

# **BISHOP MILL PROJECT**

## **INITIAL STUDY**



**Inyo County, California**

**May 3, 2011**

**Project Applicant:**

**0877887 BC Ltd./CMC Metals Ltd.  
369 Terminal Avenue Suite 305  
Vancouver, B.C. V6A 4C4**

**Prepared for:**

**Regional Water Quality Control Board –Lahontan Region**

**Prepared by:**

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This Initial Study has been prepared in compliance with the California Environmental Quality Act.

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## Initial Study (CEQA Appendix G Environmental Checklist)

### 1 Project Information and Background

According to CEQA Guidelines section 15063(c), the purpose of an Initial Study (IS) is to provide a preliminary analysis of a proposed action to determine whether a Negative Declaration (Neg Dec) or an Environmental Impact Report (EIR) should be prepared. An IS also enables an applicant or Lead Agency to modify a project, mitigating adverse impacts in lieu of preparing an EIR, thereby potentially enabling the project to qualify for a Neg Dec. The IS provides a factual basis for the Neg Dec or serves to focus an EIR on the significant effects of a project.

#### 1.1 Project Title

This IS addresses the Bishop Mill Project (Project).

#### 1.2 Lead Agency Name and Address

**Regional Water Quality Control Board – Lahontan Region**  
2501 Lake Tahoe Boulevard  
South Lake Tahoe, California 96150

#### 1.3 Contact Person and Phone Number

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#### 1.4 Project Location

The Bishop Mill Project (Project) is located in Inyo County near the northern extent of the Owens Valley and northeast of the town of Bishop, California. The Bishop Mill site (Project area) is located approximately one mile west of State Route (SR) 6 on Rudolph Road, approximately 9 miles northeast of the town of Bishop, California. Rudolph Road (an existing, improved dirt road) traverses westerly from SR 6 for approximately one mile to the power line and mill-site access road. The mill-site access road traverses approximately ¼ mile southerly to the Project area entrance.

The site is situated on public lands administered by the U.S. Department of the Interior, Bureau of Land Management, Bishop Field Office (BLM) within the SW quarter of section 4, Township 6 South, Range 33 East, Mount Diablo Baseline and Meridian on three mill-site claims controlled by the Project Applicant. The total mill site claims total 161.33 acres, while the active Project area encompasses 9.1-acres of this total area.

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**Figure 1** provides the Regional Location Map depicting the Project location within the surrounding land uses and environmental setting. **Figure 2** presents the Project Location Map.

The Project area can be reached by travelling approximately 9 miles north on SR 6 north from Bishop, turning left on Rudolf Road, and travelling 0.9 miles west to the intersection with an unnamed dirt road and turning left (south). Follow the dirt road south for ¼ mile to the Project area entrance. Access to the Project area is restricted by a locked gate and monitored by an on-site guard.

## 1.5 Project Applicant/Sponsor's Name and Address

Mr. Don Wedman – President, CEO  
0877887 BC Ltd. / CMC Metals Ltd.  
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## 1.6 General Plan Description

The Inyo County Board of Supervisors approved the 2001 Inyo County General Plan Update on December 11, 2001. State law requires each county and city to prepare and adopt a comprehensive and long-range general plan for its physical development (Government Code section 65300). The comprehensive General Plan provides Inyo County with a consistent framework for land use decision-making.

