI opened a small open pit in 1995 under permits from USFS and IDL. The pit was shut down under orders from MSHA after the southeastern highwall began to fail. - The pit was backfilled and reclaimed by SMI between 1996-1997. Anecdotal information from past operators suggests some of the pit backfill may have been material from the West End pit. - At least part of the access road was also backfilled with West End spent ore during 1998 and later reclamation by USFS and IDEQ contractors. - No ground disturbance here by MGII. A helipad water monitoring well drill pad was constructed, but never utilized and did not involve ground disturbance.	- Any action here will require reopening a reclaimed road and major earth moving activity. - There are extensive cultural resources (historical water works) present that may require mitigation. - High natural background levels that exceed WQ standards are present in the unimpacted stream above the backfilled former open pit. - Past operator and MGII data indicate significant elevated As, Sb and lesser Hg in soils, rocks and stream sediments in areas unimpacted by mining activity surrounding the former pit suggesting site specific water quality may be appropriate to reflect natural conditions. - The Garnet pit is on USFS managed land and is outside the footprint of the proposed Stibnite Gold Project.	- Continue to monitor WQ and flow in Garnet Creek drainage. - Work with agencies to establish and implement an appropriate permanent mitigation strategy, if required.	TBD	TBD	Interim: TBD Long-term: TBD	

Seepage from Herla Heap Leach	Seep	Seepage from Herla Heap Leach		Removed by PRO	Herla heap removed during Project construction	Potential			SEA-17	Herla Heap Leach, Mill & Smelter, Original Bradley tailings ponds, Herla Tailings Pile	YP-M-2				41	- See SEA-03 and SEA-05 for additional applicable area history. - Herla's closure of the Herla heap was approved by IDEQ in Jan. 2005, which included authorization for continued discharge of heap effluent to groundwater. - Herla also constructed a diversion ditch above the Heap leach pad draining to the southwest to manage seepage from the toe of the slope, from the old portals, and to capture surface water flow from the hillside and two adjacent ephemeral streams. - The ditch was established to minimize excessive seepage that was present at the base of the heap leach pad near the access road entrance of the county road. - The ditch was designed to route the captured water away from the heap to eliminate the seep by diversion and route water to a small settling pond on the northwest end of the SODA keyway. - This diversion ditch and former another stock area (site of a 2001 TCRA) was backfilled and modified by the USFS during reclamation in 2009-2010. The 2001 TCRA after action report by the USFS OSC noted that not all contaminated materials here were removed and would be removed at a later date. It is unknown whether these materials were removed in the 2009-10 activity.	- Seepage from hillside above Heap Leach flows adjacent to leach pad and terminates at base of hill. - Infiltration through the leach pad reports to an underdrain system and is conveyed through a PVC pipe system to an infiltration gallery at the site of the former ZVI system. - Limited underdrain seepage analyte indicate elevated concentrations of multiple constituents. - The Herla Heap Leach Pile will be removed and material used for construction of the tailings storage facility (TSF) starter dam.	Complete MGB proposed Early Action to divert upgradient surface water, which may reduce or eliminate Herla Heap Leach Seep. - Continue to monitor surface water flows and WQ before and after implementing the Early Action. - During construction of the SGP, remove the Heap Leach Pad and reuse the material in TSF construction, and remove any remaining BMC-era contaminated mill-related materials and appropriately dispose of same. - Work with agencies to develop an appropriate interim mitigation strategy, if required.	Post-AOC/Pre-Permit	Construction	Interim: Post-AOC/Pre-Permit Long-term: Construction	

Candidate Early Action Site Pilot Studies (Year 2)

[Meadow Creek above EFSFSR] [EFSFSR above Sugar Creek	Surface Water	SW flow from pond downgradient of Yellow Pine Pit	3	Mitigated during dewatering	3	Potential	Construct batch treatment plant and intake and conduct pilot test treatment of flow from pond.	Pilot Test for TCRA EE/CA
Meadow Creek above EFSFSR	Surface Water	SW flow from Keyway Marsh Outlet	7	N/A		Mined	Based upon Year 1 evaluations, pilot test marsh enhancements or construct a pilot test of a vertical wetlands to treat discharge from the marsh.	Pilot test under CERCLA TCRA
EFSFSR above Fiddle Creek	Seep	SW flow from Garnet pit seep	14	N/A		Unpotentiated	Construct a pilot test of a vertical wetlands to treat discharge from the pit.	Pilot test under CERCLA TCRA
EFSFSR above Fiddle Creek	Adit Discharge	SW flow from DMEA Adit seep	18	N/A		Unpotentiated	For adits: install collection system with baseflow to holding tanks and bypass to existing stream. Based upon Year 1 evaluations: pilot test bioreactor or vertical wetlands, or compile road work screen vary to haul baseflow to batch plant for treatment prior to discharge. Conduct geotechnical studies to support bulkhead design.	Pilot test and geotech study informing NTCRA EE/CA
EFSFSR above Yellow Pine Pit	Adit Discharge	SW flow from Canadian Tunnel adit seep	10	N/A		Unpotentiated		
EFSFSR below Sugar Creek above West Fork Creek EFSFSR	Adit Discharge	SW flow from Bonanza Adit Seep	19	N/A		Unpotentiated		
EFSFSR below Sugar ~~Creek~~ Sugar Creek above EFSFSR	Adit Discharge	SW flow from Bailey Tunnel Adit Seep	8	Minimized by PRO dewatering	3	Unpotentiated		
Meadow Creek above EFSFSR	Adit Discharge	SW flow from Meadow Creek Mine adit seep	9	N/A		Potential		
EFSFSR above Yellow Pine Pit	Adit Discharge	SW flow from Monday Tunnel adit seep	20	N/A		Unpotentiated		

Candidate Early Action Removal Actions (Year 2)

EFSFSR below Sugar Creek	Waste Rock	Seepage from Lower West Fork DRSF	6	Minimized by PRO dewatering	3	Mined	Move waste rock to (upland) staging area for one of the PRO DRSFs.	CERCLA TCRA
EFSFSR below Sugar Creek	Waste Rock	Seepage from BMC NW DRSF	12	Removed by PRO	2-10	Potential		
EFSFSR above Fiddle Creek	Waste Rock	CIM /PMC/SMI Upper Man Camp DRSF	16	N/A		Unpotentiated		
EFSFSR below Yellow Pine Pit	Waste Rock	Seepage from BMC NE Oracle stockpile #1	17	N/A		Unpotentiated		
EFSFSR above Fiddle Creek	Waste Rock	Bradley Dumps	2	Partially removed by PRO	2-10	Unpotentiated	Move as water waste rock to (upland) staging area for one of the PRO DRSFs.	CERCLA TCRA
~~EFSFSR below Yellow Pine Pit~~ Meadow Creek above EFSFSR	Waste Rock	BMC Meadow Creek Mill-Smelter Site	5	Removed by PRO	2-10	Mined		

Candidate Early Remedial Actions (Year 3)

[Meadow Creek above EFSFSR] [EFSFSR above Sugar Creek	Surface Water	SW flow from pond downgradient of Yellow Pine Pit	3	Mitigated during dewatering	3	Potential	Ramp up intake volumes to batch plant to treat average flows, automate with winterization and shutdown capabilities to operate with minimal maintenance during winter months.	TCRA
Meadow Creek above EFSFSR	Surface Water	SW flow from Keyway Marsh Outlet	7	N/A		Mined	Based on results of Year 2 work, enhance Keyway Marsh with substrate, vegetation and drainage features to optimize hydraulic residence time and loading rate, or construct full-scale vertical wetlands treatment system discharge from marsh.	CERCLA TCRA
EFSFSR above Fiddle Creek	Adit Discharge	SW flow from DMEA Adit seep	18	N/A		Unpotentiated	Continue baseline flow and water quality studies to support bulkhead design, complete geotechnical data gap investigations, ramp up treatment systems to treat average flows, and automate with winterization and shutdown capabilities to operate with minimal maintenance during winter months.	NTCRA EE/CA
EFSFSR above Yellow Pine Pit	Adit Discharge	SW flow from Canadian Tunnel adit seep	10	N/A		Unpotentiated		
EFSFSR below Sugar Creek	Adit Discharge	SW flow from Bonanza Adit Seep	19	N/A		Unpotentiated		
~~EFSFSR below Sugar~~ Creek Sugar Creek above EFSFSR	Adit Discharge	SW flow from Bailey Tunnel Adit Seep	8	Minimized by PRO dewatering	3	Unpotentiated		
Meadow Creek above EFSFSR	Adit Discharge	SW flow from Meadow Creek Mine adit seep	9	N/A		Potential		
EFSFSR above Yellow Pine Pit	Adit Discharge	SW flow from Monday Tunnel adit seep	20	N/A		Unpotentiated		
EFSFSR above Fiddle Creek	Seep	SW flow from Garnet pit seep	14	N/A		Unpotentiated	Ramp up intake volumes to batch plant to treat average flows, automate with winterization and shutdown capabilities to operate with minimal maintenance during winter months.	CERCLA TRCA

DRSF - Development Rock Storage Facility (Waste Rock) IPDES - Idaho Pollutant Discharge Elimination System PRO - Midas proposed mining Alternatives 1, 2 or 4
sfc - surface, SW - surface water
N/A - Not Applicable (i.e., not modified by actions in the mining proposal).
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act (a.k.a. Superfund) TCRA - Time Critical Removal Action
NTCRA - Non-Time Critical Removal Action
ROD/RA - CERCLA Record of Decision / Remedial Action RI/FS - CERCLA Remedial Investigation/Feasibility Study
EE/CA - Engineering Evaluation/Cost Analysis (NTCRA under CERCLA)
CWA / NPDES - Clean Water Act / National Pollutant Discharge Elimination System (permit)

EPA, 2017, Best Practices for Preventing Sudden, Uncontrolled Fluid Mining Waste Releases, OLEM 9200.3-118
Notes: Early treatment of Yellow Pine Pit Lake deferred because of current function of Lake as sediment trap. Early treatment of seeps and springs associated with Meadow Creek tailings and DRSFs

Project Phase	PRO Mine Plan Year		Calendar Year*	
[Latest]	Begin	End	Begin	End
Post-AOC/Pre-Permit	-5	-4	2020	2021
Construction	-3	-1	2022	2024
Early Operations	1	4	2025	2028
Middle Operations	5	8	2029	2032
Late Operations	9	12	2033	2036
Active Closure/Reclamation	13	15	2037	2039
Post closure	16	25	2040	2049
TBD	Post AOC studies could lead to actions later, timing uncertain			

*Assumes ROD and financing is year: 2021

Construction duration: 3 years

service phase step out of three cells as An debugging formulas

Stibnite, Idaho
Legacy Mining
Features and Surface Water
Monitoring Locations

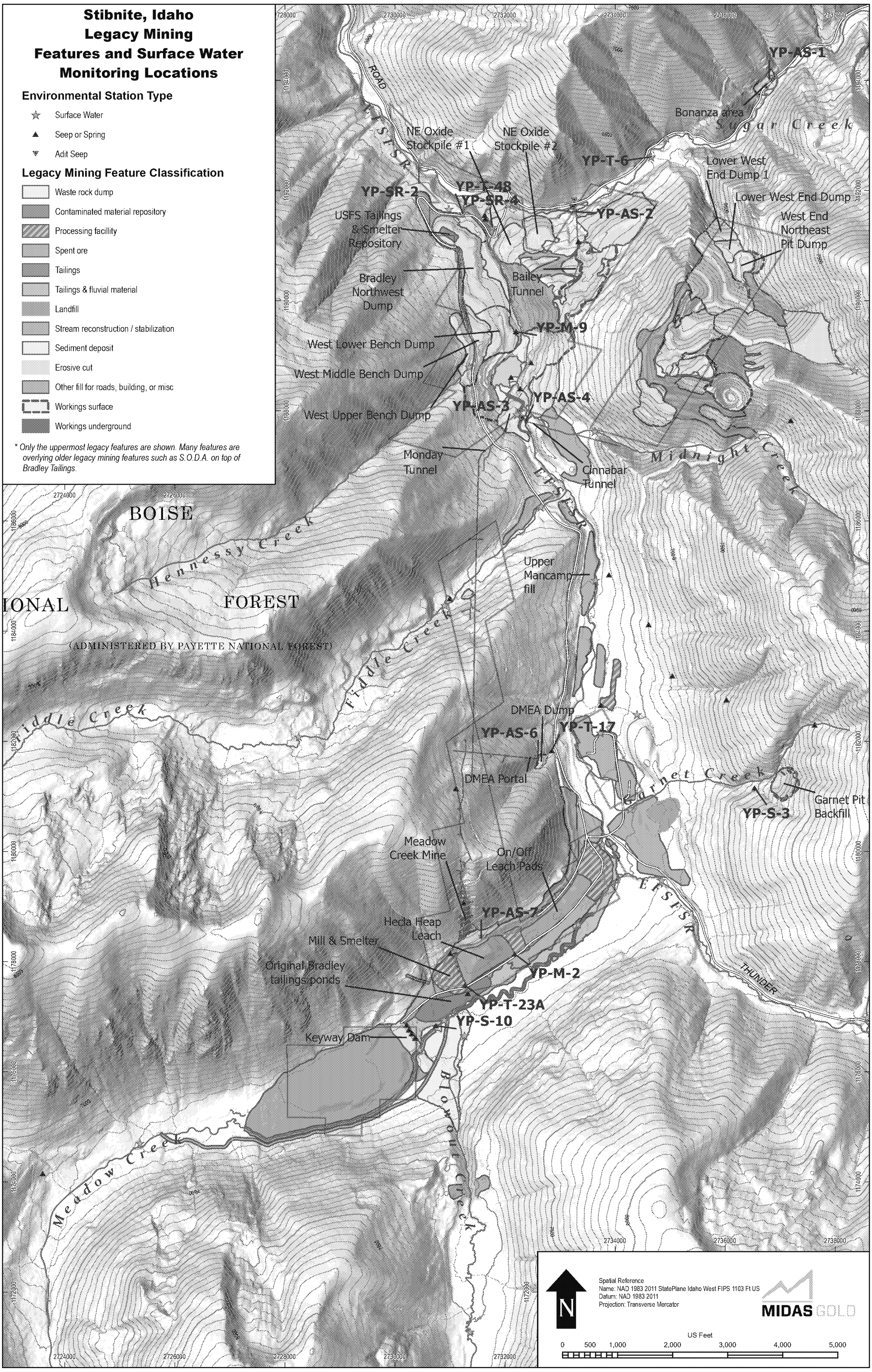
Environmental Station Type

- Surface Water
- Seep or Spring
- Adit Seep

Legacy Mining Feature Classification

- Waste rock dump
- Contaminated material repository
- Processing facility
- Spent ore
- Tailings
- Tailings & fluvial material
- Landfill
- Stream reconstruction / stabilization
- Sediment deposit
- Erosive cut
- Other fill for roads, building, or misc
- Workings surface
- Workings underground

** Only the uppermost legacy features are shown. Many features are overlying older legacy mining features such as S.O.D.A. on top of Bradley Tailings.*



Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 2/14/2020 5:05:15 PM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: RE: Points of contact at Midas Gold

Helen,
I apologize for not getting this to you sooner.
I have edited your email below with the appropriate additional or modified information in red text.
FYI, most general correspondence amongst the AOC Participants only needs to come to me and Michael Bogert (from Midas Gold) and we can distribute internally.
Do you have time for a call today? If so, could you suggest a time?
Regards,
John

From: Bottcher, Helen <Bottcher.Helen@epa.gov>
Sent: Thursday, February 13, 2020 4:51 PM
To: John Meyer <JMeyer@midasgoldcorp.com>
Subject: Points of contact at Midas Gold

Hi, John.

I'm still working on a contact list for the project. It's coming together, but I'm missing info for the Midas team members. Can you fill in / correct as needed my partial list below? Thanks!

Michael Bogert
General Counsel
Midas Gold Idaho, Inc.
405 South 8th Street, Suite 201
Boise, Idaho 83702
mbogert@midasgoldinc.com
Desk: (208) 901-3095

Gene Bosley
Senior Civil Engineer
Midas Gold Idaho, Inc.
405 South 8th Street, Suite 201
Boise, Idaho 83702
bosley@midasgoldinc.com
Desk: (208) 901-3097

Christopher (Chris) Dail
Midas Gold Idaho, Inc.
Manager, Exploration
405 South 8th Street, Suite 201
Boise, Idaho 83702
dail@midasgoldinc.com
Desk: (509) 939-2272

Kyle Fend

Midas Gold Idaho, Inc.
Field Operations Manager
405 South 8th Street, Suite 201
Boise, Idaho 83702
fend@midasgoldinc.com
Desk: (208) 901-3047

Andy Koulermos
Formation Environmental
Principal Consultant
2500 55th Street, Suite 200
Boulder, CO 80301
akoulermos@formationenv.com
Desk: (303) 396-0738

Brad Marten
Marten Law
Partner
1191 Second Ave, Suite 2200
Seattle, WA 98101
bmarten@martenlaw.com
Desk: 206-292-2604

John Meyer
Vice President, Development
Midas Gold Inc.
405 South 8th Street, Suite 201
Boise, Idaho 83702
meyer@midasgoldinc.com
Desk: (208) 901-3063
Cell: (208) 608-3543

Austin Zinsser
Midas Gold Idaho, Inc.
Senior Resource Geologist
405 South 8th Street, Suite 201
Boise, Idaho 83702
zinsser@midasgoldinc.com
Desk: (208) 901-3054
Cell: (970) 708-0873

Koda Merkley
Midas Gold Idaho, Inc.
Geologist
405 South 8th Street, Suite 201
Boise, Idaho 83702
kmerkley@midasgoldinc.com
Desk: (208) 901-3094

Warning: This email originated externally. **DO NOT CLICK** links if the sender is unknown.

Appointment

From: Bottcher, Helen [Bottcher.Helen@epa.gov]
Sent: 4/7/2020 10:47:21 PM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]; Albert Crawshaw [Albert.Crawshaw@deq.idaho.gov]; ally_turner@fws.gov; Clabaugh, Charles D. [clabaugh.charles@epa.gov]; Derek Young (derek.young@deq.idaho.gov) [derek.young@deq.idaho.gov]; McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Fremerman, Gary - OGC, Washington, DC [gary.fremerman@usda.gov]; Jeremy Moore (jeremy_n_moore@fws.gov) [jeremy_n_moore@fws.gov]; Jill Grant [jgrant@jillgrantlaw.com]; Zamba, Kathy -FS [kathy.zamba@usda.gov]; kwright@sbtribes.com; Lisa O'Hara (lisa.ohara@deq.idaho.gov) [lisa.ohara@deq.idaho.gov]; Maley, Timothy [maley.timothy@epa.gov]; McGrath, Patricia [mcgrath.patricia@epa.gov]; Susan Hanson [susanthanson9@icloud.com]; Leeds, Todd - FS [todd.leeds@usda.gov]; John Meyer (meyer@midasgoldinc.com) [meyer@midasgoldinc.com]; Austin Zinsser (zinsser@midasgoldinc.com) [zinsser@midasgoldinc.com]; Nathalie Doherty (Nathalie.Doherty@sol.doi.gov) [Nathalie.Doherty@sol.doi.gov]
CC: John Meyer [JMeyer@midasgoldcorp.com]; Hendricks, Kathleen [Kathleen_Hendricks@fws.gov]; Fisher, Sandi [sandi_fisher@fws.gov]; Koda Merkley [kmerkley@midasgoldinc.com]; Chris Dail [Dail@midasgoldinc.com]; Gene Bosley [bosley@midasgoldinc.com]; Andy Koulermos [akoulermos@formationenv.com]; L. Michael Bogert [mbogert@midasgoldinc.com]; Bradley M. Marten [bmarten@martenlaw.com]

Subject: Stibnite: Midas response to Gov't Parties Table
Location: Zoom meeting

Start: 4/9/2020 11:00:00 PM
End: 4/10/2020
Show Time As: Busy

Hi, everyone. Sorry for scheduling so late in the day, but this time worked best for most of the team. Guess we're all busy with Skype and Zoom calls these days. John Meyer will explain Midas' additions to the table of early actions that we sent. Austin Zinsser will be on the call to explain Midas' loading estimates, and they'll both be happy to take our questions. If you have a specific question or there's something you hope is covered, please let John and Austin know.

EPA staff – please sign off the agency's VPN before joining the Zoom meeting.

Here are the Zoom meeting instructions:

As discussed, a Zoom video conference has been setup for this Thursday afternoon. To connect to the call, please use the following information:

Join Zoom Meeting
https://zoom.us/ Ex. 6 Personal Privacy (PP)

Meeting ID: Ex. 6 Personal Privacy (PP)

One tap mobile
Ex. 6 Personal Privacy (PP) US (Houston)
US (San Jose)

Message

Sent: 7/16/2020 6:09:22 PM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Michael Bogert [mbogert@midasgoldinc.com]
Subject: RE: Stibnite

Thanks, Brad.

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Thursday, July 16, 2020 10:41 AM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Michael Bogert <mbogert@midasgoldinc.com>
Subject: Stibnite

Elizabeth -- We're ok with whatever HQ is willing to approve you do.

Bradley M. Marten
Partner

M- 206-999-1808
D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Date: Wednesday, July 15, 2020 at 1:07 PM
To: Bradley Marten <bmarten@martenlaw.com>
Subject: Stibnite

Hi Brad. I left you a voicemail, but I'm following up with an email in case you see this first. I am checking in regarding the agreement we had with Midas that settlement communications would be shared with the Shoshone-Banock Tribes and the Nez Perce. HQ did not realize that we had established the protocol of sharing communications with the Tribes when it sent the settlement proposal to Midas and did not copy the Tribes on the letter. Can you please confirm that Midas would not object to HQ sharing EPA's proposal with the Tribes? Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 2/27/2020 3:45:15 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: mbogert@midasgoldinc.com; Stephen Quin [SQuin@midasgoldcorp.com]; Laurel Sayer [lsayer@midasgoldinc.com]; John Meyer [JMeyer@midasgoldcorp.com]; Tenpas, Ron [rtenpas@velaw.com]; Snow, Corinne [csnow@velaw.com]; Peloso, Margaret [mpeloso@velaw.com]; John C. Cruden [JCruden@bdlaw.com]; Terry T. Uhling [tuhling@martenlaw.com]
Subject: Stibnite Mine Site
Attachments: 2020-02-26 AOC Transmittal Letter to EPA R10 (002).pdf

Elizabeth --Thanks for your call today. Attached is the draft AOC and SOW we discussed. I look forward to working with you on it.

Bradley M. Marten
Partner

D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

MARTEN LAW

February 26, 2020

FRE 408 Communication
Confidential

Via E-Mail and U.S. Mail

Elizabeth McKenna, Assistant Regional Counsel
U.S. EPA, Region 10
Mail Code 11-C07
1200 Sixth Avenue, Suite 155
Seattle, WA 98101
mckenna.elizabeth@epa.gov

RE: Stibnite Gold Project: Transmittal of Draft Administrative Order on Consent for RI/FS and Removal Actions

Dear Elizabeth:

On behalf of Midas Gold Idaho, Inc., and its corporate parent, Midas Gold Corporation (collectively, "Midas Gold" or the "Company"), and as we have discussed, I am forwarding for your review the Company's proposed Administrative Order on Consent for RI/FS and Removal Actions ("draft AOC") at the Stibnite mine site in Idaho. This draft AOC, which includes an attached Statement of Work ("SOW"), is a confidential settlement proposal to be shared only among the parties who have been working on the document. We ask for your confirmation that it will not be shared with the Nez Perce Tribe, with whom, as you know, the Company is in litigation, or with any other non-party. The Company regards this draft AOC as privileged, confidential, and subject to the protections afforded by Rule 408 of the Federal Rules of Evidence (FRE).

I look forward to discussing this draft with you. If possible, I would appreciate the opportunity to have a call or meeting with you next week to discuss your proposed edits to the AOC and SOW.

Sincerely,

Bradley M. Marten

D - 206 . 292 . 2604 | E – bmarten@martenlaw.com | 1191 Second Ave, Suite 2200, Seattle, WA 98101

CC: Stephen Quin, Midas Gold Idaho
Laurel Sayer, Midas Gold Idaho
John Meyer, Midas Gold Idaho
L. Michael Bogert, Midas Gold Idaho
Ron Tenpas, Vinson & Elkins LLP
Margaret Peloso, Vinson & Elkins LLP
Corinne Snow, Vinson & Elkins LLP

Enclosures: Draft AOC and SOW

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 10

IN THE MATTER OF:	)	
	)	
Stibnite Mine Site,	)	CERCLA Docket No.
Midas Gold Corp.,	)	
Idaho Gold	)	
Resources	)	
Company, LLC,	)	
Stibnite Gold	)	
Company, and	)	
Midas Gold Idaho,	)	
Inc.	)	
	)	
Respondents	)	
	)	
	)	

DRAFT

ADMINISTRATIVE ORDER ON CONSENT FOR
REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AND REMOVAL ACTIONS

TABLE OF CONTENTS

I. JURISDICTION & GENERAL PROVISIONS 3
II. PARTIES BOUND 3
III. DEFINITIONS 4
IV. FINDINGS OF FACT 7
V. CONCLUSIONS OF LAW 11
VI. SETTLEMENT AGREEMENT & ORDER 11
VII. CONTRACTOR, PROJECT COORDINATOR, & REMEDIAL PROJECT MANAGER 11
VIII. WORK TO BE PERFORMED 13
IX. SUBMISSION & APPROVAL OF DELIVERABLES 15
X. HEALTH & SAFETY 17
XI. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS 17
XII. PROPERTY REQUIREMENTS 19
XIII. ACCESS TO INFORMATION 20
XIV. RECORD RETENTION 21
XV. COMPLIANCE WITH OTHER LAWS 22
XVI. EMERGENCY RESPONSE & NOTIFICATION OF RELEASES 23
XVII. PAYMENT OF NON-RESPONDENTS' RESPONSE COSTS 23
XVIII. DISPUTE RESOLUTION 25
XIX. STIPULATED PENALTIES 25
XX. FORCE MAJEURE 27
XXI. COVENANTS BY THE NON-RESPONDENT PARTIES 28
XXII. RESERVATIONS OF RIGHTS BY THE UNITED STATES 29
XXIII. COVENANTS BY RESPONDENTS 30
XXIV. OTHER CLAIMS 31
XXV. EFFECT OF SETTLEMENT/CONTRIBUTION 31
XXVI. INDEMNIFICATION 32
XXVII. INSURANCE 33
XXVIII. FINANCIAL ASSURANCE 33
XXIX. MODIFICATION 35
XXX. NOTICE OF COMPLETION OF WORK 36
XXXI. PUBLIC COMMENT 36
XXXII. INTEGRATION & APPENDICES 36
XXXIII. HEADINGS 36
XXXIV. EFFECTIVE DATE 36
XXXV. DISCLAIMER 37
XXXVI. NOTICES & SUBMISSIONS 37
CERTIFICATE OF SERVICE 44
APPENDIX A 45
APPENDIX B 47

DRAFT

ED_004715A_00030571-00004

I. JURISDICTION & GENERAL PROVISIONS

1. This Settlement is entered into voluntarily by EPA, USFS, IDEQ, the Tribes, and Respondents. The Settlement provides for the performance by Respondents of an RI/FS and for certain response actions to be taken at the Site.

2. This Settlement is issued under the authority vested in the President of the United States under Sections 104, 106, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9606, 9607, and 9622, as amended ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923-26 (1987), and to the Secretary of the United States Department of Agriculture ("Secretary") by Executive Order 12580, 52 Fed. Reg. 2926 (January 23, 1987), 3 C.F.R. 13308, 1987 Compilation, p. 193. It was then further delegated to EPA Regional Administrators on September 13, 1987, in and through EPA Delegation Nos. 14-14-A, 14-14-B, 14-14-C and 14-14-D. This authority has since been redelegated by the Regional Administrator, EPA Region 10, to the Office of Superfund Environmental Management Division Director. The Agriculture Secretary's authority has likewise been delegated to the Chief of the USFS by 7 C.F.R. § 2.60(a)(39), and then re-delegated by the Chief of the USFS to the USFS Region 4 Regional Forester.

3. This Settlement has been negotiated in good faith, and actions undertaken in accordance with this Settlement do not constitute an admission of any liability by any party. Solely for the limited purpose of carrying out the terms of this Settlement, Respondents agree not to challenge the jurisdiction of the Parties to enter into it, and further agree to comply with and be bound by the terms of this Settlement. They further agree not to contest the legal basis or validity of this Settlement or any of its terms.

4. The purposes of this Settlement are to guide the conduct of (1) a remedial investigation and feasibility study of the Site not inconsistent with the NCP and (2) certain accelerated response actions, as collectively identified and described in the Statement of Work ("SOW") attached as Appendix B.

5. Consistent with Executive Order 12580 and the NCP, EPA is the lead agency for response actions involving the privately owned/operated portions of the Site, while the USFS is the lead agency for response actions involving the USFS portions of the Site. Notwithstanding that division, the parties agree that it is appropriate, given fiscal and efficiency priorities, for EPA to take principal responsibility for implementation of the entire response action. The State enters into this Settlement pursuant to Sections 120(f) and 121(f) of CERCLA, 42 U.S.C. §§ 9620(f) and 9621(f), and will serve as Support Agency under this Settlement. It will review response data and documents and consult with EPA and the USFS on decisions and approvals made under the Settlement. Likewise, the Tribes, which are federally recognized and have a governing body known as the Fort Hall Business Council that is asserting exercise of authority pursuant to inherent sovereign power, the Fort Bridger Treaty (15 Stat. 673), and the Constitution and By-Laws of 1936—will serve as a support agency under this Settlement. The Tribes will review response data and documents and consult with the EPA and USFS regarding decisions or approvals made under this Settlement.

II. PARTIES BOUND

6. This Settlement is binding upon the Parties and their heirs, successors, and assigns. Any change in ownership or corporate status of Respondents, including, but not

ED_004715A_00030571-00005

limited to, any transfer of assets or real or personal property, shall not alter their responsibilities under this Settlement.

7. Each undersigned representative of Respondents certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute this Settlement. Respondents agree that each of them is jointly and severally liable for carrying out all activities required by this Settlement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement, the remaining Respondents shall complete all such requirements.

8. MGII, as the Site Operator for purposes of this Settlement, shall act on behalf of Respondents in carrying out the terms of this Settlement and has been designated to act on their behalf. When the term "Respondents" is used in this Settlement, the Parties understand that MGII is acting on behalf of all Respondents, and that all Respondents will be bound by MGII's actions.

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

DRAFT

III. DEFINITIONS

10. Unless otherwise expressly provided in this Settlement, terms used herein are defined in and by CERCLA or implementing regulations promulgated thereunder shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply. Singular form shall be construed to include the plural and vice versa, unless the context requires otherwise:

"BFPP" shall mean a bona fide prospective purchaser as defined in Section 101(40) of CERCLA, 42 U.S.C. § 9601(40).

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

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

"Effective Date" shall mean the effective date of this Settlement as provided in Section XXXIV.

"EFSFSR" shall mean the East Fork of the South Fork of the Salmon River.