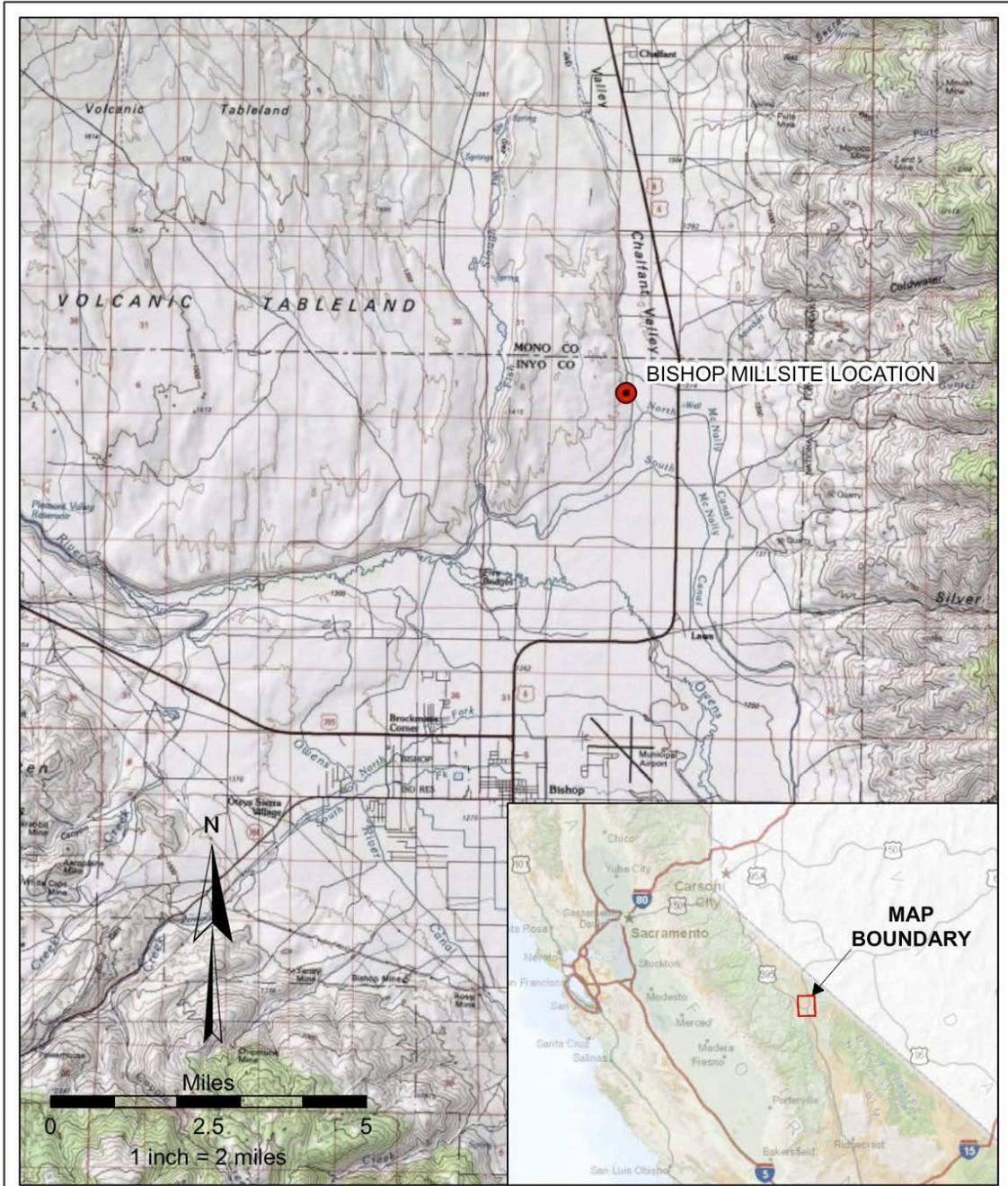
Inyo County General Plan Land Use and Conservation/Open Space Elements - Diagram 1 (dated January 16, 2002) designates the Project area as Natural Resources.

## 1.7 Zoning

The Inyo County Zoning Ordinance, which is Title 18 of the Inyo County Code (October 2010), identifies the Project area for industrial or commercial uses.