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

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

"Existing Contamination" shall mean:

a. any hazardous substances, pollutants, contaminants or Waste Materials present or existing on or under the Site as of the Effective Date;

b. any hazardous substances, pollutants, contaminants or Waste Materials that migrated from the Site prior to the Effective Date; and

c. any hazardous substances, pollutants, contaminants or Waste Materials presently at the Site that migrate onto or under or from the Site after the Effective Date.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, not inconsistent with the NCP, that the United States, the State and the Tribes incur after the Effective Date in reviewing or developing deliverables submitted pursuant to this Settlement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs.

"IDEQ" shall mean the Idaho Department of Environmental Quality and any successor departments or agencies of the State.

"IGRCLLC" shall mean Idaho Gold Resources Company, LLC.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Applicable dates are available at *http://www.epa.gov/superfund/superfund-interest-rates*.

"MGC" shall mean Midas Gold Corp.

"MGII" shall mean Midas Gold Idaho, Inc.

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

"Non-Respondent Parties" shall mean the United States, the IDEQ, the Tribes,

"Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper- or lower-case letter.

"Parties" shall mean the EPA, USFS, IDEQ, the Tribes, and Respondents.

"Past Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the Parties paid at or in connection with the Sites through the

DRAFT

Effective Date, plus Interest on all such costs that has accrued pursuant to 42 U.S.C. § 9607(a) through such date.

"Plan of Restoration and Operations" or "PRO" shall mean the approved plan of operations by the United States Forest Service pursuant to 36 C.F.R. § 228.5.

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

"Records" shall mean records, reports, documents, and other information, including in electronic form.

"Respondents" shall mean Midas Gold Corp., and related Respondents Idaho Gold Resources Company, LLC, Stibnite Gold Company, and Midas Gold Idaho, Inc.

"RI/FS" shall mean the RI and FS described in Paragraph 48.

"RPM" shall mean the Remedial Project Manager as defined in 40 C.F.R. § 300.5.

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

"Settlement" shall mean this Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study and Removal Action and all appendices attached hereto (listed in Section XXXII (Integration & Appendices)).

"SGC" shall mean Stibnite Gold Company.

"Site" encompasses both National Forest Service lands and private lands, including all areas within the Stibnite Mining District—located in Stibnite, Idaho, approximately 15 miles east of Yellow Pine, Idaho in Valley County, Idaho, 78 miles from McCall—in which any Respondent has ownership interest in land or holds patented or unpatented mining claims, including the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for response action implementation and materials handling. For purposes of this Settlement, the Site is intended to include, but is not limited to, all alleged point sources identified in the Complaint in *Nez Perce Tribe v. Midas Gold*, No. 01:19-cv-307, filed in the U.S. District Court for the District of Idaho on August 8, 2019. The Site is depicted generally on the map attached as Appendix A.

"State" shall mean the State of Idaho.

"Statement of Work" or "SOW" shall mean Appendix B to this Settlement, the document describing the activities MGII must perform pursuant to this Settlement, including any modifications made thereto in accordance with this Settlement.

"Stibnite Mining District" is the area of historically significant mining located in Valley County, Idaho, east of the community of Yellow Pine near the EFSFSR, where Respondents hold patented and unpatented mining claims.

DRAFT

"Stibnite Special Account" shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

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

"Tribes" shall mean the Shoshone Bannock Tribes.

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

"USFS" shall mean the United States Forest Service, an agency of the United States Department of Agriculture, and its successor departments, agencies, offices, or instrumentalities.

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any hazardous wastes as defined in the Idaho Hazardous Waste Management Act, Idaho Code 39-4403(8); (e) "pollutants" as defined in IDAPA 58.01.02.010.731; (f) "contaminants" as defined in IDAPA 58.01.11.007.10; (g) "hazardous materials" as defined in IDAPA 58.01.02.010.40; or "deleterious materials" as defined in IDAPA 58.01.02.010.16.

"Work" shall mean all activities and obligations MGII commits to on behalf of Respondents and that Respondents are required to perform under this Settlement, except those required by Section [XIV] (Record Retention).

"Work Plan" shall mean any plan to be approved by EPA for performance of the Work.

DRAFT

IV. FINDINGS OF FACT

11. MGII is a wholly owned subsidiary of MGC Pursuant to the USFS Plan of Restoration and Operations and 36 C.F.R. § 228.3 (b), MGII is an "operator," as defined by the regulation, which is "[a] person conducting or proposing to conduct operations" on the Site.

12. The majority of the mining and processing activity proposed by Respondents will take place is on patented claims.

13. The Site contains a number of hazardous substances source areas resulting from previous mining along Meadow Creek and EFSFSR. Historical mining in the Stibnite Mining District mostly occurred in three general areas named Hangar Flats, Yellow Pine, and West End. Mining operations began in the Stibnite Mining District in the 1920s and continued through the 1950s. During this initial period of mining activity, the mining of gold, silver, antimony, and tungsten mineralized materials was achieved by both underground and, later, open-pit mining methods.

14. In November 1952, the Defense Minerals Exploration Administration ("DMEA") awarded the Bradley Mining Company ("Bradley") two contracts to explore and develop metals deposits at the Yellow Pine and Meadow Creek mines. During World War II, the Site is estimated to have produced more than 90% of the Nation's antimony and 65% of the Nation's tungsten, materials that were used in advancing the war effort, including munitions, steel, fire retardants, and other purposes. Strategic mining operations continued through much of the Korean War, and antimony, gold, and tungsten mining and milling ceased in 1952, near the end of the Korean War.

15. A second major period of activity at the Site began with exploration activities in 1972 and was followed by open-pit mining and seasonable on-off heap leaching and one-time heap leaching from 1982 to 1997. With ore provided by multiple operators from a number of locations, and processed in adjacent heap-leaching facilities, over 10 million tons of ore were mined and processed. During the years of production, millions of cubic yards of mine tailings were deposited at locations within the Site, and in some cases, spent ore was permanently placed over historical Stibnite mill tailings that had previously been discarded.

16. The Site has been subject to substantial cost recovery litigation under CERCLA, and several consent decrees emerged from these actions including *Mobil Oil v. United States*, Civ. No. 99-1467-A (D. Virginia) (consent decree filed June 26, 2000); *United States v. Oberbillig* (D. Idaho) (consent decree filed March 18, 2004); and *United States v. Bradley Mining Company*, Case No. 3:08-CV-03968 TEH and *United States v. Bradley Mining Company*, Case No. 3:08-CV-05501 TEH (N.D. Ca.) (consent decree filed April 19, 2012). In some of the above-noted cost recovery litigation, the Site has been alleged to be a CERCLA "facility" as defined by Section 101 (9) of CERCLA, 42 U.S.C. § 9601 (9). In *Bradley Mining Company*, the EPA extended CERCLA covenants not to sue to the USFS, United States Department of Defense, United States Department of the Interior, EPA, and United States General Services Administration.

17. The prior mining activity at the Site resulted in CERCLA remedial actions by EPA, the USFS and the IDEQ. Among other actions, minor quantities of legacy tailings were removed, Meadow Creek was re-channelized in 2005, and certain legacy tailings impoundments were covered with clean fill in 2009. Past additional events at the Site include building removal, equipment removal, the 1965 failure of a hydropower dam on the East Fork of Meadow Creek (commonly referred to as "Blowout Creek"), and the creation and storage of Waste Materials deposited at locations within the Site. Notwithstanding multiple completed response actions, legacy tailings and contamination remain buried over much of the Site.

18. Beginning in 1982, IDEQ began monitoring the Site. IDEQ sampled surface water and groundwater for hazardous substances generated by mining operations. Sampling results showed exceedances of cyanide for the EPA quality criteria for water for fresh-water aquatic organisms.

19. On September 25, 1991, the EPA placed the Yellow Pine Mine Area on the Federal Facilities Docket. The Yellow Pine Mining Area site is located along the EFSFSR, 14 miles southeast of the town of Yellow Pine in Valley County, Idaho, in the Payette National Forest, where antimony and gold mining operations took place from the early 1900s until the late 1990s The USFS initiated a CERCLA Section 104 and 107 response and enforcement action at the Site.

ED_004715A_00030571-00010

20. In 1995, former owner/operator Stibnite Mine, Inc. ("SMI") entered into an Administrative Order on Consent ("AOC") with EPA Region 10 to mitigate environmental problems associated with the historic Bradley tailings in the upper Meadow Creek Valley. The AOC required SMI to stabilize the upper Meadow Creek Diversion Channel and to treat the flow exiting the diversion to meet water quality standards.

21. In 1999, the USFS completed a time-critical removal action at the pilot plant. The action consisted of covering and capping ponds constructed by Canadian Superior Mining (U.S.) Limited in connection with a gold-processing pilot test. The pilot test used cyanide-leaching technology for ore extracted from the site. By the end of 1999, most of the SMI facilities and haul roads were reclaimed under a reclamation plan approved by the USFS and IDEQ. Reclamation and closure continued in 2000.

22. In 2002, the USFS completed two time-critical removal actions ("TCRAs"). The first was to remove tailings from the Poison Pond area. The Poison Ponds were located along Meadow Creek south of Hecla's heap leach pad. Approximately 2,500 cubic yards were removed and placed in a repository cell located on the northwest Bradley waste dump. The second TCRA was in the smelter stack area. This action consisted of removing the wood flume and ash to an off-site EPA approved facility. This TCRA also included removal and placement of 400 cubic yards of soil in the same repository cell located on Respondents' patented lands in the northwest Bradley waste dump. The soil was removed from below the smelter stack flume and placed in an unlined trench.

23. These arsenic "hot spots" were in the northwest Bradley waste dump, which was an unsecured area with unrestricted public access. In 2004, EPA through its contractor, Environmental Quality Management ("EQM"), implemented a removal action which included excavation of contaminated waste, regrading of the removal area, and placement of clean soil on top. The area was later seeded with native plants and covered with straw. Excavated waste was placed in the on-site USFS "repository cell", an area designed to safely store the waste and prevent exposure to the public.

24. In 2004, a Meadow Creek Engineering Evaluation/Cost Analysis ("EE/CA") was completed under a USFS contract by Science Applications International Corporation ("SAIC"), including specifications and design of the recommended alternative. Also, in 2004, a Biological Assessment was completed, as required by the Endangered Species Act, and submitted to the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

25. In 2005, the USFS and EPA completed a CERCLA removal action in Meadow Creek between Blowout Creek and its confluence with the EFSFSR. Legacy tailings that were contributing elevated levels of arsenic to the stream were excavated from a 19-acre area and placed in an engineered unlined repository covered with waste rock in the Spent Ore Disposal Area ("SODA") and 3,500 feet of stream channel was reconstructed, providing habitat potentially suitable for salmonid spawning.

26. Elevated arsenic, antimony, and mercury levels have been detected in sampling locations located near the DMEA dump area associated with tunnel construction by Bradley pursuant to a contract and loan by the United States and supervised by the DMEA.

27. Since the construction of the SODA repository by the USFS and EPA, elevated levels of arsenic and antimony in the Meadow Creek Valley area in locations downgradient from the SODA have been identified. Alluvial groundwater sampled in groundwater wells regularly show arsenic concentrations of 1,000 – 3,000 μg/L; groundwater

ED_004715A_00030571-00011

in well MWH-A07 regularly shows antimony concentrations of 600-1,600 µg/L. One alluvial monitoring well (MWH-A19) near the repository cell constructed by the USFS has measured particularly high arsenic concentrations; typically ranging from 3,000 to 6,000 µg/L and as high as 6,670 µg/L from a sample gathered in 2018. Similar levels of arsenic are consistently indicated, with a reading of 6,230 µg/L from a sample gathered in late May 2019. This same well has measured 4,650 µg/L of arsenic from a sample gathered on April 19, 2013; 6,020 µg/L from a sample gathered on May 31, 2014; 5,400 µg/L from a sample gathered on May 31, 2015; 5,500 µg/L from a sample gathered on June 8, 2016; 7,520 µg/L arsenic from a sample collected on June 21, 2017; and 6,670 µg/L arsenic from a sample gathered on July 4, 2018. The current Water Quality Summary Reports prepared by Respondents show a range of arsenic readings from 839-12,100 µg/L and 148-2,990 µg/L arsenic. Total antimony reported in groundwater during this same time frame ranges from 48.6-2090 µg/L.

28. In 2009, Respondents or their predecessors began acquiring land and mineral interests at the Site. MGII is currently seeking a mine operating permit and approval of a Plan of Restoration and Operations ("PRO") through the National Environmental Policy Act ("NEPA") process, with the USFS as the lead agency.

29. The United States provided public notice of the above-noted consent decrees before they were entered by the court.

30. Respondents have never constructed or operated a mine on the Site. MGII submitted a proposed PRO that proposes to develop and operate a mining operation that produces gold and silver doré, and antimony concentrates from ore deposits in the project area. Activities proposed in the PRO will disturb legacy areas at the Site. As set forth in the PRO, MGII will undertake cleanup and reclamation at the Site before, during, and after the proposed mining. By entering into this Settlement, the Parties understand that it is the intent of MGII to remove and then productively mine certain legacy tailings that have been previously deposited in areas of the Site. In some cases, such as the spent heap leach ore disposal area SODA/Bradley tailings, remediation has previously been undertaken under CERCLA.

31. In general, MGII proposed development of the mineral resources would include construction of fish passage around legacy blockage of the Yellow Pine Pit; placement of tailings in a composite-lined tailings storage facility ("TSF"); placement of development rock in engineered and designed facilities; and reclamation and restoration of the Site, including backfill of the Yellow Pine Pit and subsequent reestablishment of the surface waters of the EFSFSR. It is the Parties' intent that, to the degree possible, this Settlement be interpreted and implemented in accordance with Respondents' proposed plan of operations as reflected in the PRO and as may be amended or adjusted from time to time.

32. The general sequence of mining will be guided by the restoration aspects of the PRO, which includes backfilling the Yellow Pine Pit with West End development rock to restore the approximate original gradient of the EFSFSR, to provide permanent fish passage, and facilitate aquatic habitat enhancement.

33. The estimates for direct employment from the activity described in the PRO are 594 construction jobs; 583 operations jobs; 160 reclamation jobs; and 44 monitoring jobs.

DRAFT

V. CONCLUSIONS OF LAW

34. Based on the Statement of Facts set forth above, EPA has determined that:

a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. The conditions described in the Statements of Facts above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

d. The actions required by this Settlement are necessary to protect the public health, welfare, or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

e. The Work required by this Settlement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement, will not be inconsistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

f. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement.

DRAFT

35. The Parties intend for this Settlement to address every claim raised by the Complaint in *Nez Perce Tribe v. Midas Gold*, No. 01:19-cv-307, filed in the U.S. District Court for the District of Idaho on August 8, 2019 ("Complaint"), including the discharge of pollutants at the Site regulated under CERCLA and/or the Clean Water Act from all point sources and pollutants alleged in the Complaint.

VI. SETTLEMENT AGREEMENT & ORDER

36. Based upon the Findings of Fact and Conclusions of Law set forth above, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

VII. CONTRACTOR, PROJECT COORDINATOR, & REMEDIAL PROJECT MANAGER

37. All Work performed under this Settlement shall be under the direction and supervision of qualified personnel. Respondents may retain one or more contractors or subcontractors to perform the Work and shall notify EPA of the names, titles, addresses,

telephone numbers, email addresses, and qualifications of such contractors or subcontractors within seven (7) days after the Effective Date or such date on which a contractor or subcontractor is proposed for selection, whichever date is later.

38. If, after the commencement of Work, Respondents retain additional contractors or subcontractors, Respondents shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors.

39. The qualifications of the persons undertaking the Work shall be subject to EPA's review for verification based on objective assessment criteria (*e.g.*, experience, capacity, technical expertise) and that they do not have a conflict of interest with respect to the project.

40. EPA retains the right to disapprove of any or all of the contractors and/or subcontractors retained by Respondents. If EPA disapproves of a selected contractor or subcontractor, Respondents shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications as soon as practicable after EPA's disapproval.

41. With respect to any proposed contractor performing activities related to the Work, Respondents shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs - Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, Reissued May 2006) or equivalent documentation as determined by EPA.

42. Within thirty (30) days after the Effective Date of this Settlement, Respondents shall designate a Project Coordinator who shall be responsible for administration of the Work required by this Settlement and shall submit to EPA the designated Project Coordinator's name, title, address, telephone number, email address, and qualifications.

43. Respondents have designated, and EPA has approved, [_____] as its Project Coordinator, who shall be responsible for administration of all actions by Respondents required by this Settlement. To the greatest extent possible, Respondents' Project Coordinator shall be present on Site or readily available during Site work.

44. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within seven (7) days following EPA's disapproval or such date on which a different Project Coordinator is proposed for selection, whichever date is later. Notice or communication relating to this Settlement from EPA to Respondents' Project Coordinator shall constitute notice or communication to Respondents.

45. EPA has designated Helen Bottcher of the Superfund Emergency Management Division in EPA Region 10 as its Remedial Project Manager ("RPM"). EPA will notify Respondents of a change of its RPM. Communications between Respondents and EPA, and all documents concerning the activities performed pursuant to this Settlement, shall be directed to the EPA RPM.

DRAFT

46. EPA and Respondents shall have the right to change their respective designated RPM or Project Coordinator. Respondents shall notify EPA seven (7) days before such a change is made. The initial notification by Respondents may be made orally but shall be promptly followed by formal written notice.

47. The RPM shall be responsible for overseeing Respondents' implementation of this Settlement. The RPM shall have the authority stated in the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement, or to direct any other response action undertaken at the Site. Absence of the RPM from the Site shall not be cause for stoppage of work unless specifically directed by the RPM.

VIII. WORK TO BE PERFORMED

48. Respondents shall conduct the RI/FS and prepare all plans in accordance with the provisions of this Settlement, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance"), OSWER Directive # 9355.3-01 (October 1988), available at https://semspub.epa.gov/src/document/11/128301, "Guidance for Data Usability in Risk Assessment (Part A), Final," OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at http://semspub.epa.gov/src/document/11/156756, and guidance referenced therein, and guidance referenced in the SOW. The Remedial Investigation ("RI") shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study ("FS") shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, 40 C.F.R. § 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and 40 C.F.R. § 300.430(e).

49. All written documents prepared by Respondents pursuant to this Settlement shall be submitted by Respondents in accordance with Section IX (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and approved by EPA in accordance with Section IX (Submission and Approval of Deliverables). Respondents shall implement all EPA approved, conditionally-approved, or modified deliverables.

50. Respondents shall also perform "early action" response actions to expedite cleanup and will do so in accordance with approved Work Plans. A description of the response "early actions" as set out in the SOW includes the following: (1) Bradley Dumps and Hennessy Creek Area; (2) DMEA Adit and Waste Rock Dump Area; (3) Former Bradley Mill and Smelter Area.

51. ***Work Plan and Implementation***. Within thirty (30) days after the Effective Date, Respondents shall submit to EPA for approval a draft Work Plan describing the Work to

ED_004715A_00030571-00015

implement the SOW. The draft Work Plan shall provide a description of, and an expeditious schedule for, the actions required by this Settlement.

a. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify EPA's RPM by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the Work Plan, EPA shall modify the Work Plan in writing accordingly or direct Respondents to modify and submit the modified Work Plan to EPA for approval. Respondents shall perform the RI/FS Work Plan as modified.

b. EPA may approve, disapprove, require revisions to, or modify each draft Work Plan in whole or in part, provided such disapproval is reasonable and not arbitrary and capricious. If EPA requires revisions, Respondents shall submit a revised draft Work Plan within seven (7) days of receipt of EPA's notification of the required changes but such 7-day limit may be extended by EPA for good cause related to the extent and scope of matters addressed in the Work Plan. MGII shall implement the Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Settlement.

c. Upon approval or approval with modifications of the Work Plan, Respondents shall, upon notification to EPA that appropriate funding and other preparation pursuant to this Settlement is in place, commence implementation of the Work in accordance with the schedule included therein. Respondents shall not commence or perform any Work except in conformance with the terms of this Settlement.

d. Unless otherwise provided in this Settlement, any additional deliverables that require EPA approval under the SOW and/or Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph.

e. Nothing in the foregoing shall be construed to limit EPA's authority to require performance of further response actions at the Site consistent with law.

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

ED_004715A_00030571-00016

changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondents shall provide the written notice after the award of the contract for the RI/FS and before the Waste Material is shipped. Respondents may ship Investigation Derived Waste ("IDW") from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.

53. ***Meeting Participation***. Respondents shall make presentations at, and participate in, meetings at the request of EPA during the preparation of the Work Plan. Topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

54. ***Progress Reports***. In addition to the deliverables set forth in this Settlement, Respondents shall submit written monthly progress reports to EPA by the 15th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall: (1) describe the actions that have been taken to comply with this Settlement; (2) include all results of sampling and tests and all other data received by Respondents; (3) describe Work planned for the next two (2) months with schedules relating such Work to the overall project schedule for RI/FS completion; and (4) describe all problems encountered in complying with the requirements of this Settlement and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

IX. SUBMISSION & APPROVAL OF DELIVERABLES

55. ***General Requirements***. Unless otherwise provided in this Settlement, any additional deliverables that require EPA approval under the SOW and/or Work Plan shall be reviewed and approved by EPA in accordance with this Paragraph. Except as otherwise provided in this Settlement, Respondents shall direct all submissions required by this Settlement to the RPM at 1200 6th Avenue, Seattle, Washington 98101, [phone], [email] and to the State at [ID contact information]. Respondents shall submit all deliverables required by this Settlement, the attached SOW, or any approved Work Plan in accordance with the schedule set forth in such plan. Respondents shall submit all deliverables in electronic form and paper copies of all final versions of reports, Sampling and Analysis Plan ("SAP"), Quality Assurance Project Plan ("QAPP"), maps and figures shall also be submitted to EPA and the State. All other deliverables shall be submitted to EPA in the form specified by the RPM. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5x11 inches, Respondents shall also provide EPA with paper copies of such exhibits.

56. ***Technical Specifications***. Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable format. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes. Spatial data, including spatially referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format; and (2) as un-projected geographic coordinates in decimal degree format using North American Datum 1983 or World Geodetic System 1984 as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant

ED_004715A_00030571-00017

with the Federal Geographic Data Committee Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor, complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/. Each file must include an attribute name for each site unit or sub-unit submitted. Respondents shall consult https://www.epa.gov/geospatial/geospatial-policies-and-standards for any further available guidance on attribute identification and naming. Spatial data submitted by Respondents does not, and is not intended to, define the boundaries of the Site.

57. ***Initial Submissions***. After review of any deliverable that is required to be submitted for EPA approval under this Settlement EPA shall: (1) approve, in whole or in part, the submission; (2) approve the submission upon specified conditions; (3) disapprove, in whole or in part, the submission; or (4) any combination of the foregoing. EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

58. ***Resubmissions***. Upon receipt of a notice of disapproval under Paragraph 57 ("Initial Submissions"), or if required by a notice of approval upon specified conditions under Paragraph 57, Respondents shall, within forty-five (45) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring Respondents to correct the deficiencies; or (5) any combination of the foregoing.

59. ***Implementation***. Upon approval, approval upon conditions, or modification by EPA under Paragraph 57 ("Initial Submissions") or Paragraph 58 ("Resubmissions"), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the Settlement; and (2) Respondents shall take any action required by such deliverable, or portion thereof. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for penalties under Section XIX ("Stipulated Penalties") for violations of this Settlement. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. In the event that EPA takes over some of the tasks, but not the preparation of the Remedial Investigation Report ("RI Report") or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into those reports. Respondents shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan; Sampling and Analysis Plan; draft RI Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; Treatability Testing Health and Safety Plan; and draft FS Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondents shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement. For all remaining deliverables, Respondents shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the Work.

ED_004715A_00030571-00018

60. ***Material Defects***. If an initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and the plan, report, or other deliverable is disapproved or modified by EPA due to such material defect, Respondents shall be deemed in violation of this Settlement for failure to submit such plan, report, or other deliverable timely and adequately. Respondents may be subject to penalties for such violation. Neither failure of EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA.

X. HEALTH & SAFETY

61. In accordance with the schedule set forth in the SOW, Respondents shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-site work under this Settlement. This plan shall be prepared in accordance with "OSWER Integrated Health and Safety Program Operating Practices for OSWER Field Activities," Pub. 9285.0-OIC (Nov. 2002), available on the NSCEP database at http://www.epa.gov/nscep, and "EPA's Emergency Responder Health and Safety Manual," OSWER Directive 9285.3-12 (July 2005 and updates), available at http://www.epaosc.org/HealthSafetvManual/manual-index.htm. In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning for potential mine impacted water releases. EPA may comment and make recommendation to the Health and Safety Plan, however, Respondents assume full responsibility to adhere to applicable OSHA and Mine Safety and Health Administration ("MSHA") regulations, as appropriate. Respondents shall incorporate all changes to the plan recommended by EPA provided such recommendations are reasonable and not arbitrary and capricious and shall implement the plan during the pendency of the response action.

XI. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

62. ***Quality.***

a. Respondents shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all environmental samples collected related to the Work consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)" EPA/240/B-01/003 (March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)" EPA/240/R-02/009 (December 2002), or "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A-900C (March 2005).

b. Within seven (7) days after the Effective Date or before commencing Work, Respondents shall submit a Sampling and Analysis Plan related to the Work to EPA for review and approval. This plan shall consist of a Field Sampling Plan ("FSP") and a QAPP that is consistent with the SOW, the NCP and applicable guidance documents, including, but not limited to, "Guidance for Quality Assurance Project Plans (QA/G-5)" EPA/240/R-02/009 (December 2002), "EPA Requirements for Quality Assurance Project Plans (QA/R-5)"EPA 240/B-01/003 (March 2001, reissued May 2006), or "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A-900C (March 2005). Upon its approval by EPA, the Sampling and Analysis Plan shall be incorporated into and become enforceable under this Settlement.

ED_004715A_00030571-00019

c. Respondents shall ensure that EPA, the USFS, IDEQ, and the Tribes personnel and authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondents in implementing this Settlement. In addition, Respondents shall ensure that such laboratories shall analyze pursuant to this Settlement all samples submitted by EPA pursuant to the QAPP for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that environmental sampling and field activities are conducted in accordance with the Agency's "EPA QA Field Activities Procedure," CIO 2105-P- 02.1 (9/23/2014) available at http://www.epa.gov/innpoli8/epa-qa-field-activities-procedures. Respondents shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions" available at http://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements and that the laboratories perform all analyses according to accepted EPA methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (http://www.epa.gov/clp), SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (http://www3.epa.gov/epawaste/lrazard/testmethods/ sw846/online/index.htm), "Standard Methods for the Examination of Water and Wastewater" (http://www.standardmethods.org/). 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (http://www3.epa.gov/ttnamtil/airtox.html).

d. However, upon approval by EPA, after a reasonable opportunity for review and comment by the USFS, State, and Tribes, Respondents may use other appropriate analytical method(s), so long as (1) quality assurance/quality control (QA/QC) criteria are contained in the method(s) and the method(s) are included in the QAPP, (2) the analytical method(s) are at least as stringent as the methods listed above, and (3) the method(s) have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, *e.g.*, EPA, ASTM, National Institute for Occupational Safety and Health ("NIOSH"), OSHA, MSHA, etc. MGII shall ensure that all laboratories they use for analysis of samples taken pursuant to this Settlement have a documented Quality System that complies with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs - Requirements with guidance for use" (American Society for Quality, February 2014), and "EPA Requirements for Quality Management Plans (QA/R-2)" EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network ("ERLN") laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program ("NELAP"), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements. Respondents shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the QAPP approved by EPA.

DRAFT

63. ***Samples***. Upon request, Respondents shall provide split or duplicate environmental samples related to the Work to EPA, USFS, the State, and the Tribes, or their authorized representatives. Respondents shall notify the parties not less than seven (7) days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA and the State shall have the right to take any additional samples related to the Work that the parties deem necessary. Upon request, EPA shall provide to Respondents split or duplicate samples of any samples its takes as part of EPA's oversight of their implementation of the Work. Other than resource related data associated with the exploration activities, mine production and mill operations assays, Respondents shall submit to EPA and the State results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondents with respect to the Site and/or the implementation of this Settlement.

64. ***Progress***. Respondents shall submit a quarterly written progress report to EPA and the State concerning actions undertaken pursuant to this Settlement, or as otherwise requested by EPA, from thirty (30) days after the Effective Date until issuance of Notice of Completion of Work pursuant to Section XXX, unless otherwise directed in writing by the RPM. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

65. ***Final Report***. Within sixty (60) days after completion of all Work required by this Settlement, other than continuing obligations listed in Section XXX (Notice of Completion of Work), Respondents shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement. The format of the final report or reports is included in the SOW. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP titled "OSC Reports." The final report shall include a good faith estimate of total costs or a statement of actual costs incurred in complying with the Settlement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant and material documentation generated during the Work (*e.g.*, manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a responsible corporate official of Respondents or their Project Coordinator:

> *"I certify under penalty of law that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this document and all attachments, the information submitted is true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

XII. PROPERTY REQUIREMENTS

66. If the Site, or any other property where access is needed to implement this Settlement, is owned or controlled by one of the Respondents, MGII agrees to provide the Non-Respondent Parties, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, as may be needed to implement this Settlement.

ED_004715A_00030571-00021

67. MGII shall require that assignees, successors in interest, and any other parties with rights to use the property shall provide access and cooperation to the Non-Respondent Parties, and their authorized officers, employees, representatives, and all other persons performing response actions under EPA oversight. MGII shall require that assignees, successors in interest and other parties with rights to use the Property implement and comply with any land use restrictions and institutional controls on the Property in connection with the Work, and not contest EPA's authority to enforce any land use restrictions and institutional controls on the Site. MGII shall provide a copy of this Settlement to any current and other party with rights to use the Site as of the Effective Date.

68. EPA agrees to provide reasonable notice to Respondents of the timing of response actions to be undertaken at the Site and other areas owned or controlled by MGII.

69. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than MGII (other than the Parties), Respondents shall use best efforts to secure an agreement, enforceable by Respondents and the United States, providing that such owner shall provide the Parties, and their representatives, contractors, and subcontractors with access at all reasonable times to such property to conduct any activity regarding the Settlement; and refrain from using such property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or unduly interfere with or adversely affect the implementation or integrity of the Work. MGII shall provide a copy of such access agreement(s) to EPA.

70. To the extent any action under this Settlement Agreement is to be performed in areas owned by or in possession of USFS, USFS shall cooperate with MGII to allow MGII to perform the Work, including by executing an agreement with MGII as described in Paragraph 69 agreeing to provide the Parties, and their representatives, contractors, and subcontractors with access at all reasonable times to such property to conduct any activity regarding the Settlement; and refrain from using such property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or unduly interfere with or adversely affect the implementation or integrity of the Work.

71. Notwithstanding any provision of this Settlement, EPA retains all of their access authorities and rights, as well as all of its rights to require land, water or other resource use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statute or regulations.