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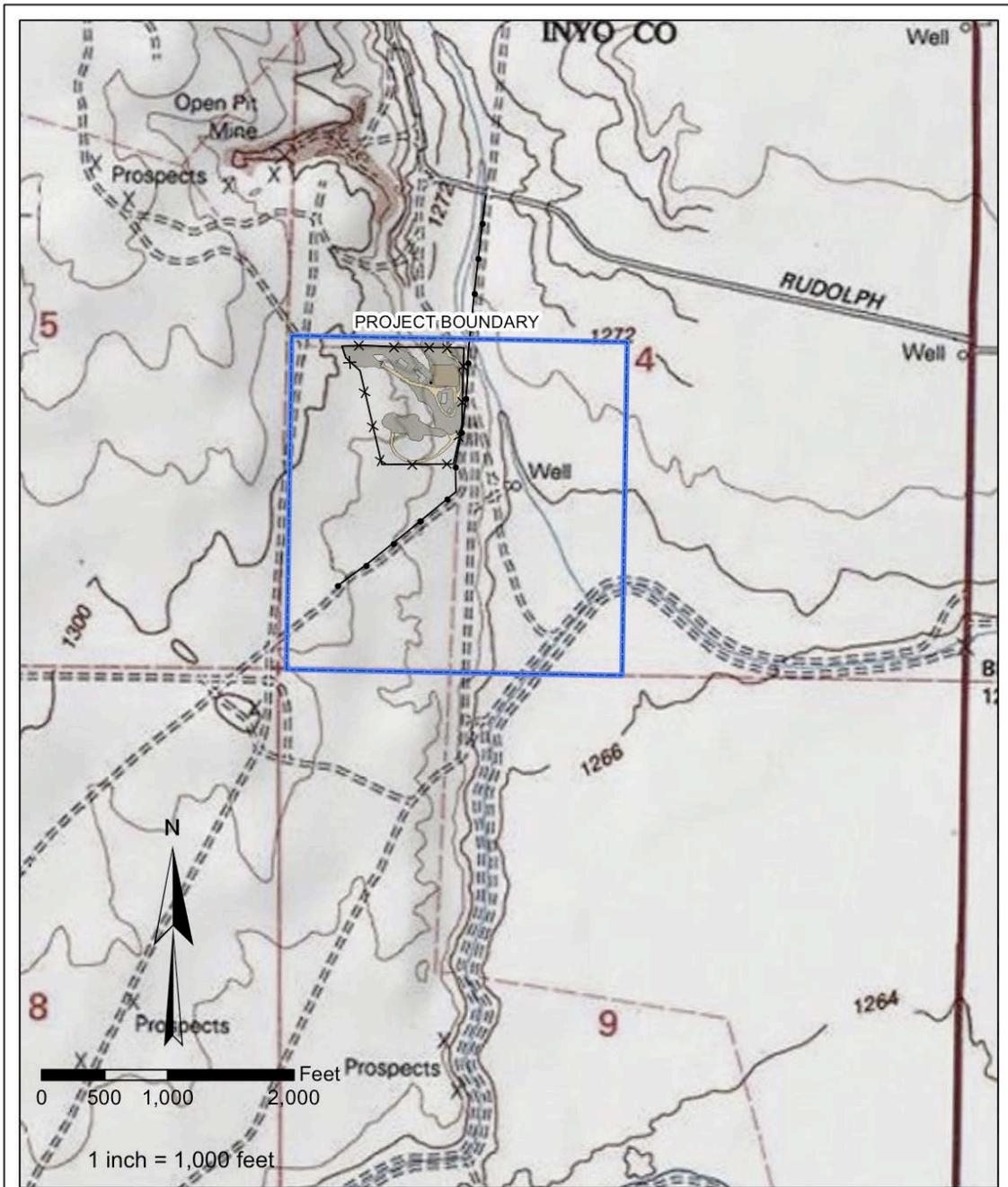
Figure 1. Regional Location Map



<b>BISHOP MILL</b>		<b>BISHOP MILL REPORT OF WASTE DISCHARGE</b>		<b>VICINITY MAP</b>	
DESIGN: MB	DRAWN: ML	REVIEWED: -	<b>INYO COUNTY, CALIFORNIA</b>	DRAWING NO. <b>FIGURE 1-1</b>	REVISION NO.
CHECKED: -	APPROVED: MB	DATE: 6/24/2010			<b>A</b>
FILE NAME: Fig1-1_Vicinity_Map_ML_20090826.mxd					

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Figure 2. Project Location Map



<b>0877887 BC Ltd.</b>				<b>BISHOP MILL AMENDED PLAN OF OPERATIONS INYO COUNTY, CALIFORNIA</b>		DRAWING TITLE: <b>PROJECT SITE LOCATION MAP</b>	
DESIGN: MB	DRAWN: ML	REVIEWED: -	DRAWING NO. <b>FIGURE 1-2</b>			REVISION NO. <b>A</b>	
CHECKED: -	APPROVED: MB	DATE: 12/21/2010	SRK JOB NO. <b>204600-010</b>				
FILE NAME: PoO_Fig1-2_Location_Map_ML_20101221							

## 1.8 Project Description

Phases of Project planning, implementation and operation are described in conformance with CEQA Guidelines section 15063(a)(1). The proposed Project consists of updating and re-commissioning an existing ore milling facility. The updates include construction of a new double-lined waste impoundment for spent tailings produced during the milling process. The impoundment will be designed and constructed in accordance with applicable regulations to protect water quality.