XIII. ACCESS TO INFORMATION

72. Respondents shall provide to EPA, upon request, copies of all Records within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondents shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

DRAFT

73. Respondents may assert that all or part of a Record requested by EPA is privileged or protected as provided under federal law, in lieu of providing the Record. If Respondents assert such a privilege or protection, they shall provide EPA with the following information regarding such Record: its title; its date; the name, title, affiliation (*e.g.*, company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondents shall provide the Record to EPA and the State in redacted form to mask the privileged or protected portion only. Respondents shall retain all Records that they claim to be privileged or protected until EPA has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondents' favor.

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

75. Except for business confidential claims, Respondents may make no claim of privilege or protection regarding: (1) any data, other than non-environmental data, regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondents are required to create or generate pursuant to this Settlement.

76. Notwithstanding any provision of this Settlement, EPA retains all of its information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIV. RECORD RETENTION

77. Until ten (10) years after EPA provides Respondents with notice that all Work has been fully performed in accordance with this Settlement, Respondents shall preserve and retain all non- identical copies of Records now in their possession or control, or that come into their possession or control, that relate in any manner to Respondents' representations of the BFPP provisions of CERCLA §§ 101(40)(A)-(H) and 107(r)(l), 42 U.S.C. §§ 9601 (40)(A)-(H) and 9607(r)(l), with regard to the Site, provided, and, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Respondents must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records now in their possession or control or that come into their possession or control that relate in any manner to the performance of the Work, provided, however, that Respondents (and their contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record

DRAFT

retention requirements shall apply regardless of any corporate retention policy to the contrary.

78. At the conclusion of the document retention period, Respondents shall notify EPA at least ninety (90) days prior to the destruction of any such Records, and, upon request by EPA, and except as otherwise provided, Respondents shall deliver any such Records to EPA.

79. Respondents certify that, as of the Effective Date and to the best of their knowledge and belief, after reasonably diligent inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to the Site and that it has fully complied with any and all EPA and State requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and state law.

XV. COMPLIANCE WITH OTHER LAWS

80. Nothing in this Settlement limits Respondents' obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-site actions required pursuant to this Settlement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws. Respondents shall identify ARARs in the Work Plan subject to EPA approval.

81. Respondents assert that they have established a defense from liability under CERCLA because they are BFPPs pursuant to 42 U.S.C. Section 9601(40) and that Respondents have not, by virtue of any prior activity, become owners or operators of the Site. The Non-Respondent Parties takes no position on whether Respondents have established a BFPP defense but agree, for purposes of this Settlement, that such a determination is not necessary to implement the terms of this Settlement; provided Respondents agree not to contest the jurisdiction of the United States to enforce the terms of this Settlement.

82. Notwithstanding the above paragraph, pursuant to Section 4 of the Idaho Pollutant Discharge Elimination System [IPDES] User's Guide to Permitting and Compliance (April, 2017), IDEQ and MGII will engage in Clean Water Act permitting compliance assistance for the Site.

83. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (*i.e.*, within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondents may seek relief under the provisions of Section [XX] (Force Majeure) for any delay in the performance of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that they have submitted timely and complete applications and taken all other actions necessary to obtain all such

ED_004715A_00030571-00024

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

XVI. EMERGENCY RESPONSE & NOTIFICATION OF RELEASES

84. ***Emergency Response.*** If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondents shall take these actions in accordance with all applicable provisions of this Settlement, including, but not limited to, the Health and Safety Plan. Respondents shall also immediately notify the RPM or, in the event of his/her unavailability, the Regional Duty Officer of the incident or Site conditions. Respondents shall also notify the State in accordance with Section XXXVI (Notices & Submissions). In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA for all costs of such response action not inconsistent with the NCP pursuant to Paragraph 87 (Payment of Sum for Future Response Costs).

85. ***Release Reporting.*** Upon the occurrence of any event during performance of the Work that Respondents are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11004, Respondents shall immediately orally notify the RPM or, in the event of her unavailability, the Regional Duty Officer at 303-293-1788, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

86. For any event covered under this Section, Respondents shall submit a written report to EPA within seven (7) days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

XVII. PAYMENT OF NON-RESPONDENTS' RESPONSE COSTS

87. ***Payment of Sum for Future Response Costs.*** On a periodic basis EPA will send Respondents a bill requiring payment that includes a cost summary for Future Response Costs incurred by Non-Respondent Parties. Within sixty (60) days of receipt, Respondents shall make all payments as follows:

a. [$] to EPA by Fedwire Electronic Funds Transfer (EFT) to: "Federal Reserve Bank of New York, ABA = 021030004, Account = 68010727, SWIFT address = FRNYUS33, 33 Liberty Street, New York, NY 10045, Field Tag 4200 of the Fedwire message should read 'D 68010727 Environmental Protection Agency' and shall reference Site/Spill ID Number [____] and the EPA docket number for this action." At the time of payment, MGII shall send notice that payment has been made to [insert names and mailing addresses of Regional Financial Officer and any other receiving officials at EPA].

ED_004715A_00030571-00025

b. [$] to USFS by [_____]. At the time of payment, Respondents shall send notice that payment has been made to [insert names and mailing addresses of receiving officials at USFS.] At the time of payment, Respondents shall send notice that payment has been made to [insert names and mailing addresses of Regional Financial Officer and any other receiving officials at EPA.]

c. [$] to IDEQ by [_____]. At the time of payment, MGII shall send notice that payment has been made to [insert names and mailing addresses of receiving officials at IDEQ.]

d. [$] to The Tribes by [_____]. At the time of payment, MGII shall send notice that payment has been made to [insert names and mailing addresses of receiving officials at the Tribes.]

88. ***Interest.*** In the event that any payment for Future Response Costs is not made by the date required, Respondents shall pay Interest on the unpaid balance, beginning to accrue as of the date of the bill. The Interest shall accrue through the date of Respondents' payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties.

89. ***Return of Excess.*** After the Notices of Completion are issued pursuant to Section XXX and the parties have performed their final accounting, they shall each remit and return to MGII any unused amount of the funds paid by Respondents.

90. ***Contesting Future Response Costs.*** Respondents may initiate the procedures of Section XVIII (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 87 (Payment of Sum for Future Response Costs) if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate such dispute, Respondents shall submit a Notice of Dispute in writing to the RPM within thirty (30) days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If MGII submits a Notice of Dispute, MGII shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 87, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation ("FDIC") and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the RPM a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within five (5) days after the resolution of the dispute, the escrow agent shall release the sums due (with accrued Interest) to EPA in the manner described in Paragraph 87. If Respondents prevail concerning any aspect of the contested costs, the escrow agent shall release that portion of the costs (plus associated accrued Interest) for which they did not prevail to EPA in the manner described in Paragraph 87. Respondents shall be disbursed any balance of the escrow account within five (5) days after the resolution of the dispute. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section

ED_004715A_00030571-00026

XVIII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

91. ***Past Response Costs.***

The Parties irrevocably surrender any right or entitlement to and reciprocally commit as a condition precedent to execution not to seek recovery of any of their Past Response Costs from or against any other Party to this Settlement.

XVIII. DISPUTE RESOLUTION

92. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement. The Parties shall attempt to resolve any disagreements concerning this Settlement expeditiously and informally.

93. ***Informal Dispute Resolution.*** If Respondents object to any EPA action taken pursuant to this Settlement, including providing Notice of Completion of Work or matters pertaining to Future Response Costs, it shall send EPA a written Notice of Dispute describing the objection(s) within fourteen (14) days after such action or on the date Respondents first became aware of such action, whichever is later. EPA and Respondents shall have thirty (30) days from EPA's receipt of their Notice of Dispute to resolve the dispute through informal negotiations (the Negotiation Period). The Negotiation Period may be extended at the sole discretion of EPA. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

94. ***Formal Dispute Resolution.*** If the Parties are unable to reach an agreement within the Negotiation Period, Respondents shall, within twenty (20) days after the end of the Negotiation Period, submit a statement of position to the RPM. EPA may, within twenty (20) days thereafter, submit a statement of position. Thereafter, an EPA management official at the Supervisory level or higher will issue a written decision on the dispute to Respondents. EPA's decision shall be incorporated into and become an enforceable part of this Settlement. Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

95. Except where contesting future response costs or as agreed by EPA, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondents under this Settlement. Except as provided in Paragraph 103, stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement. In the event that Respondents do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XIX (Stipulated Penalties).

XIX. STIPULATED PENALTIES

96. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth below for failure to comply with the obligations specified herein, unless excused under Section XX (Force Majeure).

ED_004715A_00030571-00027

97. "Comply," as used in the previous paragraph, includes compliance by Respondents with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

98. ***Stipulated Penalty Amounts.***

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 14th day
$2,500	15th through 30th day
$5,000	31st day and beyond

99. ***Obligations.*** Respondents are obligated to pay any sum properly due under Paragraph 87 (Payment of Sum for Future Response Costs); to establish and maintain financial assurance in accord with Section XXVIII; establish an escrow account to hold any disputed Future Response Costs under Paragraph 90 (Contesting Future Response Costs); and achieve major deliverables and milestones under the SOW.

100. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 121 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of [$_____].

101. Stipulated penalties under this Paragraph are in addition to other remedies available to EPA under Paragraphs 121 (Work Takeover) and 141 (Access to Financial Assurance).

102. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period and shall be paid within fifteen (15) days after the agreement or the receipt of EPA's decision.

103. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission or during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondents of any deficiency; and (b) with respect to a decision by the appropriate EPA Management Official, under Paragraph 94 (Formal Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this Settlement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.

104. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement, EPA may give Respondents written notification of the failure and describe the noncompliance. EPA may send Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondents of a violation.

105. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days after Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the Dispute Resolution procedures under Section XVIII (Dispute Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 87 (Payment of Sum for Future Response Costs).

DRAFT

106. If Respondents fail to pay stipulated penalties when due, Respondents shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondents have timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 102 until the date of payment; and (b) if Respondents fail to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 102 until the date of payment. If Respondents fail to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.

107. The payment of penalties and Interest, if any, shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement.

108. Nothing in this Settlement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek civil penalties pursuant Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement, except in the case of willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 121 (Work Takeover).

109. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

XX. FORCE MAJEURE

110. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondents or Respondents' contractors that delays or prevents the performance of any obligation under this Settlement despite Respondents' best efforts to fulfill the obligation. The requirement that Respondents exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or increased cost of performance.

111. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement for which Respondents intend or may intend to assert a claim of force majeure, Respondents shall notify EPA's RPM orally or, in their absence, EPA Region 10, within ten (10) days of when Respondents first knew that the event might cause a delay. Within five (5) days thereafter, Respondents shall provide in writing to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondents shall include with

DRAFT

any notice all available documentation supporting their claim that the delay was attributable to a force majeure. Respondents shall be deemed to know of any circumstance of which Respondents or their contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondents from asserting any claim of force majeure regarding that event; provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 110 and whether Respondents have exercised their best efforts under Paragraph 110, EPA may, in its unreviewable discretion, excuse in writing Respondents' failure to submit timely or complete notices under this Paragraph.

112. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, the time for performance of the obligations under this Settlement that are affected by the force majeure will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a force majeure, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure.

113. If Respondents elect to invoke the dispute resolution procedures set forth in Section XVIII (Dispute Resolution), it shall do so no later than fifteen (15) days after receipt of EPA's notice. In any such proceeding, Respondents shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondents complied with the requirements of Paragraphs [_____]. If Respondents carry this burden, the delay at issue shall be deemed not to be a violation by Respondents of the affected obligation of this Settlement identified to EPA.

114. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents MGII from meeting one or more deadlines under the Settlement, Respondents may seek relief under this Section.

XXI. COVENANTS BY THE NON-RESPONDENT PARTIES

115. Except as provided in Section XXII (Reservations of Rights by United States), the Non-Respondent Parties covenant not to sue or to take administrative action against Respondents for the Work, Existing Contamination, and Past Response Costs including pursuant to Sections 106 or 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a).

116. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement. These covenants are also conditioned upon the veracity of the information provided to EPA by Respondents relating to Respondents' Work at the Site and the certification made by Respondents in Paragraph 65. This covenant extends only to Respondents and does not extend to any other persons.

117. Nothing in this Settlement constitutes a covenant not to sue or to take action or otherwise limits the ability of the United States, including EPA, or the IDEQ to seek or obtain further relief from Respondents, if the information provided to EPA by Respondents

DRAFT

relating to Respondent's Work at the Site, or the certification made by Respondents in Paragraph 65, is false or in any material respect, inaccurate.

XXII. RESERVATIONS OF RIGHTS BY THE UNITED STATES

118. Except as specifically provided in this Settlement, nothing in this Settlement shall limit the power and authority of the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, except as specifically provided in this Settlement, nothing in this Settlement shall prevent the United States from seeking legal or equitable relief to enforce the terms of this Settlement, from taking other legal or equitable action as it deems appropriate and necessary.

119. The covenants set forth in Section XXI (Covenants by the Non-Respondent Parties) do not pertain to any matters other than those expressly identified therein. The United States reserves, and this Settlement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to: (1) liability for failure by Respondents to meet a requirement of this Settlement; (2) criminal liability; (3) liability for violations of federal or state law that occur during or after implementation of the Work; (4) liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments; (5) liability resulting from the release or threat of release of hazardous substances, pollutants or contaminants at or in connection with the Site after the Effective Date, not within the definition of Existing Contamination; (6) liability resulting from exacerbation of Existing Contamination not associated with the Work by Respondents, its successors and assigns; and (7) liability arising from the disposal, release or threat of release of Waste Materials outside of the Site.

120. With respect to any claim or cause of action asserted by the United States, Respondents shall bear the burden of proving that the claim or cause of action, or any part thereof, is attributable solely to Existing Contamination and that Respondents have complied with all of the requirements of 42 U.S.C. §§ 9601 (40)(A)-(H) and 9607(r)(l).

121. ***Work Takeover.***

a. In the event EPA determines that Respondents: (1) have ceased implementation of any portion of the Work, (2) are seriously or repeatedly deficient or late in their performance of the Work, or (3) are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondents. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondents a period of fifteen (15) days within which to remedy the circumstances giving rise to EPA's issuance of such notice.

b. If, after expiration of the 15-day notice period specified in Paragraph [____] Respondents have not remedied or begun to remedy to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary. EPA will notify Respondents in writing (which writing may be electronic) if

ED_004715A_00030571-00031

EPA determines that implementation of a Work Takeover is warranted under this Paragraph.

c. Respondents may invoke the procedures set forth in Paragraph 94 (Formal Dispute Resolution) to dispute EPA's implementation of a Work Takeover under Paragraph [____]. However, notwithstanding Respondents' invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph [____] until the earlier of (1) the date that Respondents remedy, to EPA 's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a written decision terminating such Work Takeover is rendered in accordance with Paragraph 94 (Formal Dispute Resolution).

d. Notwithstanding any other provision of this Settlement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXIII. COVENANTS BY RESPONDENTS

122. Respondents agree not to assert any claims or causes of action against EPA, USFS, the State, the Tribes or their contractors or employees, with respect to Existing Contamination, the Work, Past Response Costs, and this Settlement—including, but not limited to:

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

b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the State of Idaho Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law; or

c. any claim pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding, the Work, Future Response Costs, and this Settlement.

123. These covenants not to sue shall not apply in the event the United States, the States or the Tribes bring a cause of action or issues an order pursuant to any of the reservations set forth in Section XXII (Reservations of Rights by the United States), other than in Paragraph [____] (liability for failure to meet a requirement of the Settlement), [____] (criminal liability), or [____] (violations of federal/state law during or after implementation of the Work), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

124. Nothing in this Settlement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

DRAFT

125. Respondents reserve, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of MGII's deliverables or activities.

126. Respondents reserve, and this Settlement is without prejudice to, arguments that any claim or cause of action, or part thereof, is attributable solely to Existing Contamination and that Respondents have complied with all of the requirements of 42 U.S.C. §§ 9601(40)(A)-(H) and 9607(r)(l).

XXIV. OTHER CLAIMS

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

128. Except as expressly provided in Section XXI (Covenants by the Non-Respondent Parties), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

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

XXV. EFFECT OF SETTLEMENT/CONTRIBUTION

130. Nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XXIII (Covenants by Respondents), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing herein diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2) and (3), to pursue any such persons to obtain additional response costs or response actions and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

ED_004715A_00030571-00033

131. If a suit or claim for contribution is brought against Respondents with respect to Existing Contamination (including any claim based on the contention that Respondents is liable as a result of response actions taken in compliance with this Settlement or at the direction of EPA's RPM), the Parties agree that this Settlement constitutes an administrative settlement pursuant to which Respondents have, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C.§§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement. The "matters addressed" in this Settlement are the Work, Existing Contamination, Past Response Costs and Future Response Costs.

132. Respondents shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA in writing no later than sixty (60) days prior to the initiation of such suit or claim. Respondents shall, with respect to any suit or claim brought against it for matters related to this Settlement, notify EPA in writing within ten (10) days after service of the complaint or claim upon it. In addition, Respondents shall notify EPA within ten (10) days after service or receipt of any Motion for Summary Judgment and within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

XXVI. INDEMNIFICATION

133. The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondents as EPA's authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. § 300.400(d)(3). Respondents shall indemnify, save, and hold harmless the United States, its officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondent's behalf or under their control, in carrying out activities pursuant to this Settlement. Further, Respondents agree to pay the United States all costs it incurs, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement. The United States shall not be held out as a party to any contract entered into by or on behalf of MGII in carrying out activities pursuant to this Settlement. Neither Respondents nor any such contractor shall be considered an agent of the United States or the State.

134. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

135. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

ED_004715A_00030571-00034

136. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondents and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXVII. INSURANCE

137. No later than fourteen (14) days before commencing any on-site Work, Respondents shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section [INSERT] (Notice of Completion of Work), commercial general liability insurance with limits of $1 million per occurrence, and automobile liability insurance with limits of liability of $1 million per accident, and umbrella liability insurance with limits of liability of $5 million in excess of the required commercial general liability and automobile liability limits, naming EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondents pursuant to this Settlement. In addition, for the duration of the Settlement, Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, Respondents need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondents shall ensure that all submittals to EPA under this Paragraph identify the Stibnite Mine Site name and the EPA docket number for this action.

DRAFT

XXVIII. FINANCIAL ASSURANCE

138. In order to ensure completion of the Work, Respondents shall secure financial assurance, initially in the amount of [$_____]. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from the "Financial Assurance" category on the Cleanup Enforcement Model Language and Sample Documents Database at https://cfpub.epa.gov/compliance/models/, and satisfactory to EPA. Respondents may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, and/or insurance policies.

a. A surety bond guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;

b. An irrevocable letter of credit, payable to or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;

c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;

d. A policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency;

139. Respondents shall diligently monitor the adequacy of the financial assurance. If Respondents become aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, Respondents shall notify EPA of such information within seven (7) days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify Respondents of such determination. Respondents shall, within thirty (30) days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for Respondents, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed sixty (60) days. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Settlement.

140. Respondents shall submit such mechanisms and documents to the Regional financial assurance specialist at the following address: [____]

141. ***Access to Financial Assurance.***

a. If EPA issues a notice of implementation of a Work Takeover under Paragraph 121, then in accordance with any applicable financial assurance mechanism EPA is entitled to: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid.

b. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel such mechanism, and Respondents fail to provide an alternative financial assurance mechanism in accordance with this Section at least thirty (30) days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation.

c. If, upon issuance of a notice of implementation of a Work Takeover, either: (1) EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism, whether in cash or in kind, to continue and complete the Work; or (2) the financial assurance is provided under Paragraph 138, then EPA may demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondents shall, within seven (7) days of such demand, pay the amount demanded as directed by EPA.

d. Any amounts required to be paid under this Paragraph shall be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work

DRAFT

by EPA or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA may deposit the payment into the EPA Hazardous Substance Superfund or into the Stibnite Mine Site Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

e. All EPA Work Takeover costs, not inconsistent with the NCP, and not paid under this Paragraph must be reimbursed as Future Response Costs.

142. ***Modification of Amount, Form, or Terms of Financial Assurance.*** Respondents may submit, on any anniversary of the Effective Date or at any other time agreed to by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to EPA in accordance with Paragraph 99 and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondents of its decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Respondents may reduce the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) if there is a dispute, the agreement or written decision resolving such dispute under Section XVIII (Dispute Resolution). Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall be made in EPA's sole and unreviewable discretion, and such decision shall not be subject to challenge by Respondents pursuant to the dispute resolution provisions of this Settlement or in any other forum. Within thirty (30) days after receipt of EPA's approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Respondents shall submit to EPA documentation of the reduced, revised, or alternative financial assurance mechanism.

143. ***Release. Cancellation, or Discontinuation of Financial Assurance.*** Respondents may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Section XXX (Notice of Completion of Work); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation, or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XVIII (Dispute Resolution).

XXIX. MODIFICATION

144. EPA's RPM may modify any plan or schedule or the SOW in writing or by oral direction. Any modification will not be arbitrary and capricious and will be of fair cost. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the RPM's oral direction. Any modification will be subject to modification that may be required of the PRO or other agency authorization for the Work concerned. Any other requirements of this Settlement may be modified in writing by mutual agreement of the Parties.

145. If Respondents seek permission to deviate from any approved Work Plan or schedule or the SOW, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not

ED_004715A_00030571-00037

proceed with the requested deviation until receiving oral or written approval from EPA's RPM.

146. No informal advice, guidance, suggestion, or comment by the RPM or other EPA representatives regarding any deliverable submitted by Respondent shall relieve it of its obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

XXX. NOTICE OF COMPLETION OF WORK

147. When EPA, in consultation with the State, determines, after review of the Final Report, that all Work has been fully performed in accordance with this Settlement, with the exception of any continuing obligations required by this Settlement, EPA will provide written notice to Respondents. If EPA determines that any such Work has not been completed in accordance with this Settlement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the Work Plan if appropriate in order to correct such deficiencies. Respondents shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondents to implement the approved modified Work Plan shall be a violation of this Settlement.

XXXI. PUBLIC COMMENT

148. This Settlement shall be subject to a thirty (30) day public comment period, after which EPA may modify or withdraw its consent to this Settlement if comments received disclose facts or considerations which indicate that this Settlement is inappropriate, improper or inadequate.

XXXII. INTEGRATION & APPENDICES

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

a. Appendix A is a map of the Site.

b. Appendix B is the SOW.

XXXIII. HEADINGS

150. The headings and captions in this Settlement have been inserted for convenience of reference only and shall not define or limit any of the terms or provisions hereof.

XXXIV. EFFECTIVE DATE

151. The effective date of this Settlement shall be the date upon which EPA issues written notice to MGII that EPA has fully executed the Settlement after review of and response to any public comments received. Notwithstanding any other provision in this

DRAFT

Settlement, EPA agrees that the performance obligations under this Settlement cannot proceed in the absence of applicable required permits and other authorizations issued by the appropriate government agencies.

XXXV. DISCLAIMER

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

XXXVI. NOTICES & SUBMISSIONS

153. Any notices, documents, information, reports, plans, approvals, disapprovals, or other correspondence required to be submitted from one party to another under this Settlement, shall be deemed submitted either when an email is transmitted and received, it is hand-delivered or as of the date of receipt by certified mail/return receipt requested, express mail, or facsimile. Submissions to Respondents shall be addressed in care of:

Midas Gold Idaho, Inc.
[address]
with copies to:

With Copies To:

Midas Gold Corp:
[address]

DRAFT

With electronic copies to

DRAFT

IT IS SO AGREED:
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BY:

_____

DRAFT

IT IS SO AGREED:
STATE OF IDAHO
BY:

_____

DRAFT

The undersigned representative of each Respondent certifies that they are fully authorized to enter into the terms and conditions of this Settlement and to bind the party represented to this document.

IT IS SO AGREED:
BY:

Midas Gold Idaho, Inc Date

Idaho Gold Resources Co.

Stibnite Gold Co.

Stibnite Gold Co.

DRAFT

DRAFT

DRAFT

CERTIFICATE OF SERVICE

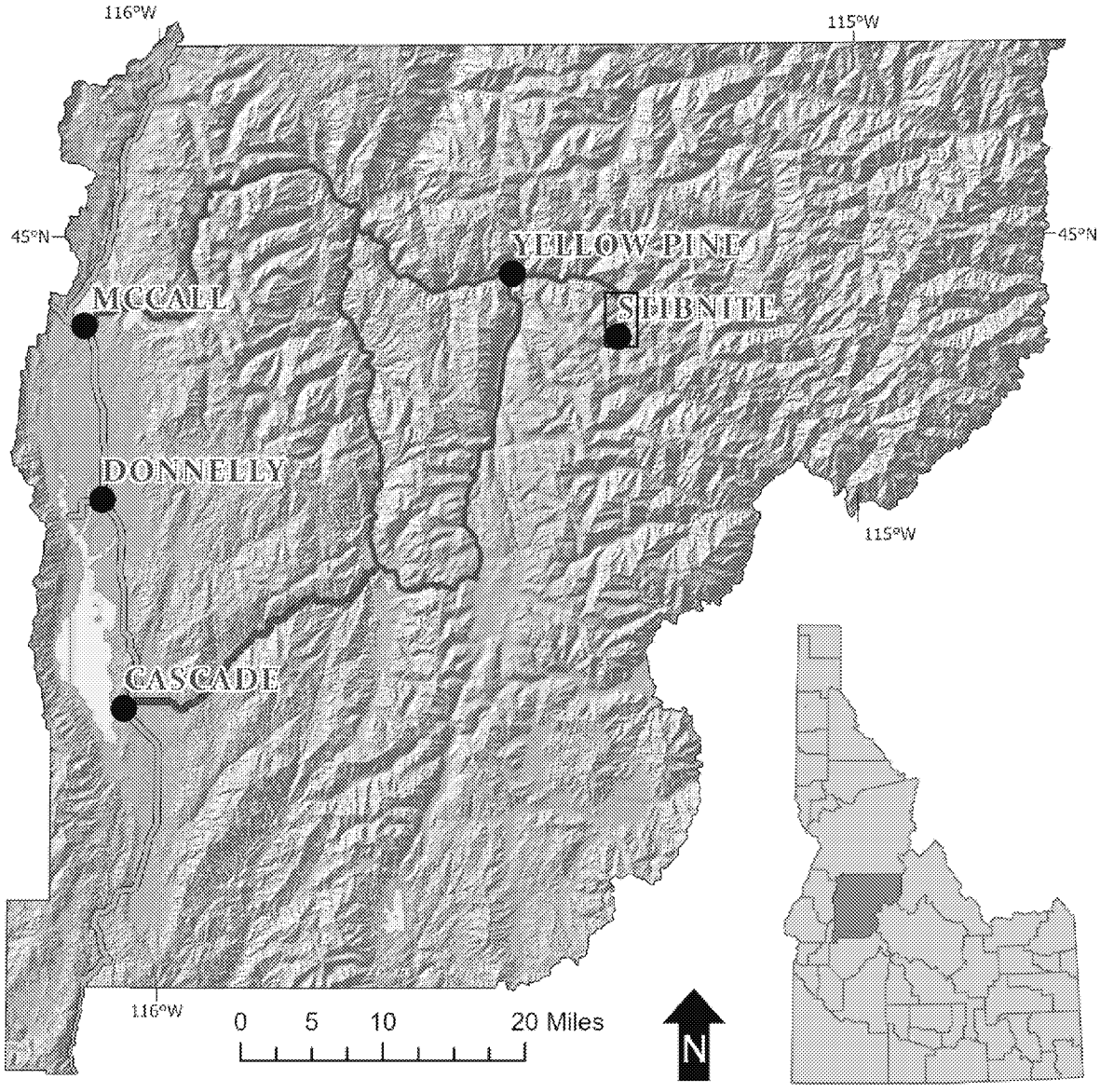
The undersigned hereby certifies that a true and correct copy of the foregoing was served on the following parties listed below by United States mail, postage prepaid, this ___ day of_____, [INSERT].

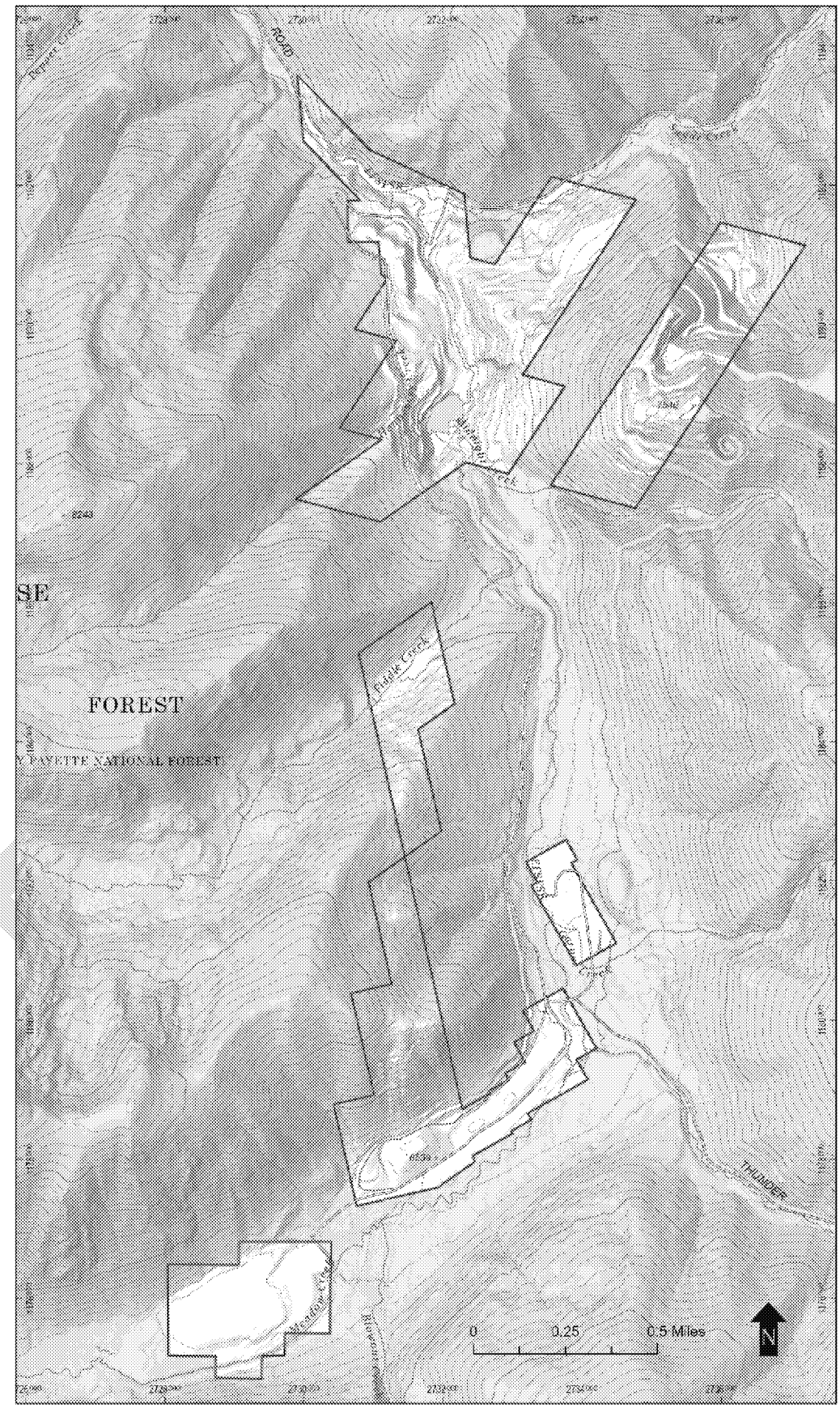
DRAFT

ED_004715A_00030571-00046

APPENDIX A

PROJECT SITE




ROAD
SE
FOREST
Y FAYETTE NATIONAL FOREST
THUNDER
0
0.25
0.5 Miles
N

APPENDIX B

STATEMENT OF WORK FOR THE STIBNITE MINE REMEDIAL INVESTIGATION / FEASIBILITY STUDY

TABLE OF CONTENTS

SECTION **PAGE**

1 PURPOSE 49
2 SCOPE 49
3 OVERSIGHT 49
4 SCHEDULE 50
5 GUIDANCE 50
6 ROLES AND RESPONSIBILITIES 50
7 REMEDY REQUIREMENTS 51
8 TASK 1 – SCOPING 51
8.1 Site Background 51
8.2 Project Planning 52
8.3 Scoping Deliverables 53
9 TASK 2 – COMMUNITY RELATIONS 58
10 TASK 3 – SITE CHARACTERIZATION 59
10.1 Field Investigation 59
10.2 Data Analyses 60
10.3 Data Management Procedures 61
10.4 Site Characterization Deliverables 62
11 TASK 4 – TREATABILITY STUDIES 63
11.1 Determination of Candidate Technologies and of Need for Testing 63
11.2 Treatability Testing and Deliverables 64
12 TASK 5 – FEASIBILITY STUDY 65
12.1 Remedial Alternative Development 65
13 TASK 6 – DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES 66
13.1 Detailed Analysis of Alternatives 66
13.2 Detailed Analysis Deliverables 67
14 TASK 7 – EARLY ACTIONS 67
14.1 Description and Scope of Early Actions 68
14.2 Design 69
14.3 Early Action Implementation 73
14.4 Project Completion and Close Out 73
15 REFERENCES FOR CITATION 74
ATTACHMENT A – SUGGESTED RI/FS WORK PLAN FORMAT 82
ATTACHMENT B – SUGGESTED FORMAT FOR SAMPLING AND ANALYSIS PLAN 83

DRAFT

ATTACHMENT C – SUGGESTED REMEDIAL INVESTIGATION REPORT FORMAT 84
ATTACHMENT D – SUGGESTED FORMAT FOR FEASIBILITY STUDY REPORT.....86
ATTACHMENT E – STIBNITE MINE RI/FS STATEMENT OF WORK SCHEDULE 88

DRAFT

ED_004715A_00030571-00050

PURPOSE

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Stibnite Mine Site ("Site") located in northwest Idaho approximately 14 miles from the town of Yellow Pine. The purpose of the RI/FS is to investigate the nature and extent of contamination at the Site and to develop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of work that will be carried out by Midas Gold Idaho, Inc. ("Midas Gold" or "Respondent") as it implements the RI/FS at the Site.

In September 2016, Midas Gold filed a Plan of Restoration and Operations ("PRO") with the United States Forest Service ("USFS") for the redevelopment of Stibnite, and plans to undertake mining, mineral processing and restoration activities on portions of the Site that will result in landscape-scale changes to many of the existing Site features. As such, the scope and timing of sampling and other elements of the RI/FS will consider existing field data and analyses, mining activities proposed in the PRO, and any modifications and subsequent remediation. This will require flexibility in the RI/FS and could require a phased approach to accelerate certain activities.

This RI/FS SOW is attached to and is incorporated into the Settlement Agreement and Administrative Order on Consent (AOC) for the Site. Technical work described in this SOW is intended to provide more information to the Respondent for the purpose of implementing the AOC and is not intended to change the meaning of any AOC language. This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan, commonly calledthe National Contingency Plan (NCP), 40 CFR 300. The AOC and this SOW are hereafter referred to interchangeably as the "AOC." Any discrepancies between the AOC and this SOW are unintended, and whenever necessary, the AOC will control any interpretive disputes.

SCOPE

The specific RI/FS activities to be conducted at the Site are set forth in seven separate tasks.

Task 1 – Scoping
Task 2 – Community Relations
Task 3 – Site Characterization
Task 4 – Treatability Studies
Task 5 – Feasibility Study
Task 6 – Detailed Analysis of Remedial Alternatives
Task 7 – Early Actions

OVERSIGHT

Work conducted under the AOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection &

ED_004715A_00030571-00051

Health Act, Idaho Code§§ 39-101 to 39-130; the Hazardous Waste Management Act of Idaho, Idaho Code§§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code§§ 39-3601 et seq. As such, oversight of the Respondent's Work conducted under the SOW will be carried out by EPA, the USFS, and the IDEQ (the Agencies) in a manner to assure the satisfaction of all federal and state requirements. The Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for EPA's review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or Settlement Agreement and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the RI/FS, the Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the AOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment E.

SCHEDULE

Refer to Attachment E for the primary and potential secondary deliverables and associated schedules.

GUIDANCE

The Respondent shall conduct the RI/FS, and produce technical reports that are in accordance with the AOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A, B, C, and D include suggested document formats for the Work Plan, Sampling and Analysis Plan, RI Report, and FS Report, respectively. The RI/FS guidance describes the required report contents.

ROLES AND RESPONSIBILITIES

The Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI/FS, except as otherwise specified in the AOC. At the completion of the RI/FS, EPA will be responsible for the selection of a Site remedy and will document this selection in a Record of Decision (ROD).

ED_004715A_00030571-00052

REMEDY REQUIREMENTS

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final RI/FS report including the baseline risk assessment (BLRA), as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's remedy and will provide the information necessary to support the development of the ROD.

TASK 1 – SCOPING

Scoping is the initial planning process of the RI/FS. Respondent shall document the specific project scope in the RI/FS Work Plan. During the scoping process, the Site-specific objectives of the RI/FS, including the identification of potential preliminary remediation goals (PRGs) will be proposed by the Respondent and approved by EPA. In addition to developing the Site-specific objectives of the RI/FS, Respondent shall define a general project management approach for the Site, which shall be documented by the Respondent in a draft Work Plan. Because the Work required to perform an RI/FS is not fully known at the outset and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the RI/FS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by the Respondent as a function of the project planning process.

Site Background

The Respondent shall gather, analyze, and present existing Site background information and shall conduct a work session to assist in planning the scope of the RI/FS.

Collect and analyze existing data and document the need for additional data

Before planning RI/FS activities, all existing Site data shall be thoroughly compiled and reviewed by the Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. The Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from any previous sampling events that may have been conducted. Only data that is determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the RI/FS. This includes data utilized to develop the BLRA, to identify additional data needs to better characterize the Site, to better define potential applicable or relevant and appropriate requirements (ARARs), and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be

ED_004715A_00030571-00053

established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA. Guidance on systematic planning using the data quality objectives process (EPA QA/G-4). Washington, D.C.: 121. http://www.epa.gov/quality/qs-docs/g4-final.pdf, U.S. EPA (2006).

Conduct site visit

The Respondent and EPA shall conduct a Site visit during the project scoping phase to assist in developing a conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site. During the Site visit the Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

Project Planning

Once the Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned. Project planning activities include those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. The Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The Conceptual Site Model (CSM) should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. The Respondent shall provide assistance to the RPM in collecting this information as requested. If information is not provided to the Respondent within the timeframe specified by EPA, the RPM will notify the Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

ED_004715A_00030571-00054

Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, the Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval. The Respondent shall then identify a preliminary comprehensive range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by the Respondent and presented in the final RI/FS report. The Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by the Respondent or EPA, treatability studies shall be required, except where the Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

Begin preliminary identification of potential ARARs

The Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

Scoping Deliverables

At the conclusion of the project planning phase, the Respondent shall submit an RI/FS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP). These plans must be reviewed and approved by EPA prior to the initiation of field activities.

ED_004715A_00030571-00055

RI/FS Work Plan

A Work Plan documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. The Work Plan will take into consideration for the timing and scope of potential mining and processing activities associated with the PRO. This could include a phased approach to focus on issues of most concern or requiring early action. The Work Plan shall be developed in conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RI/FS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of the Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the BLRA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the RI/FS. The Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

Sampling and Analysis Plan

The Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. A suggested format for the SAP (inclusive of the FSP and QAPP) is provided in Attachment B. The SAP, FSP,and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

ED_004715A_00030571-00056

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425-26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision) and specifically should contain the twenty-four elements specified in Table 11 – List of QA Project Plan Elements, EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. The Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that the Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. The Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

Potential Target Analytes

The following list of chemicals include the initial Chemicals of Potential Concern (COPCs). The initial COPC list includes, but is not limited to, the analytes listed below. The Respondent shall review this list for surface water, groundwater, sediments, soils, and vegetation analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site-specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

ED_004715A_00030571-00057

Chemicals/Analytes of Potential Concern for Surface Water

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for surface water sampling stations during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph. A minimum of two storm event sampling events shall be conducted.

Laboratory Analyses

Alkalinity	Copper	Selenium
Aluminum	Cyanide	Silver
Antimony	Hardness	Sodium
Arsenic	Iron	Sulfate
Barium	Lead	Thallium
Beryllium	Magnesium	Tungsten
Boron	Manganese	Total Dissolved Solids
Cadmium	Mercury	Total Organic Carbon
Calcium	Molybdenum	Total Suspended Solids
Chloride	Nickel	Uranium
Chromium (III)	Nitrogen (TKN)	Vanadium
Chromium (VI)	Phosphorus	Zinc
Cobalt	Potassium	

Field Analyses

Conductivity	Flow	Temperature
Dissolved Oxygen	pH	

The Respondent shall review the results of the first year's surface water sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent surface water sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent surface water sampling events.

Chemicals/Analytes of Potential Concern for Sediments:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for sediment sampling stations.

Laboratory Analyses

Aluminum	Cyanide	Selenium
Antimony	Iron	Silver
Arsenic	Lead	Thallium
Cadmium	Manganese	Tungsten
Chromium	Mercury	Vanadium
Copper	Nickel	Zinc

ED_004715A_00030571-00058

Chemicals/Analytes of Potential Concern for Soils/Waste Rock:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for soils/waste rock sampling.

Laboratory Analyses

Aluminum	Cyanide	Silver
Antimony	Iron	Thallium
Arsenic	Lead	Tungsten
Boron	Manganese	Uranium
Cadmium	Mercury	Vanadium
Chromium	Molybdenum	Zinc
Cobalt	Nickel	
Copper	Selenium	

Chemicals/Analytes of Potential Concern for Vegetation:

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for vegetation sampling stations.

Laboratory Analyses

Aluminum	Copper	Nickel
Antimony	Cyanide	Selenium
Arsenic	Iron	Silver
Boron	Lead	Thallium
Cadmium	Manganese	Tungsten
Chromium	Mercury	Vanadium
Cobalt	Molybdenum	Zinc

Chemicals/Analytes of Potential Concern for Groundwater

The preliminary COPC list is shown below. These COPCs will be screened in the initial data compilation and review process to identify the COPC list for groundwater sampling stations and shall be sampled at a minimum during the first high flow (spring runoff) and the first low flow (fall) sampling events conducted following signing of the AOC. The spring runoff sampling event shall be conducted as close as possible to the peak of the spring runoff hydrograph and the low flow sampling shall be conducted at all groundwater sampling stations as close as possible to the low point of the surface water flow hydrograph.

DRAFT

Laboratory Analyses

Alkalinity	Cyanide	Silver
Aluminum	Hardness	Sodium
Antimony	Iron	Sulfate
Arsenic	Magnesium	Thallium
Barium	Manganese	Total Dissolved Solids
Beryllium	Mercury	Total Organic Carbon
Cadmium	Molybdenum	Total Suspended Solids
Calcium	Nickel	Tungsten
Chloride	Nitrate/nitrite as N	Uranium
Chromium (III)	Nitrogen (TKN)	Vanadium
Chromium (VI)	Orthophosphate	Zinc
Cobalt	Potassium	
Copper	Selenium	

Field Analyses

Conductivity	Ferrous Iron	Temperature
Dissolved Oxygen or ORP	Nitrite	
Ferric Iron	pH	

The Respondent shall review the results of the first year's groundwater sampling, shall compare the analytical results for each of the COPCs against the screening levels, and shall recommend COPCs to be eliminated from the above list for subsequent groundwater sampling events. Upon approval by EPA, the COPCs eliminated by this process do not need to be included in the analyses for subsequent groundwater sampling events.

Site Health and Safety Plan

A HASP shall be prepared in conformance with the Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" the Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

TASK 2 – COMMUNITY RELATIONS

The development and implementation of community relations activities are the responsibility of EPA. The critical community relations planning steps performed by EPA include conducting community interviews and developing a community relations plan. Although implementation of the community relations plan is the responsibility of EPA, the Respondent may assist by providing information regarding the Site's history, participating in public meetings, and preparing fact sheets for distribution to the general public. In addition, the Respondent shall establish a community information repository, at or near the City of Cascade, to house one copy of the administrative record. The extent of community relations activities involvement by potentially responsible parties (PRPs) is left to the discretion of EPA. The Respondent's community relations responsibilities, if any, are specified in the community relations plan. Any PRP-conducted community relations activities will be subject to oversight by EPA.

ED_004715A_00030571-00060

TASK 3 – SITE CHARACTERIZATION

As part of the RI, the Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a RI report. The overall objective of Site characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology to the extent that it has not already been determined through existing data. Surface and subsurface pathways of migration must be defined. The Respondent shall identify the sources of contamination and define the nature, extent, and volume of the sources of contamination, including their physical and chemical constituents as well as their background concentrations at incremental locations in the affected media. The Respondent shall also investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the RI/FS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. The Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. The Respondent shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the RI/FS, it may be necessary for the Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, the Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the RI/FS.

Field Investigation

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site. These activities shall be performed by the Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

Implement and document field support activities

The Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. The Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. The Respondent shall also notify the RPM upon completion of field support activities.

ED_004715A_00030571-00061

Investigate and define site physical and biological characteristics

The Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan, to the extent that it has not already been determined through existing data. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, the Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

Define sources of contamination

The Respondent shall locate each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. The Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the QAPP and DQOs.

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

Delineate the nature and extent of contamination

The Respondent shall gather information to delineate the nature and extent of contamination as a final step during the field investigation to the extent that it has not already been determined through existing data. To describe the nature and extent of contamination, the Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, the Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

Data Analyses

Evaluate Site characteristics

The Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport to the extent that it has not already been determined through

ED_004715A_00030571-00062

existing data. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The RI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. The Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the RI).

Data Management Procedures

The Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by the Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Maintain sample management and tracking

The Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, the Respondent shall establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by

ED_004715A_00030571-00063

uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See www.epa.gov/storet/wqx.hmtl)

Site Characterization Deliverables

The Respondent shall prepare the preliminary Site characterization summary and the RI report.

Data Summary Reports

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), the Respondent shall prepare a concise Site characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the RI report.

Remedial Investigation Report (RI)

The Respondent shall prepare and submit a draft RI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the RI report can be found in Attachment C. Following comment by EPA, the Respondent shall prepare a final RI report satisfactorily addressing the comments.

Baseline Risk Assessment (BLRA)

The Respondent shall conduct a BLRA to assess the potential human health, and environmental risks posed by the Site in the absence of any remedial action, but will consider implementation of the PRO. This effort will involve four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

> **Contaminant Identification** – The Respondent shall review available information on all hazardous substances present at the Site and identify the major contaminants of concern. Contaminants of concern should be selected based on their intrinsic toxicological properties because they are present in large quantities, and/or because they are currently in, or potentially may migrate into, critical exposure pathways (e.g., drinking water).
>
> **Exposure Assessment** – The Respondent shall identify actual or potential exposure pathways, characterize potentially exposed populations, and evaluate the actual or potential extent of exposure.

ED_004715A_00030571-00064

Toxicity Assessment – The Respondent shall provide a toxicity assessment of those chemicals found to be of concern during Site investigation activities. This will involve an assessment of the types of adverse health or environmental effects associated with chemical exposures, the relationship between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity, (e.g., weight of evidence for a chemical's carcinogenicity). EPA has prepared chemical screening tables with updated toxicity values and Preliminary Remediation Goals for various land uses available from: https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables

Risk Characterization – The Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health or environmental effects for the chemicals of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

TASK 4 – TREATABILITY STUDIES

If potential remedial actions involving treatment have been identified by Respondent or EPA, Respondent shall conduct treatability studies except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. The following activities shall be performed by the Respondent to support all treatability studies.

Determination of Candidate Technologies and of Need for Testing

The Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the range of technologies required for the development and analysis of alternatives (Task 5 and 6) The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3, 5, and 6).

Conduct literature survey and determine the need for treatability testing

The Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless the Respondent can demonstrate to EPA's satisfaction that it is not needed, the Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

Evaluation of treatability studies

Once a decision has been made to perform treatability studies, the Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating

ED_004715A_00030571-00065

conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS. To assure that a treatability testing program is completed on time, and with accurate results, the Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

Treatability Testing and Deliverables

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

Treatability testing work plan

The Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by the Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the treatment tests, a separate or amended HASP must be developed by the Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

Treatability study evaluation report

Following completion of treatability testing, the Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate each technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

ED_004715A_00030571-00066

TASK 5 – FEASIBILITY STUDY

The Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FS Report must document the results of these two components of FS. Interim deliverables associated with these activities will be identified in the RI/FS Work Plan. The RI and FS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the RI to influence the development of remedial alternatives during the FS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

Remedial Alternative Development

The Respondent shall develop and evaluate a range of appropriate waste management options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the RI to ensure protection of human health and the environment and comply with ARARs, concurrent with the RI site characterization task.

A range of remedial alternatives must be developed to identify and provide a variety of waste management options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by the Respondent during the development of remedial alternatives.

Refine and document remedial action objectives

Based on the BLRA, the Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

Develop general response actions

The Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

ED_004715A_00030571-00067

Identify areas or volumes of media

The Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

Identify, screen, and document remedial technologies

The Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. The Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

Assemble and document alternatives

The Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by the Respondent for inclusion in a technical memorandum.

TASK 6 – DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by the Respondent to provide EPA with the information needed to allow for the selection of a Site remedy. This analysis is the final task to be performed by the Respondent during the FS.

Detailed Analysis of Alternatives

The Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

ED_004715A_00030571-00068

Apply nine criteria and document analysis

The Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative, the Respondent must provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

Compare alternatives against each other and document the comparison of alternatives

The Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. The Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

Detailed Analysis Deliverables

In addition to the technical memorandum summarizing the results of the comparative analysis, the Respondent shall submit a draft FS report to the RPM for review and approval. Once EPA's comments have been addressed by the Respondent to the satisfaction of EPA, the final FS report may be bound with the final RI report.

Feasibility Study report

The Respondent shall submit a draft FS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for remedy selection by EPA, and documents the development and analysis of remedial alternatives. The Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment D. The Respondent shall prepare a final FS report which satisfactorily addresses the comments.

TASK 7 – EARLY ACTIONS

EPA and the Respondent have identified three Early Actions (EAs) to be performed at the Site. It is the common goal to implement these actions in 2020, if possible.

ED_004715A_00030571-00069

Description and Scope of Early Actions

The three EAs are as follows:

Bradley Dumps and Hennessy Creek Area

The Northwest Bradley Dumps consist of extensive legacy waste rock dumps covering over 30 acres situated along the East Fork of the South Fork of the Salmon River (EFSFSR) southwest of the confluence with Sugar Creek. The EA will entail lining and rerouting the Hennessy Creek diversion to a more direct route into the EFSFSR. This would eliminate the majority of the water (0.72 square miles catchment area, lowest measured baseflow 0.15 cubic feet per second, estimated 25-year runoff peak 11 cubic feet per second) that presently leaks from the existing ditch system and flows in the subsurface through the dumps west of the Yellow Pine open pit and the Northwest Bradley Dumps. Without the perennial flow from Hennessy Creek, wet- and dry-season metals loading to the EFSFSR associated with the Northwest Bradley Dumps would decrease. Additional wet season decreases in loading would be accomplished by rerouting and piping the existing ditch in the vicinity of the USFS Smelter Debris Repository to reduce the infiltration of water from the remaining catchment (0.16 square miles catchment area, estimated baseflow 0.03 cubic feet per second, estimated 25-year runoff peak 2.5 cubic feet per second) through the dump and/or repository. Rerouting the main Hennessy Creek diversion (Figures 1 and 2) would be accomplished with a pipeline leading from the present water collection pond along the Stibnite Road, into the Yellow Pine pit to discharge into the existing pit lake (into deep water to avoid causing turbidity). Route options include a direct route eastward down the highwall directly into the lake, or a longer but flatter route along a historical conveyor corridor and roads.

The pipe intake structure would allow overflow into the existing ditch system in the event of a plugged pipe or extreme flood event. An existing earthen diversion dam upgradient of the proposed pipeline intake would continue to manage most debris and bedload, though the pipe intake structure includes a trash rack to prevent either from plugging the pipe. After the main Hennessy Creek diversion rerouting is accomplished, the existing ditch near the repository would be rerouted west of the Stibnite Road in a pipe, to discharge to another existing, unlined diversion ditch beyond the point at which re-infiltrated water could interact with the dump.

Defense Minerals Exploration Administration (DMEA) Adit and Waste Rock Dump Area

The DMEA Adit and Waste Rock Dump Area consists of a portal to an underground exploration drift and associated waste rock dumps and access roads located on the western side of the EFSFSR valley approximately 0.75 miles south of Fiddle Creek. The EA will consist of separation of upgradient water (0.11 square miles catchment area, lowest measured baseflow 0.0004 cubic feet per second, estimated 25-year runoff peak 1.6 cubic feet per second) from the DMEA dump by installation of a culvert alongside the dump, generally along the alignment of the present high-flow channel (Figure 3). The culvert intake would include a trash rack to prevent the pipe plugging with debris, and the upstream end of the pipe installed trenched-in sufficiently deep to prevent backwater from the culvert entrance from forcing water into the dump materials. The remainder of the pipe would be laid within or along the present surface channel, with ballast as needed to fix the pipe in place. The outlet would feature riprap erosion protection.

ED_004715A_00030571-00070

Former Bradley Mill and Smelter Area

The Bradley Mill and Smelter Area is the site of former legacy mineral processing activities in Meadow Creek valley approximately 0.75 miles southwest of the EFSFSR confluence and is adjacent to Hecla heap leach pad. The EA will entail installation of a geosynthetic lined ditch and pipe to divert upgradient water around mineralized backfill materials west of Hecla's former heap leach pad (Figure 4). A ditch at the upstream end of the new diversion would allow collection of the principal catchments (0.16 square miles catchment area, estimated baseflow 0.006 cubic feet per second, estimated 25-year runoff peak 2.4 cubic feet per second) draining to this area. The lower portion of the diversion would utilize a pipeline for more effective containment, faster construction, and avoidance of excavating potentially contaminated materials in the vicinity of the old smelter stack. Together, the ditch and pipe system would re-establish the effective diversion system that was backfilled in 2009-2010. The pipe outfall would report to an existing ditch that leads to a culvert, which then drains to the Keyway Marsh – with a potential ancillary benefit of providing additional water to support wetland function.

Design

Draft Early Action Design Report/Early Action Work Plan

Within 60 days after the Effective Date of the Settlement Agreement/CO the Respondent will submit a Draft Early Action Design Report (EADR)/Early Action Work Plan (EAWP) for each of the three EAs documenting the complete draft design. The reports will contain, at a minimum, the following:

1. A statement of the problem(s) and potential problem(s) posed by the EA Project Area.
2. A background summary setting forth: (a) a brief description of the Project Area including the geographic location and a description of the physiographic, hydrologic, geologic, demographic, ecological, cultural, and natural resource features of the Site; (b) a brief synopsis of the history of the Project Area including a summary of past disposal practices and a description of previous responses that have been conducted by local, State, Federal, or private parties; and (c) a summary of the existing data including physical and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Project Area
3. A cultural resource survey for the areal extent of the Project Area which shall include: A cultural resource review of records on file at the Idaho State Historic Preservation Office (SHPO) to determine potential locations of prior cultural resources inventories and previously recorded cultural resource sites in the Project Area vicinity; and an on-the-ground identification of potential cultural resources within the Project Area. Respondent shall coordinate the cultural resource survey with the Agencies.
4. A Bird Nest Survey, Mitigation, and Monitoring Plan for the areal extent of the Project Area, if needed, based on the following:

   To avoid impacts to migratory birds and their nesting, ground clearing of vegetation should be completed before or after the nesting period for the site (approximately May 15th through August 15th). The EPA may grant exceptions to this if erosion, sedimentation, weed infestation, important timing conflicts, or other unacceptable impacts would occur. If an

ED_004715A_00030571-00071

exception is granted a, Bird Nest Survey, Mitigation, and Monitoring Plan would be required and additional mitigation measures would apply in the event active nests are present.

5. The technical parameters upon which the design will be based. Specifically, the design assumptions and parameters, including (1) waste characterization for hazardous waste that leaves the Site; (2) performance standards for diversion structures; (3) compliance with ARARs, pertinent codes, and standards; (4) technical factors of importance to the design and construction, including use of currently accepted environmental control measures, constructability of the design, and use of currently acceptable construction practices and techniques.

In addition, the Draft EADR will include:

a. Preliminary Construction Schedule appropriate to the size and complexity of the project.

b. Plans, Drawings, and Specifications. A complete set of construction drawings, including Project Area representations, engineering drawings for grading, structural, and cover construction, including a detailed topographic map of the Project Area and specifications (general specifications, drawings, and schematics), shall be submitted. Plans and specifications shall conform to acceptable standards. All specifications shall conform to CSI format. Plans and specifications shall include specifications for construction, installation, Project Area preparation, and field work standards. General correlation between drawings and technical specifications is a basic requirement of any set of working construction plans and specifications. The design plans and specifications must be consistent with the technical requirements of all ARARs identified for this project. Before submitting the project specifications, Respondent shall coordinate and cross-check the specifications and drawings and complete the proofing of the specifications and the cross-checking of all drawings and specifications. The submittals shall include a complete set of construction drawings and specifications, as well as a set of one-half size reduction of drawings.

c. Basis of Design Section including a detailed description of the evaluations conducted to propose the design approach. This section shall include a Summary and Detailed Justification of Assumptions. This summary shall include (1) calculations supporting the assumptions; (2) a detailed evaluation of how all ARARs identified for this project will be met; (3) a plan for minimizing environmental and public impacts; and (4) a plan for satisfying permitting requirements.

d. Health and Safety Plan (HASP). Prepare a Site-specific HASP that specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120 (l)(1) and (l)(2).

e. Quality Assurance Project Plan (QAPP). The QAPP will specify all sampling and chemical analyses to be and shall meet the requirements of EPA's National Functional Guidelines for Inorganic Data Review, (EPA 540-R-10-011, OSWER 9240.1-51, January 2010) and shall be consistent with the requirements of EPA's Contract Laboratory Program (CLP) for laboratories proposed outside of the CLP. The QAPP shall contain third party data validation procedures to ensure data is of known quality.

f. Sampling and Analyses Plan (SAP). Prepare a SAP that defines the sampling and data collection methods that shall be used for the project. The SAP shall include sampling

ED_004715A_00030571-00072

objectives; sample locations and frequency; sampling equipment and procedures; disposal of investigatory derived waste; sample shipment; sample handling and analyses; and a breakdown of samples to be analyzed through a Contract Laboratory Program (CLP)-equivalent laboratory, as well as the justification for those decisions. The SAP shall consider the use of all existing data and shall justify the need for additional data whenever existing data will meet the same objective. The SAP shall be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and field information required.

g. Storm Water Pollution Prevention Plan (SWPPP). The EAWP will include a description of the applicable BMPs that will be implemented to maintain surface water quality during the EA construction.

h. Construction Quality Assurance Plan. The Respondent shall submit as part of the EAWP a Construction Quality Assurance (CQA) Plan. The CQA Plan shall include, but not be limited to, the inspection of the installation of any pipe, turf reinforcement mat, silt fence and other erosion-control devices, seed and mulch, precast concrete structures, grout, geotextiles, and other miscellaneous materials, required geotechnical testing of earthwork and various materials, and construction reporting and communications. The CQA Plan shall include but not be limited to construction inspection, verification sampling and testing of earthwork and various materials, review of material submittals, and reporting and communications pertaining to the CQA process. At a minimum, the CQA Plan shall provide requirements for the following elements:

    i. Responsibility and authority of Respondent and all contractors involved in the EA construction.

    ii. CQA Personnel Qualifications. The Respondent shall establish the minimum qualifications of the CQA Officer and supporting inspection personnel.

    iii. Inspection Activities. The Respondent shall establish the observations and tests that will be required to monitor the construction and/or installation of the components of the EA. The plan shall include the scope and frequency of each type of inspection to be conducted. Inspections shall be required to verify compliance with environmental requirements. Inspections shall also ensure compliance with all health and safety procedures.

    iv. Sampling requirements. The Respondent shall establish proposed requirements for sampling activities, sample size, sample locations, frequency of testing, criteria for acceptance and rejection, and plans for correcting problems as addressed in the project specifications.

    v. Documentation. The Respondent shall describe the reporting requirements for CQA activities. This shall include such items as daily summary reports and inspection data sheets.

i. Preliminary Cost Estimate of the costs of all the elements of the Early Action.

The EAWP shall include a detailed description of the technical approach for the construction activities. The necessary procedures, inspections, deliverables, and schedules shall be specified. A comprehensive construction management schedule for completion of each major activity and

ED_004715A_00030571-00073

deliverable shall also be included. It is intended to serve as a field reference for both the Respondent and Agencies' personnel as the EA is implemented. The EAWP will include:

1. The Respondent's technical approach to each task to be performed, including a detailed description of each task; the assumptions used; the information needed for each task; any information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the Agencies.
2. Construction schedule.
3. An organizational structure which outlines the responsibilities and authority of all organizations and key personnel involved in the EA. A description of Respondent's key project personnel's qualifications (Project Coordinator, Resident Engineer, quality assurance official, etc.) shall also be provided. The organizational structure shall include the Respondent, the Agencies and their respective contractors.
4. Statement of qualifications for Respondent's subcontractors. The Respondent will provide written acknowledgement that any subcontractors working on the RA have received and read a copy of the Settlement Agreement and this SOW at least 15 days prior to onset of work.
5. Best Management Practices (BMPs) shall be implemented during construction to minimize erosion, sedimentation, and dust generation. The BMPs shall include, but not be limited to silt fences, straw bales, fuel storage/handling and/or waste staging/storage areas, temporary sedimentation ponds, and watering to control dust generation, as needed.
6. Process for requesting and obtaining approval for any modifications to the final design prior to initiation of such modifications.
7. Process for documenting approved modifications to the final design.
8. Waste Management Procedures that outline the process, procedures, and safeguards that will be used to ensure hazardous substances, pollutants, or contaminants are not released on- or off-Site during the implementation of the EA. Any plans and procedures prepared during the design should be referenced or adapted whenever possible (i.e. sediment and erosion control plan).
9. Procedure for addressing any unexpected archaeological and/or paleontological discoveries encountered during construction.
10. Inspection Activities. The Respondent shall establish the observations and tests that will be required to monitor the construction and/or installation of the components of the EA. The plan shall include the scope and frequency of each type of inspection to be conducted. Inspections shall be required to verify compliance with environmental requirements and include, but not be limited to, air quality and emissions monitoring records, and waste disposal records. Inspections shall also ensure compliance with all health and safety procedures and BMPs.
11. Identification of post-construction Operations, Maintenance and Monitoring requirements.
12. Schedule and content of weekly progress reports.