### 1.8.1 Project Background

Don Beauregard of the Mammoth Lakes Mining Company filed the first claims, collectively known as the Bishop Mill site, in 1982 on public land administered by the BLM, Bishop Field Office. No Environmental Assessment (EA), Plan of Operations (PoO), or reclamation bond was required at this time because surface disturbance was less than five acres. The mill was originally constructed as a dependent mill site, that is, one “used for activities that support a particular patented or unpatented lode or placer mining claim or group of mining claims” (Title 43, Code of Federal Regulations, section 3832.31 [43 CFR 3832.31]), in connection with claims on Inyo National Forest land near Mammoth Lakes, California.

In 1986, the BLM became aware that the surface disturbance at the Bishop Mill site exceeded five acres and required the Mammoth Lakes Mining Company to either (1) submit an approved PoO and reclamation bond, or (2) to clear the site of all building, equipment and extraneous items and to reclaim the land as required by law.

In order to bring the site into compliance with BLM requirements, the BLM issued several Notice of Non-Compliance letters requesting both updated PoOs and updated reclamation bond to the respective claim site owners between 1986 and 2009.

In August 2009, Pruett Ballarat Inc., the owner at the time, submitted a PoO and reclamation bond for the Bishop Mill to comply with the BLM’s previous notices of non-compliance letters and to satisfy regulatory requirements for surface management of public lands under 43 CFR section 3809.

On March 19, 2010, ownership of the operation was transferred to 0877887 BC Ltd., a wholly-owned subsidiary of CMC Metals Ltd. (Project Applicant and Operator) of Vancouver, Canada. The BLM informed 0877887 BC Ltd. that the mill facilities and equipment were occupying public lands without authorization or an approved PoO and have been in violation of federal regulations for an extended time. BLM also stated that an updated reclamation bond estimate would be required.

In June 2010, 0877887 BC Ltd. submitted to the Lahontan Regional Water Quality Control Board (Water Board) a Report of Waste Discharge (RoWD) in order to obtain Waste Discharge Requirements (WDRs) for the disposal of tailings resulting from mill operations. In November 2010, 0877887 BC Ltd. submitted a revised RoWD to the Water Board. In December 2010, 0877887 BC Ltd. submitted an amended PoO to the BLM, which is attached in **Appendix A**.

The Water Board accepted the RoWD on February 23, 2011, as complete and assumed the role of Lead Agency for CEQA compliance. The RoWD is attached in **Appendix B**. The Water Board hired Hauge Brueck Associates to prepare this CEQA documentation. The Water Board subsequently prepared tentative WDRs (**Appendix C**) to specify the conditions of discharge for the mill operations.

The BLM, Bishop Field Office is currently reviewing 0877887 BC Ltd.’s RoWD along with the Amended PoO, conducting an EA as required by the National Environmental Policy Act (NEPA), and sharing and coordinating information with Hauge Brueck Associates to promote consistency between the NEPA and CEQA processes.

## 1.8.2 Proposed Project Operations

**Figure 3** presents the general configuration and extent of grading of the proposed Project area. The project operations will include importation and stockpiling of ore, processing of the ore, and disposal of processed ore (tailings). The majority of the ore processed will contain gold, silver, tungsten, molybdenum minerals, and copper, lead, and zinc sulfide minerals. Processing is described in section 3.13.5 of **Appendix A** and diagrammed in **Figure 4**. Ore processing will use existing on-site facilities. No mining of ore will take place at the site; some chemicals will be used during the floatation and gravity separation processes. Cyanide, specifically, will not be used.

Sources of ore will be generally from the Gold Bug Mine, Radcliffe Mine and Darwin Mine in the Ballarat Mining District in south-central Inyo County and other areas within Inyo County. Up to 75 tons of ore per day will be trucked to the site in over-the-highway haul trucks. The ore will be off-loaded at the existing concrete ore patio and/or the temporary ore stockpile area northwest of the ore patio.