Final Early Action Design Report/Early Action Work Plan

Respondent shall submit a proposed Final EADR/EAWP within 45 days after receipt of the Agencies' comments on the draft report. If the Agencies require revisions to the proposed Final

ED_004715A_00030571-00074

EADR/EAWP, Respondent shall resubmit a proposed Final EADR/EAWP within 30 days after receipt of the Agencies' comments. EPA will notify Respondent of the approval of the EADR/EAWP and authorization to implement the EA.

Early Action Implementation

Respondent shall implement the EA in accordance with the specifications, plans, and schedule set forth in the approved EADR/EAWP. The Respondent shall notify the Agencies no less than 5 Working Days prior to initiating construction activities. Other notifications may be requested by the EPA project manager (i.e. stop work, etc.).

Project Completion and Close Out

The purpose of the project completion and close-out activities is for the Respondent to conduct the necessary inspections to verify completed work and prepare a Final Early Action Report. In addition, the post-construction monitoring and effectiveness evaluation requirements are established. Project completion and close-out will consist of the following activities:

1. Removal of Temporary facilities. The Respondent shall dismantle, pack up, and move off-Site any temporary facilities (i.e. trailers) or equipment installed and used during the course of the EA.
2. Site Restoration. The Respondent shall restore the physical appearance of the Site according to the approved design (i.e. road restoration, fence removal, reseeding with approved seed mix, etc.).
3. Make Pre-Final/Final Construction Inspection. The Respondent shall conduct a Pre-final Construction Inspection with the Respondent's Project Coordinator, Design Engineer, the contractor, Third Party Oversight Engineer, EPA, and Support Agency representatives. The Pre-Final Construction Inspection shall occur 30 days prior to Respondent's projected date for construction completion. This Pre-Final Construction Inspection will be used to develop a punch list of outstanding construction items and deficiencies. The Respondent shall prepare and submit a Pre-Final Construction Inspection Technical Memorandum (TM) which includes the list of outstanding construction items, deficiencies, completion dates for outstanding items and deficiencies, and the date for the Final Inspection to determine if punch list and all terms of the design have been satisfied. The Pre-Final Construction Inspection TM shall be submitted within 30 days after the Pre-Final Construction Inspection. The Final Construction Inspection shall occur within 30 days after completion of outstanding items identified by the Pre-Final Construction Inspection. The Construction Inspection Report shall be submitted within 90 days after completion of the Final Construction Inspection.
4. The Draft Early Action Report shall be submitted within 90 days after the submittal of the Construction Inspection Report. The Draft Final Early Action Report shall be submitted within 30 days after receipt of the Agencies' comments. The Final Early Action Report shall be submitted within 30 days after receipt of the Agencies comments on the Draft Early Action Report.
5. An addendum to the RI work plan will be submitted to describe the effectiveness monitoring required for each EA, which will be operated and maintained for the duration of the RI/FS. The performance will be assessed in the FS to support identification of a Site remedy.

ED_004715A_00030571-00075

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA - 330/9-78-991-R.

"Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

"QA/R-5 *EPA Requirements for Quality Assurance Project Plans* (latest draft or revision) and EPA QA/G-5 *EPA Guidance for Quality Assurance Project Plans* (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies, and EPA QA/G-4 Guidance for the Data Quality Objective Process"

"Interim Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.

"Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.

ED_004715A_00030571-00076

"CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.

"Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.

"Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008. "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.

"Health and Safety Requirements of Employees Employed in Field Activities", U.S.EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.

"Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.

DRAFT

ED_004715A_00030571-00077

FIGURES

DRAFT

ED_004715A_00030571-00078

Figure 1 – Early Action Water Diversion Plan for Hennessy Creek

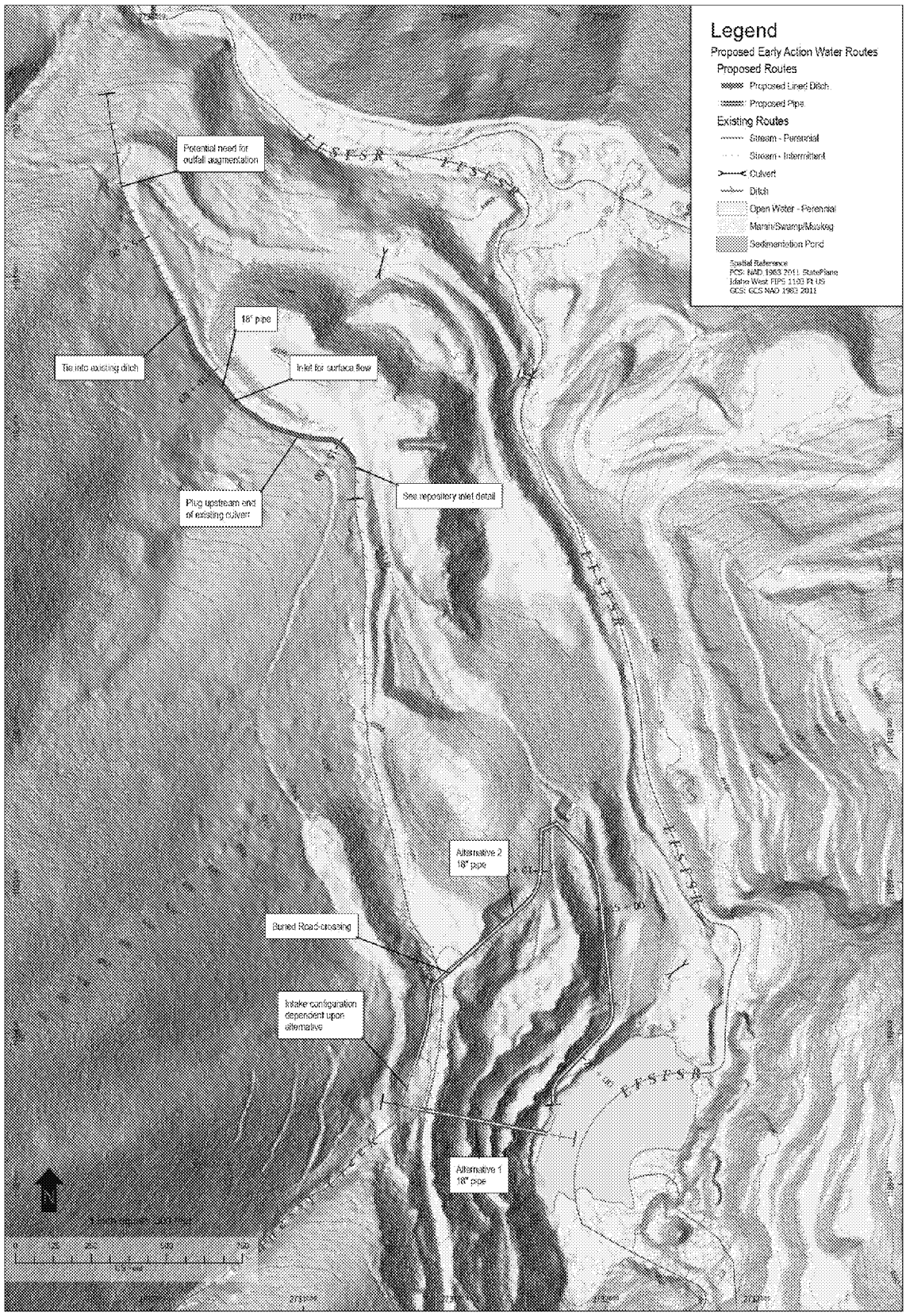


Figure 2 – Early Action Water Diversion Details for Hennessy Creek

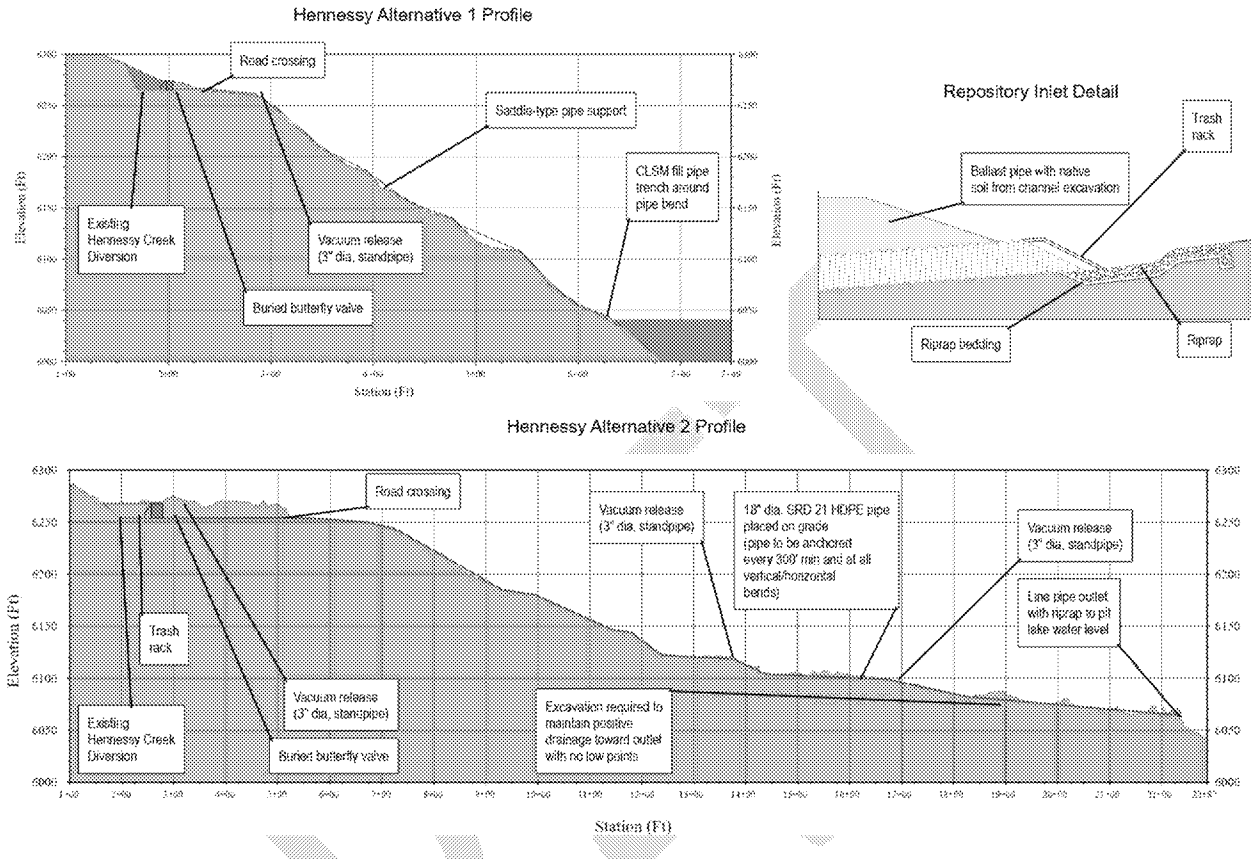


Figure 3 – Early Action Water Diversion Design for DMEA Waste Rock Dump Area

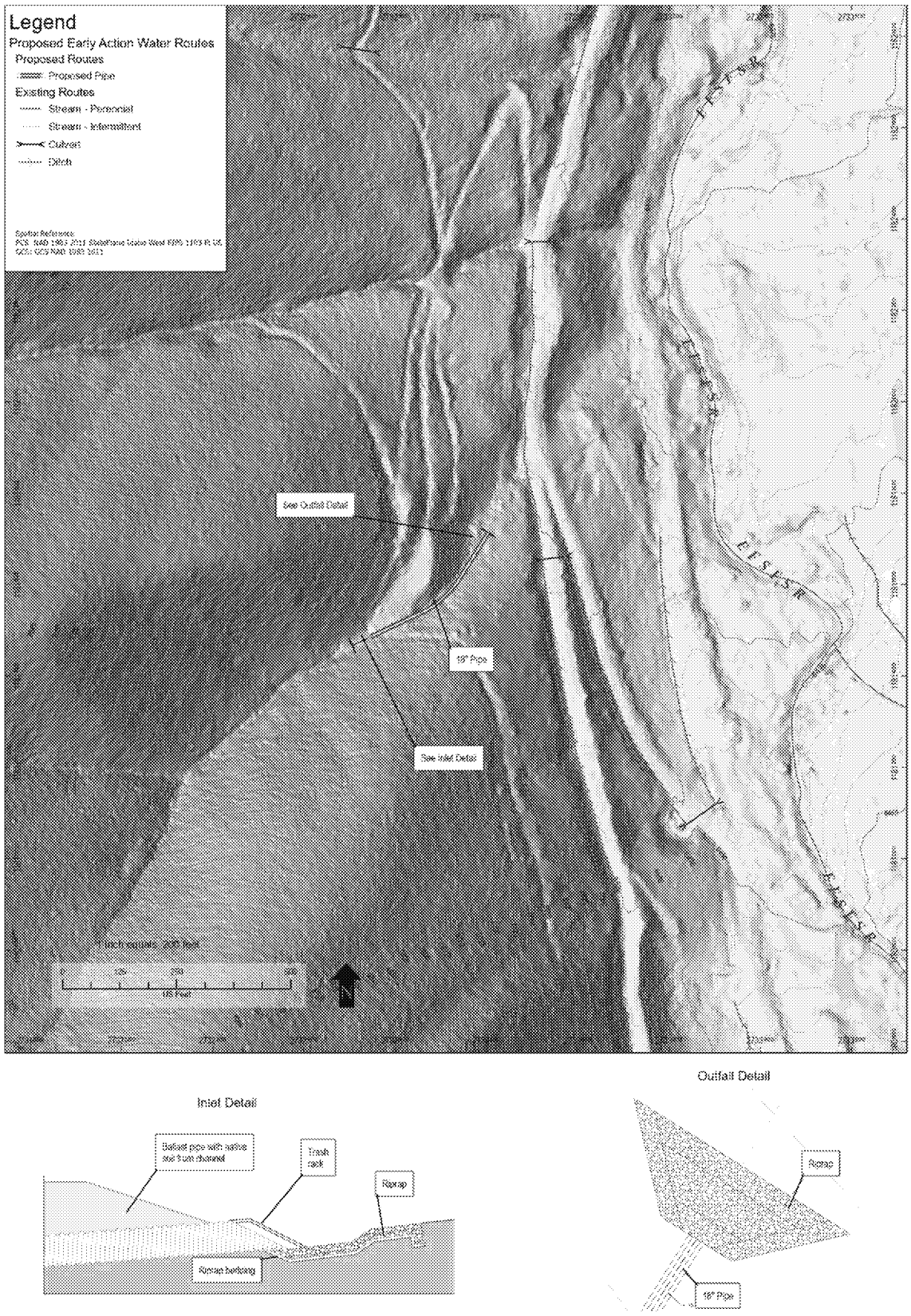
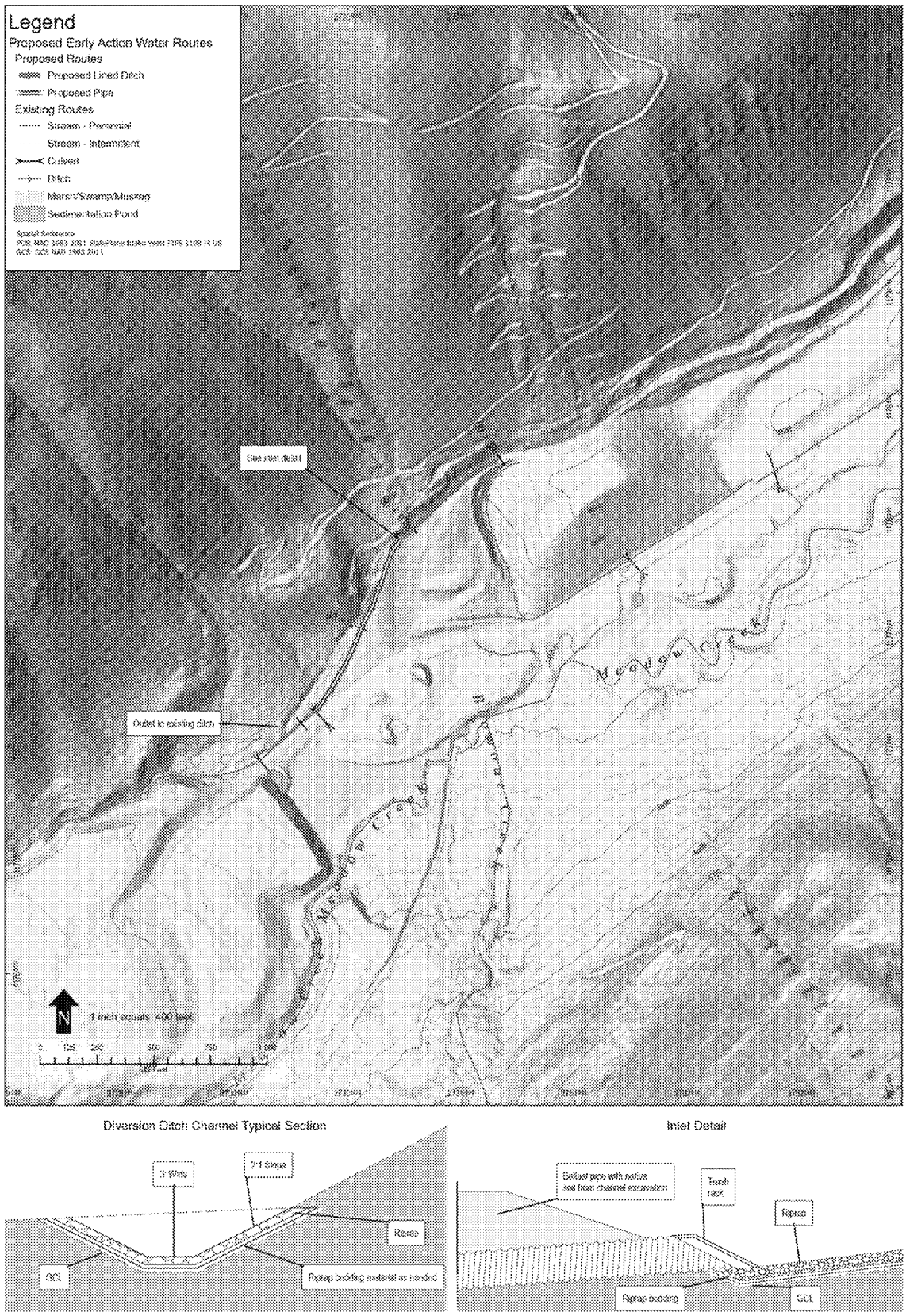


Figure 4 – Early Action Water Diversion Plan for Former Bradley Mill and Smelter Area



ATTACHMENTS

DRAFT

ED_004715A_00030571-00083

Attachment A – Suggested RI/FS Work Plan Format

Executive Summary

1. Introduction
2. Site Background and Setting
3. Initial Evaluation
   - Types and volumes of waste present
   - Potential pathways of contaminant migration/preliminary public health and environmental impacts
   - Preliminary identification of operable units
   - Preliminary identification of response objectives and remedial action alternatives
4. Work Plan Rationale
   - DQO needs
   - Work Plan approach
5. RI/FS Tasks
6. Cost and Key Assumptions
7. Schedule
8. Project Management
   - Staffing
   - Coordination
9. References

Appendices

DRAFT

ED_004715A_00030571-00084

Attachment B – Suggested Format for Sampling and Analysis Plan

Field Sampling Plan (FSP)

1. Site Background
2. Sampling Objectives
3. Sample Location and Frequency
4. Sample Designation
5. Sampling Equipment and Procedures
6. Sample Handling and Analysis

Quality Assurance Project Plan (QAPP)

Project Management

A1 Title and Approval Sheet
A2 Table of Contents
A2 Distribution List
A4 Project/Task Organization
A5 Problem Definition/Background
A6 Project/Task Description
A7 Quality Objectives and Criteria
A8 Special Training/Certifications
A9 Documentation and Records

Data Generation and Acquisition

B1 Sampling Process Design (Experimental Design)
B2 Sampling Methods
B3 Sample Handling and Custody
B4 Analytical Methods
B5 Quality Control
B6 Instrument/Equipment Testing, Inspection, and Maintenance
B7 Instrument/Equipment Calibration and Frequency
B8 Inspection/Acceptance of Supplies and Consumables
B9 Non-direct Measurements
B10 Data Management

Assessment and Oversight

C1 Assessments and Response Actions
C2 Reports to Management

Data Validation and Usability

D1 Data Review, Verification, and Validation
D2 Verification and Validation Methods
D3 Reconciliation with User Requirements

DRAFT

Attachment C – Suggested Remedial Investigation Report Format

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization
2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology
4. Nature and Extent of Contamination
   - 4.1 Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:

ED_004715A_00030571-00086

4.1.1 Sources (lagoons, sludges, tanks, etc.)
4.1.2 Soils and Vadose Zone
4.1.3 Ground Water
4.1.4 Surface Water and Sediments
4.1.5 Air

5. Contaminant Fate and Transport
   5.1 Potential Routes of Migration (i.e., air, groundwater, etc.)
   5.2 Contaminant Persistence
      5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest
   5.3 Contaminant Migration
      5.3.1 Discuss factors affecting contaminant migration for the media of important (e.g., sorption onto soils, solubility in water, movement of ground water, etc.)
      5.3.2 Discuss modeling methods and results, if applicable
6. Baseline Risk Assessment
   6.1 Human Health Evaluation
      6.1.1 Exposure Assessment
      6.1.2 Toxicity Assessment
      6.1.3 Risk Characterization
   6.2 Environmental Evaluation
7. Summary and Conclusions
   7.1 Summary
      7.1.1 Nature and Extent of Contamination
      7.1.2 Fate and Transport
      7.1.3 Risk Assessment
   7.2 Conclusions
      7.2.1 Data Limitations and Recommendations for Future Work
      7.2.2 Recommended Remedial Action Objectives

Appendices
   A. Technical Memorandum on Field Activities (if available)
   B. Analytical Data and QA/QC Evaluation Results
   C. Risk Assessment Methods

DRAFT

Attachment D – Suggested Format for Feasibility Study Report

Executive Summary

1. Introduction
    - 1.1 Purpose and Organization Report
    - 1.2 Background Information (Summarized from RI Report)
        - 1.2.1 Site Description
        - 1.2.2 Site History
        - 1.2.3 Nature and Extent of Contamination
        - 1.2.4 Contaminant Fate and Transport
        - 1.2.5 Baseline Risk Assessment
2. Identification and Screening of Technologies
    - 2.1 Introduction
    - 2.2 Remedial Action Objectives – Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.) For each medium, the following should be discussed:
        - Contaminants of interest
        - Allowable exposure based on risk assessment (including ARARs) Development of remediation goals
    - 2.3 General Response Actions – For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
    - 2.4 Identification and Screening of Technology Types and Process Options – For each medium of interest, describe:
        - 2.4.1 Identification and Screening of Technologies
        - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies
3. Development and Screening of Alternatives
    - 3.1 Development of Alternatives – Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
    - 3.2 Screening of Alternatives (if conducted)
        - 3.2.1 Introduction
        - 3.2.2 Alternative 1
            - 3.2.2.1 Description
            - 3.2.2.2 Evaluation
        - 3.2.2 Alternative 2
            - 3.2.2.1 Description
            - 3.2.2.2 Evaluation
        - 3.2.3 Alternative 3

ED_004715A_00030571-00088

3.2.3.1 Description
3.2.3.2 Evaluation

4. Detailed Analysis of Alternatives
4.1 Introduction
4.2 Individual Analysis of Alternatives
4.2.1 Alternative 1
4.2.1.1 Description
4.2.1.2 Evaluation
4.2.2 Alternative 2
4.2.2.1 Description
4.2.2.2 Evaluation
4.2.3 Alternative 3
4.2.3.1 Description
4.2.3.2 Evaluation
4.3 Comparative Analysis

DRAFT

ED_004715A_00030571-00089

Attachment E – Stibnite Mine RI/FS Statement of Work Schedule

Early Actions (separate documents will be submitted for each Early Action)

- Draft Early Action Design Report / Early Action Work Plan due within 30 days after the Effective Date of the Settlement Agreement/CO.
- Proposed Final Early Action Design Report/Early Action Work Plan due within 45 days after receipt of consolidated Agency comments on the draft.
- Final Early Action Design Report/Early Action Work Plan due within 30 days after receipt of consolidated Agency comments on the proposed final.
- EA construction: notify the Agencies 5 working days before start of construction
- Pre-Final Construction Inspection: 30 days prior to projected Project Completion.
- Pre-Final Construction Inspection TM due within 30 days after the Pre-Final Construction Inspection
- Final Construction Inspection due within 30 days after completion of outstanding items identified by the pre-final construction inspection.
- Construction Inspection Report due within 90 days after the Final Construction Inspection
- Draft Early Action Report due within 90 days of Agency comments on the Construction Inspection Report
- Draft Final Early Action Report due within 30 days of Agency comments on the Draft Early Action Report
- Final Early Action Report due within 30 days of Agency comments on the Draft Final Early Action Report
- Performance Monitoring – to be submitted as an RI Work Plan Addendum due concurrently with the Final Early Action Design Report/Early Action Work Plan

<u>RI/FS Work Plan/Sampling and Analysis Plan (WP/SAP):</u>

- Draft due within 120 days after the Effective Date of the Settlement Agreement/CO.
- Final Work Plan due within 90 days of receipt of consolidated Agency comments.

Data Summary Reports (DSRs):

- Draft DSRs due within 120 days completion of each season's field work or within 90 days of the receipt of final laboratory data, whichever is earlier. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the completion date. Within 5 days of the receipt of final laboratory data for the preceding field season, Respondent shall provide written notification to EPA identifying the receipt date of final laboratory data.
- Final DSRs due within 30 days of receipt of consolidated Agency comments.

ED_004715A_00030571-00090

Remedial Investigation Report (RI):

- Submit draft RI within 120 days after receipt of laboratory data from the final field season. Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final RI due within 60 days of receipt of consolidated Agency comments.

Baseline Risk Assessment Report (BLRA):

- Submit draft BLRA within 60 days after submittal of Final RI.
- Final BLRA due within 60 days of receipt of consolidated Agency comments.

Feasibility Study (FS):

- Submit draft FS within 120 days after submittal of BLRA Report.
- Final FS due within 90 days of receipt of consolidated Agency comments.

Data Validation Summaries (DVSs):

- DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be due within 30 days receipt of notice by Respondent that said Deliverable is required.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

Quarterly Progress Reports

- Quarterly Progress Reports shall be due 15 days after the end of the previous calendar quarter.

[1] Documents may initially be released as "draft final" pending final resolution of issues.

ED_004715A_00030571-00091

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 3/26/2020 6:35:38 PM
To: 'Bradley M. Marten' [bmarten@martenlaw.com]
CC: 'John Meyer' [JMeyer@midasgoldcorp.com]; 'Michael Bogert' [mbogert@midasgoldinc.com]
Subject: RE: Elizabeth on board with "workshops".

I think it's a good idea to have our technical teams get together and have some detailed conversations.

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Thursday, March 26, 2020 11:24 AM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: John Meyer <JMeyer@midasgoldcorp.com>; Michael Bogert <mbogert@midasgoldinc.com>
Subject: Re: Elizabeth on board with "workshops".

Sorry, Elizabeth – that was just to confirm that that makes sense to you and Michael and John. Seems like all on board.

From: Bradley Marten <bmarten@martenlaw.com>
Date: Thursday, March 26, 2020 at 11:22 AM
To: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Cc: John Meyer <JMeyer@midasgoldcorp.com>, Michael Bogert <mbogert@midasgoldinc.com>
Subject: Elizabeth on board with "workshops".

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: McKenna, Elizabeth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=859179A8CB0547BC974DC0241E973D37-MCKENNA, ELIZABETH]
Sent: 1/18/2020 1:22:19 AM
To: Bradley M. Marten [bmarten@martenlaw.com]
CC: Laurel Sayer [lsayer@midasgoldinc.com]; Bogert Michael [mbogert@midasgoldinc.com]
Subject: RE: Stibnite Mine

Just checking in because it sounded like Midas was prepared to share its interim action proposals with other parties and the longer EPA has to digest the ideas, the more productive the meeting on the 30th will be. If the proposals are not ready to share with the parties, then EPA will look forward to receiving them on the 23rd. Thanks very much.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Friday, January 17, 2020 5:11 PM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: Laurel Sayer <lsayer@midasgoldinc.com>; Bogert Michael <mbogert@midasgoldinc.com>
Subject: Re: Stibnite Mine

Elizabeth:

When we met on Monday, Midas committed to get its proposed list of projects to you in the 23rd - a week prior to our meeting on the 30th. We still plan to do so. Please let me know if you have any questions.

Sent from my iPhone

On Jan 17, 2020, at 11:12 AM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

Hi Brad. I'm checking in to see if Midas will share its list of potential interim actions with EPA. I understand from other parties that Midas has offered to share the interim actions with them, and that Midas will be meeting with the Shoshone Bannock Tribes to discuss the interim actions next week. It would facilitate our discussion on the 30th Midas could send EPA the proposals as soon as possible. Thanks very much.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016
<image002.png>

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 1/18/2020 1:10:32 AM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Laurel Sayer [lsayer@midasgoldinc.com]; Bogert Michael [mbogert@midasgoldinc.com]
Subject: Re: Stibnite Mine

Elizabeth:

When we met on Monday, Midas committed to get its proposed list of projects to you in the 23rd - a week prior to our meeting on the 30th. We still plan to do so. Please let me know if you have any questions.

Sent from my iPhone

On Jan 17, 2020, at 11:12 AM, McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov> wrote:

Hi Brad. I'm checking in to see if Midas will share its list of potential interim actions with EPA. I understand from other parties that Midas has offered to share the interim actions with them, and that Midas will be meeting with the Shoshone Bannock Tribes to discuss the interim actions next week. It would facilitate our discussion on the 30th Midas could send EPA the proposals as soon as possible. Thanks very much.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016
<image002.png>

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 7/16/2020 5:41:26 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: Michael Bogert [mbogert@midasgoldinc.com]
Subject: Stibnite

Elizabeth -- We're ok with whatever HQ is willing to approve you do.

Bradley M. Marten
Partner

M- 206-999-1808
D - 206 . 292 . 2604
T - 206 . 292 . 2600
E - bmarten@martenlaw.com
martenlaw.com
1191 Second Ave, Suite 2200
Seattle, WA 98101

MARTEN LAW

From: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Date: Wednesday, July 15, 2020 at 1:07 PM
To: Bradley Marten <bmarten@martenlaw.com>
Subject: Stibnite

Hi Brad. I left you a voicemail, but I'm following up with an email in case you see this first. I am checking in regarding the agreement we had with Midas that settlement communications would be shared with the Shoshone-Banock Tribes and the Nez Perce. HQ did not realize that we had established the protocol of sharing communications with the Tribes when it sent the settlement proposal to Midas and did not copy the Tribes on the letter. Can you please confirm that Midas would not object to HQ sharing EPA's proposal with the Tribes? Thank you.

Elizabeth

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not

intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 3/23/2020 10:49:36 PM
To: Bottcher, Helen [Bottcher.Helen@epa.gov]
CC: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; L. Michael Bogert [mbogert@midasgoldinc.com]; Bradley Marten [bmarten@martenlaw.com]
Subject: Re: Stibnite - next steps

Helen,
Thanks for touching base.
As discussed, we would like to take you up on your offer to convene a technical meeting to discuss potential Stibnite Mine Early Actions.
Thursday at 10:00am PST works well for us.
Since we will want to have video conferencing capabilities for the call, I have setup a Zoom Meeting. I will send the Zoom information in a separate meeting invitation. You can simply cut/paste the Zoom information into your meeting invitation.
Talk to you on Thursday. Until then, stay safe.
Regards,
John

From: Helen Bottcher <Bottcher.Helen@epa.gov>
Date: Monday, March 23, 2020 at 3:15 PM
To: John Meyer <JMeyer@midasgoldcorp.com>
Cc: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Subject: Stibnite - next steps

Hi, John. I hope your review of the table I sent last week is going OK. I don't want to push you because I know we gave you a lot to think through. But please know the government parties are ready and willing to answer your questions. We have two times for a potential meeting blocked off in the near future:

- Thursday, March 26 -- 10:00 AM to 11:30 AM Pacific Time
- Monday, March 30 -- 1:00 PM to 2:30 PM Pacific Time

Please let me know if you want to schedule a joint meeting with Midas and the government parties on either date.

If we could see your questions and/or initial response in writing before a meeting, that would promote a productive discussion. But we're also happy to just listen if you want to talk us through your thinking in the meeting.

Regards,

Helen Bottcher | U.S. Environmental Protection Agency, Region 10
1200 Sixth Ave, Suite 155 (12-D12-1) | Seattle, WA 98101 | 206.553.6069 | bottcher.helen@epa.gov

Warning: This email originated externally. **DO NOT CLICK** links if the sender is unknown.

Message

From: John Meyer [JMeyer@midasgoldcorp.com]
Sent: 3/26/2020 6:39:14 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]; Bradley M. Marten [bmarten@martenlaw.com]
CC: L. Michael Bogert [mbogert@midasgoldinc.com]
Subject: RE: Elizabeth on board with "workshops".

Elizabeth,
We are certainly aligned with that approach.
Thanks,
John

From: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Sent: Thursday, March 26, 2020 12:36 PM
To: Bradley M. Marten <bmarten@martenlaw.com>
Cc: John Meyer <JMeyer@midasgoldcorp.com>; L. Michael Bogert <mbogert@midasgoldinc.com>
Subject: RE: Elizabeth on board with "workshops".

I think it's a good idea to have our technical teams get together and have some detailed conversations.

Elizabeth McKenna | Assistant Regional Counsel
US Environmental Protection Agency, Region 10
1200 Sixth Avenue | Suite 155, M/S 11-C07
Seattle, WA 98101
(206) 553-0016

From: Bradley M. Marten <bmarten@martenlaw.com>
Sent: Thursday, March 26, 2020 11:24 AM
To: McKenna, Elizabeth <Mckenna.Elizabeth@epa.gov>
Cc: John Meyer <JMeyer@midasgoldcorp.com>; Michael Bogert <mbogert@midasgoldinc.com>
Subject: Re: Elizabeth on board with "workshops".

Sorry, Elizabeth – that was just to confirm that that makes sense to you and Michael and John. Seems like all on board.

From: Bradley Marten <bmarten@martenlaw.com>
Date: Thursday, March 26, 2020 at 11:22 AM
To: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Cc: John Meyer <JMeyer@midasgoldcorp.com>, Michael Bogert <mbogert@midasgoldinc.com>
Subject: Elizabeth on board with "workshops".

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Warning: This email originated externally. **DO NOT CLICK** links if the sender is unknown.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 3/26/2020 6:24:04 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: John Meyer [JMeyer@midasgoldcorp.com]; Michael Bogert [mbogert@midasgoldinc.com]
Subject: Re: Elizabeth on board with "workshops".

Sorry, Elizabeth – that was just to confirm that that makes sense to you and Michael and John. Seems like all on board.

From: Bradley Marten <bmarten@martenlaw.com>
Date: Thursday, March 26, 2020 at 11:22 AM
To: "McKenna, Elizabeth" <Mckenna.Elizabeth@epa.gov>
Cc: John Meyer <JMeyer@midasgoldcorp.com>, Michael Bogert <mbogert@midasgoldinc.com>
Subject: Elizabeth on board with "workshops".

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Message

From: Bradley M. Marten [bmarten@martenlaw.com]
Sent: 3/26/2020 6:22:09 PM
To: McKenna, Elizabeth [Mckenna.Elizabeth@epa.gov]
CC: John Meyer [JMeyer@midasgoldcorp.com]; Michael Bogert [mbogert@midasgoldinc.com]
Subject: Elizabeth on board with "workshops".

This e-mail may contain confidential and privileged information and is sent for the sole use of the intended recipient. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

Appointment

From: Bellamy, Diana [bellamy.diana@epa.gov]
Sent: 4/12/2019 7:52:53 PM
To: Bellamy, Diana [bellamy.diana@epa.gov]; lisa.alcorn@usda.gov; tamara.allen@state.co.us; kathleenbenedetto@ios.doi.gov; marcie@mountianstudies.org; Bradfish, Larry [Bradfish.Larry@epa.gov]; tbridgeford@nma.org; ann.carpenter57@gmail.com; Castelli, Kayleen [castelli.kayleen@epa.gov]; Chalfant, Mark [Chalfant.Mark@epa.gov]; Chancellor, Erin [chancellor.erin@epa.gov]; acoleman@mt.gov; Warren.colyer@tu.org; mcompton@miningamerica.org; Conway, Bette [Conway.Bette@epa.gov]; Cook, Steven [cook.steven@epa.gov]; Dixon, Douglas [Dixon.Douglas@epa.gov]; MBDonnelly@newmont.com; rellis@imcc.isa.us; Doug.Fitzgerald@mail.house.gov; HOLLY.FLINIAU@OGC.USDA.GOV; jgardner@ndep.nv.gov; jgear@coeur.com; jerry.goad@coag.gov; Gorke, Roger [Gorke.Roger@epa.gov]; jeff.graves@state.co.us; Jay Hawkins [jhawkins@osmre.gov]; Hillenbrand, John [Hillenbrand.John@epa.gov]; Courtney Hoover [courtney_hoover@ios.doi.gov]; Ismert, Peter [Ismert.Peter@epa.gov]; Doug Jamison [doug.jamison@state.co.us]; Ketellapper, Victor [Ketellapper.Victor@epa.gov]; aimee.konowal@state.co.us; Kulpan, Bruce [Kulpan.Bruce@epa.gov]; Lentz, Rachel [Lentz.Rachel@epa.gov]; dlloyd@blm.gov; saludwig@fs.fed.us; Mackey, Cyndy [Mackey.Cyndy@epa.gov]; fourmilewatershed@gmail.com; Mahmud, Shahid [Mahmud.Shahid@epa.gov]; McFadden, Angela [McFadden.Angela@epa.gov]; McGrath, Patricia [mcgrath.patricia@epa.gov]; Miles, Erin [Miles.Erin@epa.gov]; Moreen, Ed [Moreen.Ed@epa.gov]; Steve.Moyer@tu.org; ODea, Elise [odea.elise@epa.gov]; Trisha.Oeth@state.co.us; Ostendorf, Jody [ostendorf.jody@epa.gov]; patrick.j.pfaltzgraff@state.co.us; Sachs, Robert [Sachs.Robert@epa.gov]; lsayer@midasgoldinc.com; Dustin_Sherer@gardner.senate.gov; eshirley@blm.gov; hillary_smith@nps.gov; dstruhsacker@sbcglobal.net; kwaltond@usgs.gov; Jason.willis@tu.org; Williams, Laura [williams.laura@epa.gov]; Woolford, James [Woolford.James@epa.gov]; dyoung@keystone.org; kbenedetto@blm.gov; marcie@mountainstudies.org; jparshley@srk.com
CC: Wallace-Wilson, Barbara [Wallace-Wilson.Barbara@epa.gov]; Gartner, Lois [Gartner.Lois@epa.gov]; Bloom, Judy [Bloom.Judy@epa.gov]; Jenkins, Joy [Jenkins.Joy@epa.gov]; Thompson, Christopher [Thompson.Christopher@epa.gov]; dana.swift@deq.idaho.gov; Wyatt, Jean [Wyatt.Jean@epa.gov]; Miller, Johanna [Miller.Johanna@epa.gov]; L. Michael Bogert [mbogert@midasgoldinc.com]; Fronczak, David [Fronczak.David@epa.gov]; Dunham, Ryan [Dunham.Ryan@epa.gov]; Chisholm, Joseph [chisholm.joseph@epa.gov]; Blackburn, Robyn [Blackburn.Robyn@epa.gov]; robyn_a_blackburn@fws.gov; Atencio, Kathie [Atencio.Kathie@epa.gov]

Subject: AML Good Samaritan Meeting April 17th, 2019
Location: Skype Meeting and In-Person locations at Bison Bitterroot and Rocky Mountain, Denver, CO

Start: 4/17/2019 2:00:00 PM
End: 4/17/2019 11:00:00 PM
Show Time As: Busy

Appointment

From: Bellamy, Diana [bellamy.diana@epa.gov]
Sent: 4/12/2019 7:52:53 PM
To: Bellamy, Diana [bellamy.diana@epa.gov]; lisa.alcorn@usda.gov; tamara.allen@state.co.us; kathleenbenedetto@ios.doi.gov; marcie@mountianstudies.org; Bradfish, Larry [Bradfish.Larry@epa.gov]; tbridgeford@nma.org; ann.carpenter57@gmail.com; Castelli, Kayleen [castelli.kayleen@epa.gov]; Chalfant, Mark [Chalfant.Mark@epa.gov]; Chancellor, Erin [chancellor.erin@epa.gov]; acoleman@mt.gov; Warren.colyer@tu.org; mcompton@miningamerica.org; Conway, Bette [Conway.Bette@epa.gov]; Cook, Steven [cook.steven@epa.gov]; Dixon, Douglas [Dixon.Douglas@epa.gov]; MBDonnelly@newmont.com; rellis@imcc.isa.us; Doug.Fitzgerald@mail.house.gov; HOLLY.FLINIAU@OGC.USDA.GOV; jgardner@ndep.nv.gov; jgear@coeur.com; jerry.goad@coag.gov; Gorke, Roger [Gorke.Roger@epa.gov]; jeff.graves@state.co.us; Jay Hawkins [jhawkins@osmre.gov]; Hillenbrand, John [Hillenbrand.John@epa.gov]; Courtney Hoover [courtney_hoover@ios.doi.gov]; Ismert, Peter [Ismert.Peter@epa.gov]; Doug Jamison [doug.jamison@state.co.us]; Ketellapper, Victor [Ketellapper.Victor@epa.gov]; aimee.konowal@state.co.us; Kulpan, Bruce [Kulpan.Bruce@epa.gov]; Lentz, Rachel [Lentz.Rachel@epa.gov]; dlloyd@blm.gov; saludwig@fs.fed.us; Mackey, Cyndy [Mackey.Cyndy@epa.gov]; fourmilewatershed@gmail.com; Mahmud, Shahid [Mahmud.Shahid@epa.gov]; McFadden, Angela [McFadden.Angela@epa.gov]; McGrath, Patricia [mcgrath.patricia@epa.gov]; Miles, Erin [Miles.Erin@epa.gov]; Moreen, Ed [Moreen.Ed@epa.gov]; Steve.Moyer@tu.org; ODea, Elise [odea.elise@epa.gov]; Trisha.Oeth@state.co.us; Ostendorf, Jody [ostendorf.jody@epa.gov]; patrick.j.pfaltzgraff@state.co.us; Sachs, Robert [Sachs.Robert@epa.gov]; lsayer@midasgoldinc.com; Dustin_Sherer@gardner.senate.gov; eshirley@blm.gov; hillary_smith@nps.gov; dstruhsacker@sbcglobal.net; kwaltond@usgs.gov; Jason.willis@tu.org; Williams, Laura [williams.laura@epa.gov]; Woolford, James [Woolford.James@epa.gov]; dyoung@keystone.org; kbenedetto@blm.gov; marcie@mountainstudies.org; jparshley@srk.com
CC: Wallace-Wilson, Barbara [Wallace-Wilson.Barbara@epa.gov]; Gartner, Lois [Gartner.Lois@epa.gov]; Bloom, Judy [Bloom.Judy@epa.gov]; Jenkins, Joy [Jenkins.Joy@epa.gov]; Thompson, Christopher [Thompson.Christopher@epa.gov]; dana.swift@deq.idaho.gov; Wyatt, Jean [Wyatt.Jean@epa.gov]; Miller, Johanna [Miller.Johanna@epa.gov]; L. Michael Bogert [mbogert@midasgoldinc.com]; Fronczak, David [Fronczak.David@epa.gov]; Dunham, Ryan [Dunham.Ryan@epa.gov]; Chisholm, Joseph [chisholm.joseph@epa.gov]; Blackburn, Robyn [Blackburn.Robyn@epa.gov]; robyn_a_blackburn@fws.gov; Atencio, Kathie [Atencio.Kathie@epa.gov]

Subject: AML Good Samaritan Meeting April 17th, 2019
Attachments: Good Samaritan Meeting Agenda041219.docx; EPA AML Good Sam White Paper041219.docx; 2007cercla-goodsam-principles-mem.pdf; 2012-good-samaritan-CWAmemo-signed.pdf; EPA Good Sam Discussion '19.pptx; Recommendations from SMCRA Title IV State AML Programs.docx; Black Swan Project Paper 2019.04.10.pdf; EPA Security Protocol desktop version (003).docx
Location: Skype Meeting and In-Person locations at Bison Bitterroot and Rocky Mountain, Denver, CO

Start: 4/17/2019 2:00:00 PM
End: 4/17/2019 11:00:00 PM
Show Time As: Busy

All:

Welcome!

Please find attached materials for this conference.

Please find the above information for those who will be attending the AML Good Samaritan Meeting on April 17th 2019. For those who will be arriving for the conference in-person at the EPA Region8 location in Denver, Colorado, please accommodate time for traffic, parking, and Security Protocol prior your conference starting time. Coffee and water will be available, The Muffin Company is adjacent to our building, and other eatery nearby. For those who are hotel placed in or near downtown Denver we have the light rail trains and shuttles nearby for ease and comfort from traffic. I encourage you to check with RTD

(303) 299-6000; or Google map for train times; the 16th Street Shuttles run every 10 minutes during peak office hours.

For those who will participating by SKYPE please see the link below.

Shahid Mahmud will be arriving in Denver on Tuesday, April 16th approx., 10:00a.m.

On Monday, April 15th and Tuesday, April 16th if you have additional questions regarding security, teleconference, and other, you can reach me at (303)312-6244 or communicate with Shahid.

Diana

Diana Bellamy, SEE
Assessment & Revitalization Program
(303) 312-6244

Number of EPA attendees = 52; and 12 persons teleconference -Teleconference number:
Conference Phone Number: (b) (6)
Conference ID: (b) (6)

Join Skype Meeting

Trouble Joining? Try Skype Web App

Help

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

June 6, 2007

MEMORANDUM

SUBJECT: Interim Guiding Principles for Good Samaritan Projects at Orphan Mine Sites and Transmittal of CERCLA Administrative Tools for Good Samaritans

FROM: Granta Nakayama, Assistant Administrator, /s/
Office of Enforcement and Compliance Assurance

Susan Parker Bodine, Assistant Administrator, /s/
Office of Solid Waste and Emergency Response

Benjamin Grumbles, Assistant Administrator, /s/
Office of Water

Roger Martella, General Counsel, /s/
Office of General Counsel

TO: Regional Administrators, Regions I-X
Ronald Jay Tenpas, Acting Assistant Attorney General,
Environment & Natural Resources Division, U.S. Department of Justice

I. Background

EPA's Good Samaritan Initiative is an Agency-wide effort to facilitate the cleanup of certain watersheds affected by Orphan Mine Sites (as defined below) by encouraging the efforts of certain non-liable parties ("Good Samaritans") who are willing to voluntarily clean up some of these sites. Concerns about incurring potential liability under the Clean Water Act ("CWA") and the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") as a result of performing cleanup work at orphan mines have long discouraged voluntary cleanups at many of these sites. The Good Samaritan Initiative's principal purpose is to use the federal government's authority to provide greater legal certainty to Good Samaritans and resolve to the extent possible the threat of potential federal liabilities so that voluntary cleanups at these sites can proceed.

This guidance is intended to assist the Regions in the implementation of the Good Samaritan Initiative and focuses on administrative tools developed under CERCLA. As EPA gains more experience implementing this Initiative, the Agency may revise this guidance and the attached administrative tools.

Importantly, the Good Samaritan Initiative preserves CERCLA's "polluter pays" principle. These administrative tools are not intended in any way to absolve responsible parties of their liability under existing federal law for any environmental pollution. Rather, the tools are intended solely to aid non-liable parties in cleaning up Orphan Mine Sites.

EPA Regions, in consultation with the states, have the lead role in implementing the Good Samaritan Initiative. As early as practicable, prior to the implementation of a Good Samaritan project, a Region should consult with the state and any affected tribes regarding planning and implementation of the project. EPA will work with federal land management agencies to determine lead agency status for sites that are partially on federal and non-federal land.[1]

The administrative tools discussed in (and attached to) this Memorandum are intended for the performance of a removal action by a Good Samaritan at an Orphan Mine Site where the Good Samaritan's voluntary effort will accelerate partial or complete cleanup and will result in environmental improvement. Good Samaritan cleanups may allow for limited recycling or incidental reprocessing of historic tailings and waste piles to the extent that such actions are necessary for, and directly related to, the cleanup. A Good Samaritan project will not include the new extraction of remaining reserves. New extraction activities would need to comply with all applicable mining requirements. EPA anticipates that Good Samaritan cleanups will take place at sites that are not of federal interest. Thus, EPA does not expect that sites listed (or proposed for listing) on the National Priorities List and sites that are the subject of ongoing or planned removal actions, would be eligible for Good Samaritan cleanups under this Initiative.

II. Important Terms

For purposes of this guidance, the terms below have the following definitions:

"Good Samaritan" means a Person (as defined in CERCLA § 101(21)) who is rendering care, assistance, or advice in accordance with the NCP or at the direction of an onscene coordinator ("OSC"), by voluntarily agreeing to clean up contamination at an Orphan Mine Site, and who:

1. is not a past owner or current owner of the Property (i.e., a specified portion of the site) and has no intention of purchasing the Property in the future;
2. is not potentially liable for the remediation of the Existing Contamination (as defined below) pursuant to Sections 106 or 107 of CERCLA; and
3. is not potentially liable under any other federal, state or local law for the remediation of the Existing Contamination.

[1] For sites where the ownership includes both federally owned and non-federally owned land, EPA and the federal land management agency will need to coordinate with the Good Samaritan concerning the proposed activity. Regions should consult the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP") and Exec. Order No. 12,580, 52 Fed. Reg. 2,923 (1987), as amended by Exec. Order 13,016, 61 Fed. Reg. 45,871 (1996), in determining which agency will be the lead agency for a site.

ED_004715B_00000126-00002

As stated above, a Good Samaritan is an entity willing to perform cleanup work under CERCLA at an Orphan Mine Site even though it does not own the property, and does not intend to own it in the future. A person who would otherwise qualify as a bona fide prospective purchaser (BFPP) pursuant to Section 101(40) of CERCLA (because, among other things, the person acquires the property being cleaned up) should not be considered a Good Samaritan, but rather would have the protection from CERCLA liability provided by Section 107(r).[2]

Good Samaritans can include individuals, corporations, non-profit organizations, states, local governments, and municipalities that meet the criteria discussed above.

"Orphan Mine Site" means an abandoned, inactive hard rock mine or primary metal processing mill site for which, despite reasonable and diligent efforts, no financially viable party (except, for purposes of this guidance, the owner of the site who did not cause, contribute to, or exacerbate the contamination) is potentially liable to perform or pay for, or has been required to perform or pay for, environmental cleanup actions under applicable law.

"Existing Contamination" means any hazardous substances, pollutants or contaminants present or existing on or under the Property as of the effective date of the applicable settlement agreement (discussed below); any hazardous substances, pollutants or contaminants that migrated from the Property prior to the specified date; and any hazardous substances, pollutants or contaminants presently at the site that migrate onto or under or from the Property after the effective date of the applicable settlement agreement.

III. Tools to Address Good Samaritan Liability Concerns

Regions should work with states to encourage Good Samaritans to explore the use of state voluntary cleanup programs (VCPs) to perform cleanups at Orphan Mine Sites. VCPs generally are tailored to non-liable parties that volunteer to clean up abandoned, contaminated, lower-risk sites that are not of federal interest. The use of a VCP may be particularly appropriate where a Good Samaritan wishes to perform cleanup work that does not involve discharges to water. Typically, parties performing cleanups in compliance with VCPs receive a covenant not to sue from the relevant state. In addition, under CERCLA, Good Samaritans that clean up "eligible response sites" as defined in CERCLA § 101(40) in compliance with a VCP may enjoy an "enforcement bar" under CERCLA § 128(b), which provides that EPA may not use its CERCLA § 106 and 107 authorities except in specific circumstances.

EPA has developed two administrative tools for situations where a Region determines that potential federal liability under CERCLA should be addressed. These tools are intended to shield a qualifying Good Samaritan from potential liability under CERCLA that could arise as a result of conducting the cleanup of contamination. The first tool is a model Good Samaritan

---

[2] Often, BFPPs pursue cleanups at brownfields through state voluntary cleanup programs. In addition, EPA has developed a model work agreement for BFPPs performing significant removal work (beyond their statutory "reasonable steps" obligations) at sites of federal interest. See November 27, 2006 "Agreement and Order on Consent for Removal Action by Bona Fide Prospective Purchaser" at http://www.epa.gov/compliance/resources/policies/cleanup/superfund/bfpp-ra-mem.pdf.

ED_004715B_00000126-00003

Comfort/Status Letter. The second is a Model Good Samaritan Settlement Agreement and Order for Removal Actions at Orphan Mine Sites ("Good Samaritan Settlement Agreement"). Both tools cite to CERCLA § 107(d).[3] Guidelines for using these tools are provided in Section IV, below.

EPA, in consultation with the Good Samaritan, will choose the administrative tool that is most appropriate for a specific cleanup at an Orphan Mine Site. Regions should consider several factors when evaluating the most appropriate administrative tool, including:

1. the complexity and scope of the cleanup,
2. the risk and scope of potential liability, including the possibility of contribution litigation by third parties,
3. the availability of EPA resources (e.g., enforcement resources to prepare the administrative tool, oversight resources, etc.) and
4. the Good Samaritan's risk tolerance.

Regions should collect relevant information from a party wishing to be considered a Good Samaritan and to obtain one of the administrative tools. Relevant information includes:

1. Name and contact information for the Good Samaritan, description of entity (e.g., 501(c)(3), municipality, etc.), and any other information necessary to show the person qualifies as a Good Samaritan;
2. Description of mine site, current and historic owners/operators, nature and extent of contamination, and any prior site investigations or cleanup work performed (and CERCLIS number, if applicable);
3. Proposed work plan and description of the proposed cleanup project and monitoring, including a discussion of how the work will be consistent with the NCP;
4. A draft Health & Safety Plan and Quality Assurance and Sampling Plan;
5. Access agreement between the Good Samaritan who will conduct the work and the landowner;
6. Consent (or indicia thereof) by landowner to enter into agreement with EPA for site access using EPA model access agreement;
7. Evidence satisfactory to EPA that the Good Samaritan has sufficient financial resources to ensure timely and adequate completion of work;
8. A description of any contractual ties and financial arrangements (e.g., funding, site access, etc.) with any party who may have legal responsibility for the cleanup of the mine site;
9. A description of all funding sources for the work, including any funding being provided, directly or indirectly, by an owner of all or part of the site;
10. A description of the Good Samaritan's environmental record, including, for example, its involvement in prior Good Samaritan or similar cleanup projects, its involvement in environmental litigation or as a potentially responsible party at any other site; or its receipt of notices of violations, and

---

[3] CERCLA § 107(d) provides, in part:

". . . no person shall be liable under this subchapter for costs or damages as a result of actions taken or omitted in the course of rendering care, assistance, or advice in accordance with the [NCP] or at the direction of an onscene coordinator appointed under such plan, with respect to an incident creating a danger to public health or welfare or the environment as a result of any releases of a hazardous substance or the threat thereof. This paragraph shall not preclude liability for costs or damages as the result of negligence on the part of such person."

ED_004715B_00000126-00004

11. Documentation of findings that there are no liable, viable potentially responsible parties at the site (except for an owner of the site who did not cause, contribute to, or exacerbate the contamination at the site).

As a general matter, all on-site actions performed by a Good Samaritan pursuant to a Section 107(d) comfort/status letter or a Good Samaritan Settlement Agreement are required, to the extent practicable as determined by EPA considering the exigencies of the situation, to attain applicable or relevant and appropriate requirements (ARARs) under federal or state environmental or facility siting laws. Regions are encouraged to prepare Action Memoranda and Administrative Records for Good Samaritan cleanup projects.

Because Good Samaritan cleanups are anticipated to involve watersheds impacted by Orphan Mine Sites, the potential applicability of water quality standards to discharges from these sites as ARARs will need to be carefully considered and will be decided on a case-by-case basis. In some cases, Regions may determine that attainment of water quality standards at Orphan Mine Sites by Good Samaritans performing limited removal actions may not be practicable. Factors that Regions should consider in determining whether compliance with ARARs is practicable include: (1) the urgency of the situation and (2) the scope of the removal action to be conducted. 40 C.F.R. § 300.415(j). Regions should document such site-specific determinations in the Action Memorandum/ Administrative Record for the particular site. Regions should follow their standard procedures for coordinating with appropriate program offices (e.g., the Regional water office) and states in making these determinations. In cases where a Region has determined that attainment of water quality standards is not practicable given the exigencies of the situation, Good Samaritans will be required to meet site-specific work plan requirements for water quality in order to ensure that the project results in environmental improvement.

The Agency views the development of the work plan as a critical component of the Good Samaritan effort, as that is the best opportunity for the parties to discuss factors such as permanency, durability, and future uncertainties. This is particularly important to the success of Good Samaritan efforts, as their work is anticipated to be limited and/or of a defined duration. Completion of the project will be more readily recognized by both parties if uncertainties are acknowledged and expectations are clear from the start. While EPA wants to encourage as many capable and willing Good Samaritans as possible, the Agency always reserves the right to reject any proposed project if there is any concern regarding the environmental benefits that will be achieved, the financial viability or ability of the Good Samaritan to complete the work, or if the success of the project is in doubt.

IV. Guidelines Specific to the Use of the CERCLA § 107(d) Comfort/Status Letter

This administrative tool is intended as a straightforward, non-negotiable document that can be issued relatively quickly at the Regional level. A model Section 107(d) comfort/status letter is attached (see Attachment 1) and can be found at http://www.epa.gov/compliance/resources/policies/cleanup/superfund/goodsam-comfort-mod.pdf. The letter is intended to encourage Good Samaritans to perform NCP-compliant work at Orphan Mine Sites without having to invest time and resources in negotiating a formal settlement agreement with the federal government. EPA has successfully used comfort/status letters to provide information and assuage liability concerns

ED_004715B_00000126-00005

since issuing its Comfort/Status Letter Policy in 1997.[4] Comfort/status letters addressing aspects of the 2002 Brownfield Amendment landowner liability protections have proven particularly effective at promoting redevelopment. The attached Section 107(d) Comfort/Status Letter is modeled on this success.

Regions should provide a Section 107(d) comfort/status letter only when they determine that the Good Samaritan's proposed work plan is consistent with the NCP. A Regional OSC will oversee the work performed, as necessary, by the Good Samaritan. The extent of the OSC's oversight will depend on the complexity of the work to be performed. Regions should note that the comfort/status letter does not seek oversight reimbursement from the Good Samaritan. Accordingly, Regions should analyze whether their Superfund budgets can absorb the cost of the OSC's time, and should factor these costs into their analysis when deciding whether to provide a Good Samaritan with a Section 107(d) comfort/status letter.

Where appropriate (e.g., the work will involve a discharge to a navigable water), the Section 107(d) comfort/status letter may state that EPA has determined that attainment of water quality standards is not practicable considering the exigencies of the situation, applying 40 C.F.R. § 300.415(j) as a matter of policy. Factors that Regions should consider in determining whether compliance with ARARs is practicable include the urgency of the situation and the scope of the removal action to be conducted. Id. As discussed above, this determination is appropriate where justified by site-specific factors and properly documented in an Action Memorandum kept in the Administrative Record for the site. As stated above, Regions should follow their standard procedures for coordinating with appropriate program offices (e.g., the Regional water office) and states in making these determinations.

In addition, the comfort/status letter seeks to address concerns a Good Samaritan may have regarding CERCLA contribution suits by third parties as a result of taking on the voluntary work. The letter states that in the event that a third party brings or threatens a contribution lawsuit, EPA will be prepared to discuss entering into a Good Samaritan Settlement Agreement if appropriate, providing for (among other things) federal contribution protection under CERCLA.

V. Guidelines Specific to the Use of the Sample Good Samaritan Settlement Agreement

A Good Samaritan Settlement Agreement provides a federal CERCLA covenant not to sue and contribution protection in exchange for cleanup work by a Good Samaritan at an Orphan Mine Site. Approval by the U.S. Department of Justice ("DOJ") is required for Good Samaritan Settlement Agreements because the agreements rely on the inherent authority of the Attorney General to compromise and settle claims. A Model Good Samaritan Settlement Agreement is attached (see Attachment 2), and can also be found at http://www.epa.gov/compliance/resources/policies/cleanup/superfund/goodsam-agreement-mod.pdf. Good Samaritan Settlement Agreements may be particularly appropriate where the proposed cleanup work is technically complicated and/or where there is a significant possibility of third party litigation. As with the Section 107(d) comfort/status letter, Regions should consider a Good Samaritan Settlement

[4] "Policy on the Issuance of Comfort/Status Letters," Memorandum from Steven A. Herman, Assistant Administrator, Office of Enforcement and Compliance Assurance, November 8, 1996; reprinted at 62 Fed. Reg. 4,642 (Jan. 30, 1997).