The raw ore will be loaded into the ore feed bin (25-ton capacity) by a front end loader, then gravity fed to the mill at the rate of approximately 4 tons per hour, or approximately 96 tons per 24-hour shift. The ore will be crushed and milled to approximately minus 10 mesh. The material will then go through a jigging concentration process where the coarse concentrates are dried and bagged for off-site refining. The tailings from the jigging process will be mixed with water and flotation reagent chemicals consisting of Xanthate 350 (a general collector), Aero 208 (a free gold collector), and Aero 31 (a sulfide collector) creating chemically charged ore slurry that is 30 percent solids. Soda ash will also be added to maintain a near neutral pH.

The ore slurry will be transferred to flotation cells where Aero Froth, a flotation agent, is added to facilitate recovery of metallic particles. The flotation cells and frothing agent create an agitated air-infused froth bringing the metallic particles to the surface of the cells. Each cell in the system collects the frothed metallic particles and transports them to the conditioner tank.

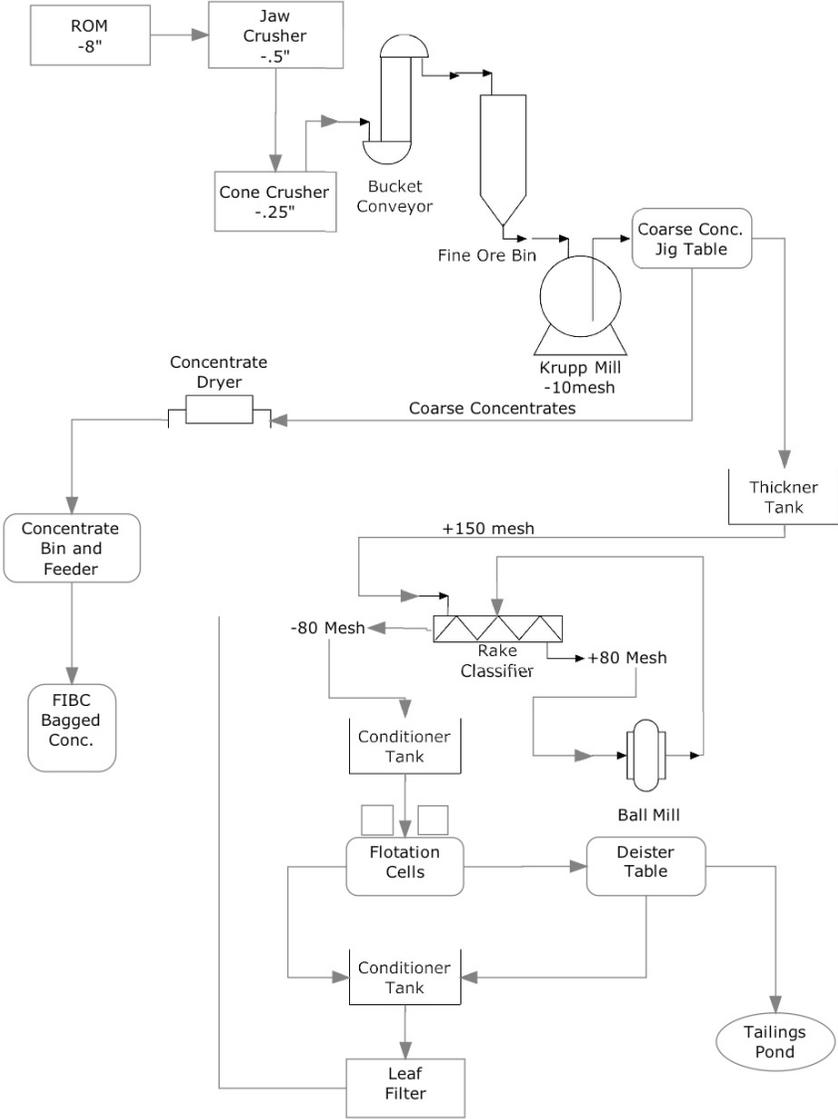
The concentrate containing the processing reagents and precious metals will be piped to the conditioner tank and dewatered, which will allow most of the additive chemicals to be re-circulated back into the processing system for re-use. The concentrate is further dewatered at the Leaf/Disk filter. The concentrate filter material is put through a concentrate dryer to reduce the moisture content to around 10 percent and is then loaded in drums or flexible intermediate bulk container sacks for shipping off-site to a refinery.