ED_004715B_00000126-00006

Agreement only where the proposed work is consistent with the NCP and the person qualifies as a Good Samaritan.

Cleanup projects using the model Good Samaritan Settlement Agreement will require evidence of the Good Samaritan's financial responsibility to conduct the cleanup (either up-front financial assurances, or a description of financial assurances that will be obtained after the agreement is signed, but prior to the start of any work), subject to EPA approval.

Possible forms of financial responsibility include:

1. A surety bond unconditionally guaranteeing payment and/or performance of the work;
2. One or more irrevocable letters of credit, payable to or at the direction of EPA;
3. A trust fund established for the benefit of EPA;
4. A policy of insurance that provides EPA with acceptable rights as a beneficiary;
5. A demonstration by the Good Samaritan that it meets the financial test criteria of 40 C.F.R. § 264.143(f) with respect to the estimated cost of the work, provided that all other requirements of 40 C.F.R. § 264.143(f) are satisfied;
6. A written guarantee to fund or perform the work executed in favor of EPA by one or more of the following: (i) a direct or indirect parent company of the Good Samaritan, or (ii) a company that has a "substantial business relationship" (as defined in 40 C.F.R. § 264.141(h)) with the Good Samaritan; provided, however, that any company providing such a guarantee must demonstrate to the satisfaction of EPA that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the estimated cost of the work that it proposes to guarantee hereunder; or
7. A written commitment of grant or other similar funding from a governmental entity, nonprofit or not-for-profit foundation or trust, or similar entity, where the Good Samaritan demonstrates to EPA's satisfaction (i) that the funding entity has adequate financial ability to fulfill its commitment and (ii) that the terms and conditions of such commitment sufficiently secure the funding of the work.

Selecting an appropriate financial responsibility mechanism for a Good Samaritan project is intended to offer maximum flexibility and will be decided on a case-by-case basis considering a host of factors, including but not limited to, the scope and complexity of the cleanup and the financial resources available for the project. EPA does not expect it will be necessary for Good Samaritans to set up an escrow account or put aside funds separate from those needed to complete the project.

EPA understands that a Good Samaritan may have limited funds with which to conduct its voluntary cleanup at an Orphan Mine Site. In the event that a Good Samaritan discovers new information or encounters unknown conditions during a project, and the new information or unknown conditions would result in cleanup costs substantially higher than the estimated cost of the work, EPA will work with the Good Samaritan in good faith to resolve any issues and modify the work plan if appropriate.

VI. Consultation Requirements

ED_004715B_00000126-00007

Regional consultation at the Division Director level within OECA/OSRE is required prior to issuance of a Section 107(d) comfort/status letter or the negotiation of a Good Samaritan Settlement Agreement. Consultation at the Division Director level within OSWER/OSRTI is required prior to the approval of any work plan submitted by a Good Samaritan. Questions regarding this document, or the attached models, may be directed to Cate Tierney at EPA (tierney.cate@epa.gov) or Tom Carroll at DOJ (thomas.carroll@usdoj.gov).

VII. Disclaimer

This document is intended as guidance for employees of the U.S. Environmental Protection. It does not constitute rulemaking by the Agency and may not be relied on to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. The Agency reserves the authority to take action at variance with this guidance document or its implementing procedures.

cc: Allison Starmann, Associate Deputy General Counsel, Office of General Counsel
Lynn Buhl, Deputy Assistant Administrator, Office of Enforcement and Compliance Assurance
Michael Shapiro, Deputy Assistant Administrator, Office of Water
Scott Sherman, Associate Assistant Administrator, Office of Solid Waste and Emergency Response
Director, Office of Site Remediation and Restoration, Region I
Director, Emergency and Remedial Response Division, Region II
Director, Hazardous Site Cleanup Division, Region III
Director, Waste Management Division, Region IV
Directors, Superfund Division, Regions V, VI, VII and IX
Assistant Regional Administrator, Office of Ecosystems Protection and Remediation, Region VIII
Director, Office of Environmental Cleanup, Region X
Director, Office of Environmental Stewardship, Region I
Director, Environmental Accountability Division, Region IV
Regional Counsel, Regions II, III, V, VI, VII, IX, and X
Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice, Region VIII
Chief, Deputy Chief, and Assistant Chiefs, Environmental Enforcement Section, U.S. Department of Justice
Chief, Deputy Chief, and Assistant Chiefs, Environmental Defense Section, U.S. Department of Justice

ED_004715B_00000126-00008

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 1 2 2012

MEMORANDUM

SUBJECT: Clean Water Act § 402 National Pollutant Discharge Elimination System (NPDES) Permit Requirements for "Good Samaritans" at Orphan Mine Sites

FROM: Cynthia Giles, Assistant Administrator
Office of Enforcement and Compliance Assurance

Mathy Stanislaus, Assistant Administrator
Office of Solid Waste and Emergency Response

Nancy K. Stoner, Acting Assistant Administrator
Office of Water

Scott C. Fulton
General Counsel

TO: Regional Administrators, Regions I-X

On June 6, 2007, the EPA issued "Interim Guiding Principles for Good Samaritan Projects at Orphan Mine Sites and Transmittal of CERCLA Administrative Tools for Good Samaritans" (hereinafter, the "2007 Guidance").[1] We have received inquiries regarding the applicability of the Clean Water Act ("CWA") § 402 National Pollutant Discharge Elimination System ("NPDES") requirements to the activities of Good Samaritans and to their potential for long-term liability under that statute. This memorandum describes two clarifications, one under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") and one under the CWA. These clarifications may be considered separately or used in conjunction with one another depending on site–specific facts and needs.

As a general matter, a Good Samaritan, as described in the 2007 Guidance, would not be the entity responsible for obtaining an NPDES permit under the CWA after the successful completion of activities under a CERCLA removal plan developed pursuant to an Administrative Settlement Agreement and Order for Removal Actions at Orphan Mine Sites, or Good Samaritan

[1] The 2007 Guidance and this memorandum are intended as guidance for employees of the U.S. Environmental Protection Agency. They do not constitute rulemaking by the Agency and may not be relied on to create a right or benefit, substantive or procedural, enforceable by law or in equity, by any person. The Agency reserves the authority to take action at variance with such guidance.

Printed on Recycled Paper

ED_004715B_00000127-00001

Comfort/Status Letter (collectively, the "CERCLA tool") with the EPA, so long as the Good Samaritan does not perform additional work at the mine site.[2] While performing work under a CERCLA tool, the Good Samaritan would be exempt from CWA permitting requirements for any discharges, including any periodic monitoring that occurs under the CERCLA tool. After completion of work under the CERCLA tool and as described further below, the Good Samaritan would also generally not be the entity responsible for obtaining an NPDES permit even where a discharge continues from a passive treatment system. Although we expect this memorandum to provide clarification regarding permit obligations for Good Samaritans, we recognize that it does not address or resolve all potential liability associated with discharges from abandoned mines.

This memorandum does not address responsibility under the CWA for any "person," other than a Good Samaritan performing work under the 2007 Guidance, who discharges pollutants from a point source to waters of the United States. This memo applies only to situations where parties have no relationship with, responsibility to, and/or liability for any existing pollution at the site, except for their actions taken as a Good Samaritan as described in the 2007 Guidance.

Discussion

The 2007 Guidance provides that discharges from on-site[3] response actions associated with creating or modifying point sources do not need an NPDES[4] or any other federal permit during the CERCLA removal action under the provisions of CERCLA §121(e), and 40 C.F.R. §300.400(e)(1). Whether Good Samaritans operate under an Administrative Order or a Comfort/Status Letter, a Good Samaritan would not have CWA permit obligations if all activities are carried out as described in the CERCLA tool as developed in accordance with the 2007 Guidance.[5] As stated in the 2007 Guidance, it is advisable for the Region and the Good

---

[2] Consistent with the 2007 Guidance, this memorandum addresses Good Samaritan activities at abandoned or orphaned hard rock mining sites. We express no opinion regarding the application of this memorandum to mining activities other than those being undertaken by a Good Samaritan at hard rock mine sites.

[3] EPA believes that any treatment system addressing an abandoned mine discharge would be entirely "on-site." Section 300.400(e)(1) of the National Contingency Plan (NCP) defines "on-site" to include "the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action." Further, in the preamble to the proposed NCP, EPA stated that "a direct discharge of CERCLA wastewater would be an on-site activity if the receiving water body is in the area of contamination or is in very close proximity to the site, even if the water flows off-site."

[4] 40 C.F.R. § 122.3(d) (States that "Any discharge in compliance with the instructions of an On-Scene Coordinator pursuant to 40 C.F.R. part 300 ..." does not require an NPDES permit.)

[5] See 2007 Guidance, pages 3-7. Unlike a Comfort/Status Letter, an Administrative Settlement Agreement and Order for Removal Actions at Orphan Mine Sites also provides the Good Samaritan with a federal CERCLA covenant not to sue and contribution protection. Id. Page 6-7. See also 40 C.F.R. § 122.3(d).

ED_004715B_00000127-00002

Samaritan to agree, before the cleanup actions begin, on all aspects of the cleanup covered by the CERCLA tool and those actions should be specified in a workplan or statement of work attached to the order. The provisions of the CERCLA tool should include post-removal site control or any other activities performed by the Good Samaritan that could result in potential discharges. In addition, the Good Samaritan should complete any earth-disturbing or site stabilization activities and operations and maintenance activities under the CERCLA tool.[6]

As discussed in the 2007 Guidance, all on-site actions performed by a Good Samaritan pursuant to a CERCLA § 107(d) Settlement Agreement and Order for Removal Action, or Comfort/Status letter, are required, to the extent practicable as determined by the EPA considering the exigencies of the situation, to attain applicable or relevant and appropriate requirements (ARARs) under federal environmental or state environmental or facility siting laws. In some cases, Regions may determine that attainment of water quality standards at Orphan Mine Sites by Good Samaritans performing removal actions may not be practicable. If a Region makes such a determination, Good Samaritans would be expected to meet site-specific work plan requirements for water quality in order to ensure that the project results in environmental improvement.[7]

One option available to the EPA and the Good Samaritan would be for a Region to determine that the Settlement Agreement and Order for Removal action, or Comfort/Status letter, should include a provision which requires Good Samaritans to continue the removal action performance through periodic monitoring or other activities which would help ensure that the project results in environmental improvement. Continued Good Samaritan removal action performance would remain subject to the CERCLA § 121(e) and 40 C.F.R. § 300.400(e) permit exception provisions.

For the Good Samaritan, the issue of CWA liability can arise after the Good Samaritan satisfactorily completes its obligations pursuant to the CERCLA tool and leaves the site, but the discharge of pollutants from a point source continues. Section 301(a) of the CWA provides that "[e]xcept as in compliance with this section and sections … [402] ... of this Act, the discharge of any pollutant by any person shall be unlawful."[8] The EPA's NPDES regulations provide that "any person who discharges or proposes to discharge pollutants" has a duty to apply for an NPDES permit.[9] The regulations clarify that when "a facility is owned by one person but

---

[6] The 2007 Guidance, page 5, discusses development of a workplan that can be used to deal with such matters.

[7] See, 2007 Guidance discussion in Part III, the Model Good Samaritan Comfort/Status Letter and Model Settlement Agreement and Order for Removal.

[8] 33 U.S.C. § 1311(a). The terms "discharge of a pollutant," "person," and "point source" are defined in sections 502(12), (5) and (14) of the CWA, respectively. 33 U.S.C. § 1362.

[9] 40 CFR § 122.21(a). The CWA is a strict liability statute making any person who discharges a pollutant from a point source into waters of the U.S. liable for that discharge under Section 301(a) unless, inter alia, the discharge is authorized under the Section 402 NPDES permit

ED_004715B_00000127-00003

operated by another, it is the operator's duty to obtain a permit."[10] The NPDES regulations require the "operator" to obtain a permit because the operator of a facility or activity is likely to be an entity capable of exercising control over the discharge, and therefore capable of ensuring any discharge is in compliance with applicable permit limits.

As described in the 2007 Guidance, by definition, a Good Samaritan cannot be an "owner" of an orphan mine site or have a legal obligation to take action where they are working to improve the site and/or its discharges.[11] While performing work under the CERCLA tool, the Good Samaritan would, as the "operator", ordinarily be the entity under the CWA responsible for obtaining a permit. However, under the CERCLA exemption, as long as the Good Samaritan's on-site activities are conducted pursuant to the CERCLA tool, those activities do not require an NPDES permit. The question *after* the CERCLA action is satisfactorily completed is whether the Good Samaritan would be considered an "operator" of any discharges that continue at the facility. In the context of a successful Good Samaritan cleanup, the Good Samaritan would not be the entity responsible for obtaining an NPDES permit *after* the CERCLA removal action is complete if they are no longer the "operator" of the facility.

The initial question to be considered is whether the Good Samaritan successfully completed the work described in their CERCLA tool. If so, then the following factors may be used to determine whether a Good Samaritan would be an "operator" who is responsible for obtaining an NPDES permit after completion of work under the CERCLA tool.[12] (Positive answers would suggest a Good Samaritan may be an operator, while consistently negative answers would indicate the Good Samaritan is likely not an operator):

- Does the Good Samaritan have access and authority to enter the site?
- Does the Good Samaritan have an ongoing contractual agreement or ongoing relationship with the owner of the site to control any remaining discharge(s)?

---

program. The NPDES regulations establish the process and requirements for applying for an NPDES permit.

[10] 40 C.F.R. § 122.21(b). 40 C.F.R. § 122.2 defines "owner or operator" as the "owner or operator of any 'facility or activity' subject to regulation under the NPDES program."

[11] 2007 Guidance, page 2.

[12] These factors for considering whether a Good Samaritan ought to be considered an "operator" reflect the factors EPA has considered in its establishment of requirements for submission of Notices of Intent for coverage under EPA's NPDES general permits for stormwater discharges from industrial activity (the multi-sector general permit (MSGP)), for stormwater discharges from construction activity (CGP) and for discharges from the application of pesticides (PGP), and with the requirements for filing Notice of Termination to end coverage under those permits. See 73 FR 56572 (Sept. 29, 2008) and Appendix H, 77 Fed. Reg. 12286 (Feb. 29, 2012) and Appendixes J and K of the CGP; 76 Fed. Reg. 68750 (Nov. 7, 2011) and Appendixes D and E of the PGP. These factors are also consistent with the District Court's decision in *Beartooth Alliance v. Crown Butte Mines*, 904 F.Supp. 1168, 1175 (D. Mont. 1995).

ED_004715B_00000127-00004

- Does the Good Samaritan have the power or responsibility to make timely discovery of any changes to the discharge(s)?
- Does the Good Samaritan have the power or responsibility to direct any activities of persons who control the mechanisms, if any, causing the ongoing discharge(s)?
- Does the Good Samaritan have the power or responsibility to prevent and abate the environmental damage caused by the remaining discharge(s)?

If the Good Samaritan, after successfully completing its obligations under the CERCLA tool, answers "no" to all of the factors above, then the Good Samaritan should not be considered an "operator" responsible for obtaining NPDES permit coverage even where a discharge continues from a passive treatment system. While the Good Samaritan would not be the entity responsible for obtaining an NPDES permit, any remaining point source discharges of a pollutant would require a permit. If no other "operator" is present, the facility owner would generally be responsible for obtaining any necessary NPDES permits because the owner is most likely to be the entity with control over the discharges. In many cases, the EPA anticipates there may be unpermitted discharges that continue after the CERCLA action is complete.

Case Law

Since the EPA issued the 2007 Guidance, a number of potential Good Samaritans have asked the Agency about some judicial opinions that heighten the Good Samaritans' concerns regarding long term liability under the CWA. The case law supports the positions described in this memorandum.

The case raised to the EPA's attention most often in discussions regarding potential long-term liability for Good Samaritans under the CWA has been *Committee to Save the Mokelumne River v. East Bay Municipal Utility District*, No. CIV. S-91-1372-LKK, 1993 U.S. Dist. LEXIS 8364 (E.D. Cal. Mar. 3, 1993) (*East Bay MUD*).[13] This case does not weaken or contradict the EPA's expectation that Good Samaritans will generally not be responsible for obtaining NPDES permit coverage for discharges continuing after completion of work they do to remediate legacy pollution problems at abandoned mine sites. Although the district court found both defendants liable for discharges from a treatment facility, at least one of the defendants was an "owner" of the discharging facility and the other defendant exercised "intimate … control over [the facility's] discharges." *Id.* at *40. As discussed below, neither of the defendants in this case would qualify as Good Samaritans under the 2007 Guidance.

The plaintiff in *East Bay MUD* alleged that the East Bay Municipal Utility District (the "District") and the California Regional Water Quality Control Board (the "Board") were discharging pollutants from the Penn Mine facility into the Mokelumne River without an NPDES permit in violation of the CWA. *Id.* at *2. Copper and zinc mining operations at the Penn Mine property had been abandoned in the 1950's after approximately a century of activity. *Id.* at *3. Around 1966, the District acquired a portion of the abandoned property and, in 1978, the District

[13] *East Bay MUD* was upheld on appeal, but the arguments discussed in this memorandum were not among those raised on appeal. *Committee to Save Mokelumne River v. East Bay Municipal Utility District*, 13 F.3d 305 (9th Cir. 1993).

ED_004715B_00000127-00005

and the Board built a treatment facility on the property in an attempt to reduce polluted runoff, which included acid mine drainage. *Id.* at *3-4. The Board argued that it could not be held responsible for obtaining an NPDES permit for the periodic discharges from the facility it and the District built because the Board did not own the facility. *Id.* at *35. The district court rejected this argument, reasoning that a non-owner may be liable if it has "control over discharges" in its capacity as an "operator." *Id.* at *38-39. Such control was demonstrated in this case because the Board had not only purchased and installed the pump and pipes involved in the facility, but it (1) paid for repair and replacement of the pump, (2) paid for the electricity to operate the pump, (3) held land use permits for continued housing and operation of the pump, and (4) retained "veto power of decisions concerning releases" from the facility. *Id.* at *40-41.

We generally do not expect Good Samaritans as described in the 2007 Guidance to be responsible for obtaining NPDES permit coverage as were the defendants in *East Bay MUD* because Good Samaritans should not be considered owners or operators of the site or facilities at issue once they have completed all activities at the site pursuant to a CERCLA tool. The District was an "owner" of the facility at issue in *East Bay MUD*, and although the district court did not clearly conclude whether the Board was also an "owner," the court's reasoning indicates that it considered the Board to be liable because of the control the Board had over discharges from the facility. Such control would render an entity an "operator" under the factors outlined in the previous section of this memorandum.

Another case raised by prospective Good Samaritans more recently is *West Virginia Highlands Conservancy v. Huffman*, 625 F.3d 159 (4th Cir. 2010) (*Highlands*). In this decision, the United States Court of Appeals for the Fourth Circuit upheld an injunction imposed by the district court requiring the West Virginia Department of Environmental Protection (WVDEP) to obtain an NPDES permit for the discharges associated with reclamation efforts at some abandoned coal mining sites. *Id.* at 161. The Court of Appeals cited the EPA's regulations at 40 C.F.R. § 122.21(b) ("When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit.") as confirmation of its conclusion that "where, as here, the mine owner generates pollution but then abandons the site, the subsequent operator is the party responsible for obtaining a permit." *Id.* at 167. We believe this decision has been raised by various prospective Good Samaritans because the Court of Appeals explicitly rejected an argument made by intervenor Interstate Mining Compact Commission (IMCC) that requiring WVDEP to obtain an NPDES permit for the discharges it was managing would "discourag[e] volunteer 'good Samaritans' from entering into 'public/private partnerships' at bond forfeiture sites for fear of 'incurring liability … for failure to meet NPDES permit requirements." *Id.* at 169.

The *Highlands* case does not contravene the analysis set forth in this memorandum. Although some of the governmental bodies that take over the operation (or possession) of abandoned mine sites will become owners or operators of those sites as in the *Highlands* case, we do not expect Good Samaritans to maintain control of such sites in a way that would render them "operators" within the NPDES regulations after completion of work under the CERCLA tool. We understand that the *Highlands* court was not swayed by the argument that requiring WVDEP to obtain an NPDES permit might discourage "good Samaritans" from conducting work at abandoned mine sites. However, the Court's use of the term "good Samaritans" appears to be

ED_004715B_00000127-00006

lifted from IMCC's argument, and there is no indication that the Court had in mind any particular Good Samaritan or that it had considered the EPA's 2007 Guidance. Nothing in the Court's analysis suggests that a Good Samaritan that lacks sufficient control over ongoing discharges at an abandoned mine site should be treated as an "operator" responsible for obtaining a permit for such discharges.

Conclusion

For the reasons described above, a Good Samaritan that satisfactorily completes its obligations pursuant to the CERCLA tool would generally not be responsible for obtaining an NPDES permit during the response activities by virtue of CERCLA § 121(e) and 40 C.F.R. §§ 300.400(e)(1) and 122.3(d), or after completion of the response activities, so long as the Good Samaritan is no longer an "operator" based on the factors described in this memorandum. If you have any questions about this memorandum, please contact Gary Hudiburgh at (202) 564-0626 or Roger Gorke at (202) 564-0470.

cc: Brenda Mallory, Deputy General Counsel, Office of General Counsel
Lawrence Starfield, Deputy Assistant Administrator, Office of Enforcement and Compliance Assurance
Michael Shapiro, Deputy Assistant Administrator, Office of Water
Barry Breen, Principal Deputy Assistant Administrator, Office of Solid Waste and Emergency Response
Steven Neugeboren, Associate General Counsel, Office of General Counsel
Water Division Directors, Regions I-X
Director, Office of Site Remediation and Restoration, Region I
Director, Emergency and Remedial Response Division, Region II
Director, Hazardous Site Cleanup Division, Region III
Director, Waste Management Division, Region IV
Directors, Superfund Division, Regions V, VI, VII and IX
Assistant Regional Administrator, Office of Ecosystems Protection and Remediation, Region VIII
Director, Office of Environmental Cleanup, Region X
Director, Office of Environmental Stewardship, Region I
Director, Environmental Accountability Division, Region IV
Regional Counsel, Regions II, III, V, VI, VII, IX, and X
Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice, Region VIII

ED_004715B_00000127-00007

4/10/2019

Black Swan Good Samaritan Project, Boulder County, Colorado

Project Overview and Benefits

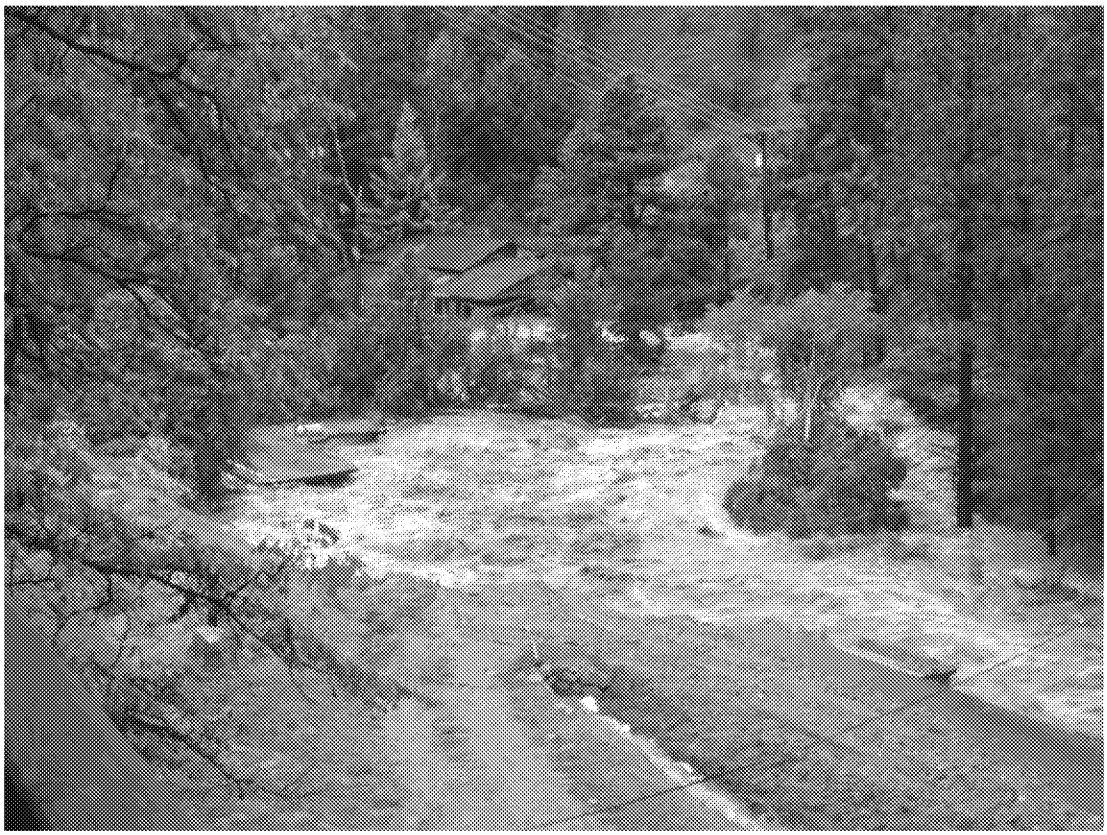
In 2018, EPA negotiated a CERCLA administrative order on consent ("AOC") with non-profit Fourmile Watershed Coalition to conduct a removal action under EPA oversight at the Black Swan Site ("Site"), an orphan mine site in Boulder County, Colorado. This project falls under EPA's Good Samaritan Initiative, which adopted CERCLA administrative tools including a model AOC and comfort letter. The purpose of these administrative tools is to reduce barriers under CERCLA for non-liable volunteers to clean up orphan mine sites.

As part of EPA's Good Samaritan Initiative, the proposed Good Samaritan project advances local, state and federal flood recovery efforts and offers tangible environmental benefits. The Site is located downstream from several historic orphan mines and is itself an orphan mine site. Mine waste rock and tailings at the Site were at risk of being eroded into Fourmile Creek. Some of these materials required removal to complete additional state and county-led stream restoration and stabilization activities necessitated by flood and fire events. These materials contribute metals such as arsenic and cadmium to the creek and have a potentially harmful effect on water quality and may pose risks to human health or the environment. The Good Samaritan followed a detailed work plan that addresses water quality issues to promote environmental improvement.

Site Description

The Site encompasses approximately 3 acres, located along Fourmile Creek in Boulder County, Colorado. The Black Swan Restoration Project is located approximately seven miles outside of the City of Boulder below the confluence of the Gold Run drainage and Fourmile Creek. Mine waste material was located on the west side of Fourmile Creek at the property located at 4389 Fourmile Canyon Drive. The historic Black Swan Mill was located across the street from the mine waste. Other mining activity upstream of the 4389 Fourmile Canyon Drive property has adversely affected the Fourmile Creek watershed, including tailings and waste rock material. The County of Boulder currently owns the Site, which it acquired in the aftermath of the historic 2013 Colorado Front Range floods. In 2014 the EPA completed an emergency removal action of 18,864 CY of mine tailings exposed during the 2013 flood a quarter mile upstream of the Black Swan site.

The Fourmile Watershed Coalition originally submitted an application for Community Development Block Grant – Disaster Recovery funding to complete a flood recovery stream restoration project. Funds were awarded without the knowledge that mine waste existed in the floodplain. When the home at 4389 Fourmile Canyon Drive was demolished due to severe damages from the flood the contractor turned up mine waste while attempting to locate the septic system with an excavator. At this time the Coalition pursued integrating mine waste removal into the scope of the stream restoration project.



September 2013: Mine tailings located under the home in the photo (4389 Fourmile Canyon Drive).

Post 2013 flood. The stream is located in the foreground in front of the pine tree, mine waste is beneath the sediment.

During Construction.

Post construction.

Project Proponents

Good Samaritans Fourmile Watershed Coalition ("FWC") and the Four Mile Fire Protection District ("FMFPD") (collectively referred to as the "Good Samaritan") requested that EPA enter into a Good Samaritan CERCLA AOC. FWC is a non-governmental organization comprised of local landowners, community members, and other stakeholders dedicated to disaster recovery efforts and stream restoration in Fourmile Watershed. Good Samaritan FMFPD is a Special District organized under the Colorado Special District Act, C.R.S. § 32-1-101 et. seq., which provides fire protection and emergency response services throughout the district in Boulder County, Colorado. FMFPD is the fiscal agent for FWC. The Good Samaritan certified in the AOC that it is not a liable party under CERCLA, and that it does not intend to acquire ownership in the property as described below.

Proposed Project and Timing

The removal action included excavating almost 1,900 cubic yards of mine tailings and hauling it to a landfill for off-site disposal. The focus of this response action were the mine tailings located at the 4389 Fourmile Canyon Drive property in the Fourmile Creek watershed. The Good Samaritan hired Frontier Environmental Services, an experienced and knowledgeable contractor, to perform the work.

Funding

The United States Department of Housing and Urban Development, Office of Planning and Development ("HUD"), awarded FMFPD as the fiscal agent for FWC Community Development Block Grant- Disaster Recovery funds in the amount of $1,509,640 to conduct a resilient stream restoration project. The Colorado Department of Local Affairs ("DOLA") administered the HUD grant, which was approved on August 28, 2017. These funds were held by DOLA, which provided payments to FMFPD on a rolling basis as costs are incurred. Actual project costs were $1,122,102.

CERCLA AOC

The Black Swan CERCLA AOC closely follows the updated 2018 model CERCLA AOC and was vetted with EPA HQ's Office of Site Remediation Enforcement. The signatories to the AOC are the Assistant Regional Administrator for EPA Region 8 Office of Enforcement, Compliance and Environmental Justice and the Acting Assistant Attorney General for the Department of Justice's Environmental and Natural Resources Division. The AOC became effective following a mandatory 30-day public comment period. EPA received no public comment on the proposed AOC.

EPA Oversight Costs

In the CERCLA AOC, the Good Samaritan agreed to pay EPA's oversight costs, which were estimated to fall in the $5,000-10,000 range. EPA's actual oversight costs were $12,033.

State Coordination

EPA Region 8 coordinated closely with the State of Colorado on the draft CERCLA AOC, work plan, and CERCLA applicable or relevant and appropriate requirements ("ARARs").

EPA Contacts:

EPA Technical:	Duc Nguyen, Federal On-Scene Coordinator, 303-312-6509
EPA Legal:	Mark Chalfant, Senior Enforcement Attorney, 303-312-6177

Project Timeline

✓On February 12, 2018, counsel for the Good Samaritan initially contacted EPA with a request to enter AOC negotiations. The Region furnished the Good Samaritan the HQ model AOC.

✓On March 23, 2018, the Good Samaritan provided a discussion draft of the AOC to the Region. This did not include a detailed work plan.

✓On April 23, 2018, counsel for the Good Samaritan advised agency counsel that its contactor was still drafting the work plan.

✓On April 16, 2018, the Region, in the meantime, formally requested ARARs identification from the Colorado Department of Public Health and Environment. This triggered a 30-day review period by prior agreement between EPA and the State.

✓On April 25, 2018, EPA reached an agreement-in-principle with the Good Samaritan, thereby finishing AOC negotiations except for 4 discrete issues, including ARARs identification and EPA oversight costs. The Good Samaritan subsequently engaged in extensive discussions with its funding entity (Colorado Department of Local Affairs) regarding the payment of EPA oversight costs.

✓On April 27, 2018, the Good Samaritan provided a draft detailed work plan to EPA for agency review. EPA subsequently provided technical comments on the work plan.

✓On May 15, 2018, the State of Colorado provided its proposed ARARs identification to the Region. The Region subsequently had follow-up discussions with both the State and the Good Samaritan regarding ARARs.

✓On May 18, 2018, counsel for the Good Samaritan apprised agency counsel that its contractor was still working to incorporate EPA's technical comments on the draft work plan.

✓On June 5, 2018, the Good Samaritan returned a signed copy of the proposed AOC to EPA, along with the revised work plan.

✓On June 18, 2018, EPA signed the proposed AOC.

✓On June 20, 2018, DOJ signed the proposed AOC. DOJ provided a copy of the signature page to EPA on June 26, 2018.

✓On July 2, 2018, the Region officially filed the AOC with the Regional Hearing Clerk.

✓On July 17, 2018, the Good Samaritan requested that EPA issue a CERCLA comfort letter to expedite field work and EPA's On-Scene Coordinator issued the comfort letter that same day after legal review.

✓On July 20, 2018, the Federal Register notice was published, triggering a 30-day public comment period on the proposed AOC.

✓On August 20, 2018, the 30-day public comment period closed. No public comment was received.

✓On August 21, 2018, EPA filed a Notice of Effective Date with the Regional Hearing Clerk and notified the Good Samaritan that the AOC and its legal protections were effective.

✓On August 6, 2019, FWC's contractor began field work.

✓On December 29, 2019, field work was complete except for limited water quality monitoring and possible additional revegetation.

ED_004715B_00000128-00005

U.S. EPA Abandoned Mine Lands Good Samaritan Initiative

April 12, 2019

Purpose

Environmental Protection Agency's (EPA) Good Samaritan ("Good Sam") Initiative promotes partnering with key stakeholders to carry out demonstration projects to remediate abandoned mine land (AML) sites. EPA hopes to initiate work on simple, low-cost projects next year while working with stakeholders to develop streamlined documents to facilitate work on more complicated and higher cost projects in two years.

Problem Statement

Hardrock AMLs are generally contaminated with metals and pose both short- and long-term human health, environmental, and physical safety hazard risks, which affect tourism, local economies and jobs. The scale of the AML problem is immense, and for this reason, assessing and cleaning up the AML site universe will likely require a broad-based, collaborative approach involving, as needed, federal, state, tribal, local governments, academia, industry, and non-governmental organizations. EPA's initiative acknowledges that Good Sam legislation at hardrock mines could greatly facilitate and expedite Good Sam projects.[1]

EPA believes that Good Sam cleanup projects may provide a cost-effective way to help address human health and environmental risks at a subset of AML sites. As an initial step, EPA is asking for assistance in identifying potential Good Sam AML demonstration projects at 5-10 sites. EPA is proposing this AML initiative to advance more of these project types. EPA seeks to work with interested stakeholders to identify candidate Good Sam sites and, where appropriate, to obtain agreements with Good Sam parties to proceed with these CERCLA projects in a timely manner.

Good Samaritan Project Scope

EPA has identified three levels of projects under this initiative ranging in complexity (from least to most complex) as follows:

- **Level 1 – Source Control Only (Dirt) Projects**:
  - Source control projects including, but not limited to, excavation, disposal, or containment of solid source areas such as waste rock, tailings, heap/dump leach and process areas.
  - Structural/physical safety projects to protect the public health, welfare, or the environment.
  - Excludes water treatment projects.
- **Level 2 – Water Diversion and/or Treatment Projects**:
  - Surface water diversion projects (e.g., rerouting surface drainage, stormwater, or snow melt around source areas to keep clean water clean).
  - Management and/or treatment of mine influenced waters both above and below ground.
- **Level 3 – Reprocessing Projects**:
  - Reprocessing of mining source areas to offset project costs if this reprocessing is done at another permitted facility and is limited to recovering valuable metals from waste and not new mining.

---

[1] While EPA's primary emphasis under this initiative is to promote Good Sam demonstration projects at hardrock mining AML sites, EPA has determined that both the June 2007 "Interim Guiding Principles for Good Samaritan Projects at Orphan Mine Sites and Transmittal of CERCLA Administrative Tools for Good Samaritans" and the December 2012 "Clean Water Act Section 402 National Pollutant Discharge Elimination System (NPDES) Permit Requirements for 'Good Samaritans' at Orphan Mine Sites" could be applied to Good Sam activities at both hardrock mining and coal mining AML sites. https://www.epa.gov/sites/production/files/2017-10/documents/good_sam_coal_mines_091217b.pdf

ED_004715B_00000129-00001

Liability Relief Options

EPA offers the following existing liability relief tools for Good Sam projects:

- **Level 1 – Source Control Only (Dirt) Projects**:
  - For projects conducted under CERCLA, EPA can enter into a CERCLA administrative settlement agreement and order on consent (ASAOC) pursuant to CERCLA (*see* 42 U.S.C. §§ 9601-9675) and the authority of the Attorney General of the United States. Such ASAOCs may include the following provisions:
    - Provide CERCLA contribution protection for the matters addressed in the ASAOC to the work party and entities providing funding to the party carrying out the work. To get such liability protection, those funding entities would have to agree to sign the ASAOC and be bound by its terms.
    - Covenants: EPA covenants that indicate EPA's intention to not pursue the Good Sam in the future (with standard caveats/reservations about negligent acts or working outside of the scope of the ASAOC).
  - For projects conducted pursuant to certain state programs governing response actions (e.g., some voluntary cleanup programs (VCPs)), the Good Sam could:
    - Seek a covenant not to sue from the state.
      - In addition, the Good Sam may be able to obtain a covenant not to sue from the state for other response actions that fall outside the scope of CERCLA § 128(b).
    - Be eligible for the CERCLA §§ 106 & 107 enforcement bar provided under CERCLA § 128(b) for projects conducted at "eligible response site[s]," as defined by CERCLA § 101(41).
    - Be issued EPA comfort/status letters regarding EPA intent.

- **Level 2 – Water Diversion and/or Treatment Projects**:
  - EPA may provide the relief options identified for Level 1 projects above.
  - Potentially extend the order on a long-term basis, as appropriate.
  - EPA generally expects that diverting and/or rerouting of clean water away from contamination would not need any specific Clean Water Act (CWA) permit or approval, but EPA, or a delegated state, would need to determine if a permit is needed on a site-specific basis.
  - EPA's Office of Water seeks to engage with willing states to use the water quality standards (WQS) tools for site-specific variances and to use modifications to provide and/or enable legal Good Sam CWA National Pollutant Discharge Elimination System (NPDES) permits for point source discharges of pollutants.

- **Level 3 – Reprocessing Projects**:
  - EPA will develop parameters for these more complicated projects after both further internal discussion and external stakeholder discussion.

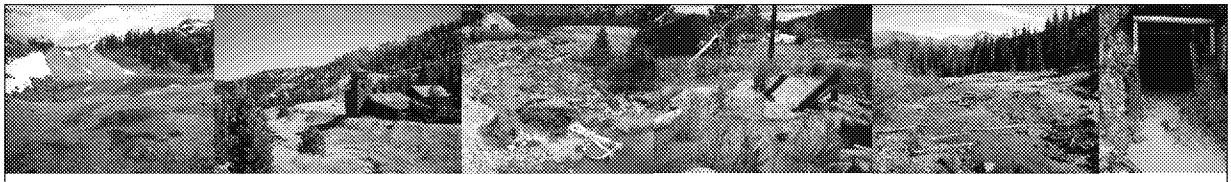
Next Steps

EPA envisions a two-track approach in carrying out this initiative.

- **Track 1** (shorter track):
  - Identify a set of Level 1 demonstration projects that can be initiated in 2019.
  - Work closely with these project proponents to share existing examples of Good Sam project documents and to obtain agreements for commencement and implementation of these projects in a timely manner.

- **Track 2** (longer track):
  - Obtain input from Good Sam stakeholders (e.g., Trout Unlimited, mining groups) on potential modifications to existing models.
  - Have stakeholder discussions regarding WQS tools for site-specific WQS variances to obtain Good Sam CWA NPDES permits for point source discharges of pollutants.
  - Develop documents to facilitate Level 2 projects based on stakeholder input.
  - Work with stakeholders to identify Level 2 projects with the goal to initiate projects in 2020.

ED_004715B_00000129-00003



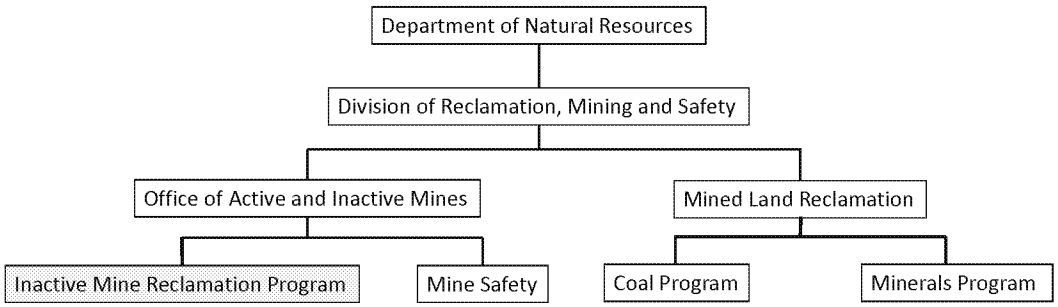
DRMS AML Non-point Source Clean Ups

JEFF GRAVES, PROGRAM DIRECTOR, INACTIVE MINE RECLAMATION PROGRAM

COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

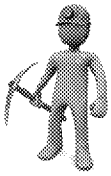
COLORADO
Division of Reclamation
Mining and Safety

DRMS



Mission: Undertake reclamation aimed at reducing hazardous situations associated with past mining activities.

Abandoned Mine Lands/Inactive Mines/Legacy Mines



- Operated prior to 1977 (coal) or prior to 1980 (non-coal).
  - Not currently or previously bonded with State for reclamation.
- No broad State level regulatory framework for AML sites.
  - SMCRA, CWA, CERCLA, RCRA, Water Rights, possibly others.
- Inactive Mine Reclamation Program
  - Not regulatory.
  - Design and Implement cleanup projects.

COLORADO
Division of Reclamation, Mining and Safety

Non-point Source Projects History

1980~1990: State AML program engaged in investigations of environmental issues at hardrock sites. Small scale projects included run-on/run-off controls, waste consolidation, capping and passive treatment.

1990-1992: Larger scale projects designed and begun under CWA 319 Program by AML and CDPHE programs. Projects included run-on/run-off controls, larger waste consolidations, capping, passive treatment, stream re-routes.

1992: MOU between EPA, Mined Land Reclamation Division (now DRMS), Colorado Dept. of Health (now CDPHE) signed, addressing CERCLA liability concerns. Time Critical Removal Actions utilized as mechanism for clean-ups.

1993: Dodson (Director, EPA Water Management Div.) letter to Region 8 States clarifies that all "mine adits are quite clearly point sources." All efforts to treat mine effluent at historic sites through CWA 319 Non-point Source Program are abandoned. Sites included Wellington-Oro (French Gulch), Mary Murphy, Solomon Mine, Pennsylvania Mine, Perigo Mine, and London Mine.

COLORADO
Division of Reclamation, Mining and Safety

History Cont'd

1994-2015: Significant work continues under MOU to address non-point source issues through run-on/run-off controls, waste consolidation, capping, in-situ waste treatment and amendment. Source control methods of adit discharge pursued in lieu of treatment (bulkhead construction, clean/dirty water segregation, infiltration reduction). USFS and BLM utilized RAMs through their CERCLA authority in partnership with DRMS to address non-point source issues.

2015: Gold King. EPA stopped signing RAMs for 319 work and determined bulkhead construction ineligible for 319 funding. AML non-point source work requiring EPA CERCLA authority ceased. USFS and BLM work continued under their CERCLA authority.

2017: EPA terminated 1992 MOU with State citing other mechanisms available to complete non-point source work.

COLORADO
Division of Reclamation, Mining and Safety

Thoughts on History

- Prior to 1993 letter, the State viewed draining adits as part of the non-point source issue on a mine site and not really captured under CWA NPDES. There was little threat of third party lawsuits under CWA.
- After 1993 all work shifted to addressing truly non-point source issues like run-off from waste piles and tailings. Addressing adit discharge was pursued through source control which was viewed as a means to avoid CWA liability.
- 1992 MOU was an extremely effective tool in facilitating AML cleanups that included multiple gov't agencies, NGOs and private entities. All parties felt "protected" from CERCLA liability, and sensed little risk from CWA since point source treatment wasn't part of the project.
- Most non-point source projects were begun after development of strong stakeholder support working through local watershed groups.
- Prior to Gold King, most hardrock environmental work was completed in the gray areas of CERCLA and CWA far from the spotlight of politics. After Gold King, the risk of liability exposure and political pressure were highlighted.

COLORADO
Division of Reclamation, Mining and Safety

What has worked?

- Working under an MOU/RAMs with EPA and CDPHE to avoid CERCLA liability.
- Utilizing USFS and BLM CERCLA authority to accomplish NPS work on federally managed lands.
- Avoiding CWA liability by not treating mine discharge.
- Developing strong and diverse stakeholder groups.
- Allowing local communities through watershed groups to guide project selection and prioritization.
- Implementing proven best management practices to address NPS issues.
- Evaluating potential projects on a site by site basis. No "one size fits all" approach.
- Avoiding long term O&M through appropriate remedy selection and design.
- Measuring success based on implementation of BMPs (performance criteria), not just chemical criteria downstream.

COLORADO
Division of Reclamation, Mining and Safety

How the MOU worked

- Provided CERCLA protection through Time Critical Removal utilizing 107d language.
- Developed a process for project assessment:
  - State appointed State Project Officer (SPO);
  - State conducts preliminary site assessment;
  - Project evaluation conducted by numerous stakeholders;
  - State determines whether 319 action is appropriate;
  - Project Implementation Plan (PIP) is developed including EE/CA of alternatives;
  - ARARs identified in PIP and met "to the extent practicable considering the exigencies of the situation";
  - State PIP reviewed by EPA OSC, and if approved, State is directed to proceed.
- Numerous NPS projects were completed with multiple partners following this process.
- If the MOU was still in place more NPS projects would be undertaken!

COLORADO
Division of Reclamation, Mining and Safety

What has not worked?

- Treating mine discharge without incurring CWA liability.
- Completing NPS projects using EPA MOU after Gold King.
- Measuring success merely by downstream water chemistry.
- A cumbersome or complex process to implement work or provide liability relief.

COLORADO
Division of Reclamation, Mining and Safety

Future Challenges

- Significantly improving AML impacted watershed without addressing mine related point sources.
- Inherent uncertainty and risk associated with AML cleanups.
- Potential cost of AML cleanups.

Project Selection Considerations for DRMS

How we rank projects internally:

1. Adequate Characterization
2. Appropriate Remedy Selection
3. Expectations/Achievability
4. Risk
5. Partnerships
6. Operations and Maintenance

Adequate Characterization

- Watershed scale ⟶ Site scale
- Adequate, not excessive
  - Cost vs Benefit
- Define the problem
- Prioritize sources
- Background?

COLORADO
Division of Reclamation, Mining and Safety

Appropriate Remedy

- Proven BMP
- Pragmatic
- Cost effective
- Low O&M
- Address the identified problem
- Effectiveness of addressing the problem

Expectations/Achievability

- Set reasonable expectations based on:
  - Characterization results
  - Remedy selection
- Establish appropriate metrics
- Funding drives expectation
  - Biggest bang for the buck

COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

Risk

- Authority for implementation (CERCLA?).
- Non-point Source vs Point Source Discharge.
- Uncontrolled release potential.
- Downstream users.
- Likelihood of success.

Partnerships

- Cooperative landowners
- Leverage funding
- Involve local stakeholders
- Utilize various expertise
- Diversify project ownership

Operations and Maintenance

- Avoid O&M through appropriate remedy seleciton
- Who's responsible?
- Operations requirements?
- Maintenance needs?
  - $$$
- Long term monitoring?

UPDATED SECURITY INFORMATION/ADDITIONAL MISCELLANEOUS INFORMATION
TODAY'S DATE: 04/10/2019; 9:41 AM

Contact:
Diana Bellamy SEE, EPA Region 8
Administrative Assistant,
Brownfields
(O) 303 312-6244; 8:00 a.m. – 5:00 p.m.

INFORMATION FOR VISITORS TO REGION 8 BUILDING:

EPA Region 8 is located downtown Denver about block-and-a-half walk from Union Station (A-train stop from the airport), or 3 blocks from the C, E, and W light rail platform (the Free Mall bus can be taken 2 stops to our building.) Public parking is available at 1500 and 1600 blocks of Wynkoop, and 1800 block of 16th street. (See additional information below). You can also determine available public parking through [HYPERLINK "https://parking.com/denver"].

Our building is at 1595 Wynkoop, on the corner of Wynkoop and 16th Streets. Visitors come in the revolving door, between "Office Depot" and "My Favorite Muffin" stores. A government issued ID is required. Some people carry mace and some people carry pocket knives. These items will not pass security. Allow about 25 extra minutes for security.

Security is now on the 2nd floor, off the elevators around by the atrium open side. EPA visitors will need to go to the security screening area (formerly the Aspen/Bighorn room on 2nd floor), show a valid ID, and obtain a visitor's badge prior to going to their meeting(s). They will still need to be escorted by a Region 8 staff member beyond the 2nd floor. The Conference Center Receptionist or guards will notify EPA staff that their guests are ready for escort.

Please review the following: Added Information from Tim Just, Security
From: *Just, Timothy*
Sent: *Wednesday, March 27, 2019 11:16 AM*
To: *Bellamy, Diana* <[HYPERLINK "mailto:bellamy.diana@epa.gov"]>*; Doris, Grace* <[HYPERLINK "mailto:doris.grace@epa.gov"]>
Subject: *RE: Resending List for Legible Reading*

Diana,

Your EPA guests will be exempted from Security Screening. In order for them to be exempt they will be required to have and properly display (between shoulder and waist with photo visible) their EPA issued EPASS ID at all times while in the facility. ***They will be required to check in with the Guards and give them their name each time they enter the facility. They will also be required to sign in at the main receptionist station for accountability purposes at the beginning of each day they are in the office.*** *If they need to go beyond the 2nd floor they will be required to have a Region 8 employee escort at all times. Please pass this information on to your guests so they are aware of the procedures.*

Thanks – Tim

TIMOTHY P. JUST
Physical Security Specialist
U.S. EPA Region 8
1595 Wynkoop Street (8TMS-INF)
Denver, CO 80202

UPDATED SECURITY INFORMATION/ADDITIONAL MISCELLANEOUS INFORMATION
TODAY'S DATE: 04/10/2019; 9:41 AM

303-312-6142
[HYPERLINK "mailto:just.timothy@epa.gov"]

Good Samaritan Workshop- EPA Abandoned Mine Land Cleanup Roundtable – April 17h – April 18th:

1.) Bring Driver's License accompanied with EPA Region badges.
2.) Upon entering the building and elevators proceed to the 2nd floor security.
3.) Even though some visitors are EPA HQ employees please be prepared to walk through security metal detectors if asked.
4.) Expediting Security Check, note the following:
    a.) Carry as light or as little as possible entering the building.
    b.) Check at front entrance of 2nd floor security to verify name is on the list prior exiting security.
    c.) Pre-prepped process would have the following removed from personhood prior entering the detector; shoes, keys, watches, laptops, cell phones, finger-nail clippers, mace, and pocket knives; (*same as going through security at the Denver International Airport).
    d.) If you carry your laptop, thumb drive, separate these items to go through security with ease.
    e.) Patrons proceed to walk through security detector. (*It is *confirmed* that EPA employees will not walk through detector; however, names will require verification). Be prepared to have ***both*** State Driver's license and EPA badges, if you are not EPA then bring your state driver's license.
    f.) If detector goes off: security officers will proceed to use what is called a "wand," pat down.
    g.) Afterwards proceed to meet Saundra Briggs who will allow you to sign in prior exiting the security room.
    h.) At this time, you will be given a lanyard as a guest. Lanyards are required by all guests.
    i.) Prior leaving the building, Lanyards must be returned by the end of the day to 2nd floor security.
    j.) You must go through security every time you enter the building; if you leave for break and lunch, you will require to enter through security prior returning to your conference meeting. You will not be able to by-pass this protocol.

Additional *suggestive* Public Parking Nearby Locations Availability
(*please confirm at parking.com for accuracy*):

A.) SP+ has several parking garage locations; 1653 14th Street, (303) 607-9093
B.) Wewatta Lot, 1480 Wewatta Street, (2 min walk), a surface lot
C.) JP Plaza Lot, 1601 Blake Street; (2 min walk), a surface lot
D.) Acme Lot, 1653 14th Street, (3 min walk), a surface lot
E.) 1600 Market Square; (3 min walk)
F.) Firehouse Lot, 1322 Blake Street; (4 min walk), a surface lot

UPDATED SECURITY INFORMATION/ADDITIONAL MISCELLANEOUS INFORMATION
TODAY'S DATE: 04/10/2019; 9:41 AM

UPDATED SECURITY INFORMATION/ADDITIONAL MISCELLANEOUS INFORMATION
TODAY'S DATE: 04/10/2019; 9:41 AM

Expedient Advice:

My name is Diana Bellamy, contact: (303) 312-6244; and I will be on the first-floor entrance briefly to answer any questions or concerns during your conference; however, because you want to attend your workshop on time try to remain close to the building if you choose to leave the premise for breaks and lunch. I will keep you posted of any concerns and or changes.

First Day, April 17th, 2019:

Note: I spoke with the security person at the front door entrance; proceed to the 2nd floor level. He is aware that you are coming. You are not required to be checked by him. Proceed to the stairs or elevators to the second floor.

Morning - If you do not see me at the front door entrance, do not wait for me to accompany you to the 2nd floor security. It will take about at least 10-minutes per person through security and time is critical. I will be on the 2nd floor security or in the Bison/Bitterroot conference rooms assisting with name tags and technology equipment. When you enter the Bison/Bitterroot conference rooms, please stop at the desk and I will accompany you with your name tags. And, answer questions.

A.) Onsite Workshop Activities-Comforts:

1.) Water/Coffee Carafate – coffee will be available; you can bring your own coffee mug.
   a.) Some disposal cups will be available if needed.
   b.) Water will be available/not bottled water.
2.) In most years, Denver averages a daily maximum temperature for April that's between 56- and 66-degrees **Fahrenheit** (13 to 19 degrees Celsius). The minimum temperature usually falls between 31 and 37 °F (0 to 3 °C). The days in Denver attributes a continued warming trend during April months.
   a.) Please check forecast prior arriving in Denver because we have seen unusual cold winter; however, warming trend to be in April.

3.) There are vending machines on the 2nd floor for snacks and drinks.

4.) Bathroom accommodations are present on the 2nd floor.

5.) Restaurants are nearby for variety of eatery.

6.) Recall that you must return your Lanyard to the 2nd floor security at the end of ***each*** day; when returning to the conference the second day, return to security check in, sign in, receive your lanyard, etc.

April 17th, April 18th:

Again, at the end of each day return your lanyard(s). Followed by, have a safe returned home trip.

EPA's Abandoned Mine Lands Good Samaritan Demonstration Projects Roundtable
DRAFT AGENDA
April 17, 2019
Denver, CO

Purpose: Obtain individual input from key stakeholders both on lessons learned from completed projects and on the barriers/concerns hindering new Good Sam project advancement; use input to identify potential modifications to existing EPA tools and processes to facilitate agreements on potential Good Sam AML source control (dirt) demonstration projects within the year. Also, initiate dialogue on water-related project barriers and potential solutions.

8:15 -8:30 am Welcome and Opening Remarks (Region 8 Administrator/Steven Cook, EPA)

8:15 - 8:30 am Introductions of Meeting Attendees (All Attendees)

8:30 - 8:40 am Purpose and Goals of Meeting (Roundtable Facilitator)
Objective: Review and discuss the reasons for the meeting and ground rules. Identify the factors that have resulted in effective and successful cleanup at abandoned mines as well as the factors that have presented challenges or hindrances to embarking on new projects at sites that do not involve direct water treatmen.t

8:40 - 9:15 am Review of State Efforts
Objective: Summarize the materials provided to attendees in advance of meeting, specifically the lessons learned, and challenges presented from:

- Good Sam Cleanups - Recommendations from SMCRA Title IV State AML Programs – Ryan Ellis, Interstate Mining Compact Commission
- Colorado Project Example(s) – Jeff Graves, Colorado DRMS
- State Cleanup Programs – Cyndy Mackey, EPA

9:15 - 9:45 am Review of Federal Efforts
Objective: Summarize advance meeting materials, specifically the lessons learned and challenges presented from:

- EPA Project Example(s) – Mark Chalfant - EPA and Maya MacHamer, Fourmile Watershed Coalition Coordinator

9:45 - 10:00 am Break

10:00 - 12:00 pm Source Control Projects Barriers and Potential Solutions (All Attendees)
Objective: Obtain individual input/advice on what factors have led to past success, and current barriers and potential solutions for starting and completing new source control Good Sam projects. Discussion topics can also be grouped into the following general areas; what has been:

- Helpful resulting in successfully completing projects?
- Barriers/hurdles, such as:
    - Legal/Process
    - Funding
    - Site Access and Characterization
    - Other

EPA's Abandoned Mine Lands Good Samaritan Demonstration Projects Roundtable
DRAFT AGENDA
April 17, 2019
Denver, CO

12:00 - 1:15 pm	Lunch
1:15 - 3:15 pm	Source Control Projects Barriers and Potential Solutions (cont.) (All Attendees)
3:15 - 3:30 pm	Break
3:30 - 4:30 pm	Water-Related Project Barriers and Potential Solutions (All Attendees) *Objective:* Obtain individual input/advice on barriers and potential solutions for starting and completing water-related Good Sam projects.
4:30–5:00pm	Summary and Next Steps (Roundtable Facilitator)

EPA's Abandoned Mine Lands Good Samaritan Demonstration Projects Roundtable
DRAFT AGENDA
April 17, 2019
Denver, CO

More detail of the structured topic areas:

- EPA Legal/Agreements: Generally, how could these be addressed/improved?
    - AOCs and Comfort letters
    - Paperwork and Process
    - Short and Long-term Liability Concerns
- State/Federal Land Management Agency (FLMA) Lead/Support: What can EPA do to facilitate/advance Good Sam projects led by state and FLMAs?
    - State VCPs/Other
    - Cleanups under FLMAs Authorities
    - Mixed Ownership sites
- Baseline/Date Requirements: Generally, do issues around site conditions create hindrances?
    - Data Availability
    - Investigations - Is too much of the onus placed on volunteers
    - Subcontractors Qualifications
    - Baseline/Existing Contamination
    - Site Access
- Monitoring and Reporting Requirements: Are there concerns with monitoring requirements and how to report and communicate results/success
    - Monitoring requirements
    - Reporting requirements
    - Costs
    - Liability
    - Communicating Project Effectiveness/Success Metrics
- Financial:
    - Financial Assurance Flexibilities for Source Control Projects
    - Federal or other Funding Sources

Advancing Good Samaritan Cleanups

Recommendations from SMCRA Title IV State AML Programs
EPA AML Good Samaritan Meeting, April 2019

Source Control Projects vs. Water Projects

- State AML programs operating under Title IV of the Surface Mining Control and Reclamation Act (SMCRA) in the eastern coal region do not have significant concern with liability for source control projects
    - These types of projects are considered typical reclamation work, e.g. reclaiming a coal refuse pile and isolating remains from exposure
- Generally there is understanding that these projects are conducted entirely under the auspices of the SMCRA Title IV AML Program
    - The Program was established specifically for pre-1977 coal AML sites and has its own well-developed rules and procedures, which work well
- However, Clean Water Act (CWA) liability is a special case due to the ambiguous relationship between the CWA and SMCRA.
    - There is significant concern with liability under CWA where AML projects directly affect water resources
- The state Title IV AML programs have recommendations for what would be necessary to facilitate their ability to conduct water projects

Clear, Achievable Expectations for Projects to Improve Water

- Recognize that AML sites are a distinct class of projects from modern mines
    - For AML, there are no PRPs, and therefore no clean up effort without government or third-party involvement
    - The typical approach to enforcing water quality under CWA doesn't work well for AML; NPDES permits are generally untenable
- Focus should be on making improvements, not achieving perfection
    - Partial improvements at individual sites are helpful and should be encouraged rather than punished with liability
    - Base project goals on what is achievable at the site, taking into account:
        - Environmental Circumstances; and
        - Funding and implementation capability
- Take a watershed-wide view when strategizing projects
    - Make incremental progress toward aggregate gains in whole watersheds
        - The aggregate effect of many small-scale projects is great
    - Focus on practical goals like restoring biological and recreational functions, rather than strictly on water quality
    - Maximize overall watershed improvement - consider funding trade offs with other projects and avoid diminishing returns by gauging economical level of improvement at each site
    - Encourage simple systems like lime dosers where they free resources for other sites and lead to more economical, effective overall approach

- Ensure expectations of project participants are reasonable given finite resources, e.g. for pre-project approvals and long-term operation and maintenance
    - Responsibility borne by project participants must be reasonably circumscribed so that requirements are clear and achievable
    - Scale the intensity and scope of requirements to what is necessary and tenable for project participants, avoiding complexity where possible
    - Indefinite responsibilities are untenable - there must be an end date

Working within Existing Frameworks

- Build on the existing governmental frameworks for AML work
    - State and federal agencies already exist with long-standing expertise
    - Procedures are already in place for how to safely conduct projects, establish eligibility for AML and verify non-existence of PRPs, provide public consultation, and monitor and care for sites post-completion
- Rely on existing state-level programs to administer projects where possible
    - State-level programs have specific expertise in their regions – they have special knowledge of:
        - Their local environment and regional best practices
        - The specific AML sites in their areas of jurisdiction; and
        - The potentially relevant watershed groups and landowners, with whom there are often existing relationships
- Make enfranchising the state AML programs a policy priority
    - The focus of policy debate is often on obstacles to assistance from third-parties, but state AML programs also face obstacles
    - Enabling state AML programs' water improvement efforts will in turn help attract and encourage participation of third-party groups
- Encourage cooperation between government agencies and third parties
    - Bringing agency expertise into the situation early helps ensure proper procedure and quality of projects
    - Third-party groups benefit from assistance in navigating authorizations and collecting necessary information etc.
    - Include landowners in the discussion– their participation is key, and they often need assistance and protection too
- Allow agencies and third-parties to apportion responsibilities between them
    - Take advantage of respective capabilities, leverage comparative strengths
        - e.g. allocation of funding and personnel resources; handling project design or operation and maintenance
- Encourage growth of local level NGO groups
    - Helps channel community resources toward local projects
    - Developing more opportunities for assistance to government agencies
    - Example of growing greener program in Pennsylvania