The tailings from the flotation cells will be passed from the last flotation cell to the Launderer tray where a surfactant (Shaklee's Basic H) will be added. The Basic H breaks down any remaining flotation reagents, allowing the heavy metal particles to sink and prepare the ore slurry for the Diester gravity recovery shaker table. The shaker table will recover metallic particles that were too large or heavy to be recovered by the flotation process. The table concentrates are sent to the concentrate thickener tank to be dewatered, filtered, and sent through the concentrate dryer. The dried concentrate will then be shipped off-site for refining. The rejects from the Deister table are the tailings that are piped to the WMU for disposal. The tailings piped to the tailings impoundment are allowed to settle and the water re-circulated to the mill for reuse.



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Figure 4. Mill Processing Circuit



### **1.8.3 Proposed Project Facilities**

The Project maintains and utilizes the existing on-site gravity mill facilities detailed in section 3.15.3 of **Appendix A** and summarized in section 1.9 – Surrounding Land Uses and Environmental Settings below. The Project proposes the installation of a Krupp Screen to increase the efficiency of the grinding process, which will require the construction of a concrete pad (approximately 500 square feet or 0.01 acre) on the southwest section of the existing Mill building.

The waste derived from ore processing will then be deposited via slurry in the proposed WMU, designed to comply with Title 27, California Code of Regulations for a “Group A” mining waste unit. The new WMU will be constructed at the location of the existing, but inoperative tailings impoundment.

#### **1.8.3.1 WMU Design**

The Project Applicant proposes the temporary removal of the previously deposited tailings from existing tailings impoundment, disposal of the existing liner and construction of a new double-lined WMU at the site of the existing tailings impoundment. The design report and drawings were prepared during the preparation of the RoWD revised in November 2010. Design and construction details of the proposed WMU are provided in the Engineering Design Report in **Attachment A of Appendix B**.

The WMU will be double lined with a leachate recovery and collection system (LCRS). The WMU will be approximately 25 feet deep with internal tailings impoundment side slopes configured at 2H:1V to maximize storage capacity within the available disturbance area footprint. The top surface area at the inside WMU crest is approximately one acre (43,000 square feet).

The WMU construction activities include:

1. Removal of a section of the 40-mil liner for use at the ore patio to underlay and cover the relocated existing tailings;
2. Removal of the existing tailings (approximately 100 tons) and placement on the ore patio that is covered with a 40-mil liner and cover the temporary stockpile with additional layer of 40-mil liner;
3. Removal and disposal of the remaining 40-mil liner in a permitted municipal solid waste facility;
4. Conduct confirmation soil sampling at the bottom of the WMU to ensure that soil is clean; including coordination with BLM and the Lahontan Water Board to establish success criteria and submittal of lab analytical results to the Water Board for review and approval;
5. Reconstruct the existing tailings impoundment area to install the proposed new Group A WMU with 2H:1V side sloped tailings impoundment and LCRS;
6. Moisture condition and compact the new WMU base and side slopes to a minimum of 90 percent of maximum dry density at +/-2 percent of optimum moisture content per ASTM D1557, modified Proctor testing – compacted density of existing tailings impoundment side slopes and base to be confirmed and reconstructed as required to meet Technical Specification;
7. Smooth rolling final compacted soil surface and removal of protrusions that could damage liner;

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8. Excavate LCRS sump, overliner seepage collection drain sump, and liner anchor trenches around tailings impoundment perimeter;
9. Placement of 60-mil Agru Super GripNet geomembrane secondary liner over compacted WMU base and side slopes;
10. Place 6-inch diameter PVC pipe and clean drain gravel in sump;
11. Place geotextile over the gravel-filled sump (to protect primary liner);
12. Place 80-mil smooth HDPE liner over top of secondary liner;
13. Backfill and compaction of liner anchor trenches;
14. Construct overliner seepage collection drain and riser; and
15. Construct up-gradient diversion berm around top of the up-gradient slope cut to divert the 100-year, 24-hour storm volume.

The new WMU will utilize as much of the existing tailings impoundment configuration as possible, but will be approximately five (5) feet deeper at the same side slope ratio and expanded to the north within the existing disturbed area using the existing fence line and access road as the boundary limitations. The layout of the WMU has crest dimensions of approximately 185 feet by 240 feet.

The discharge pipe from the mill to the tailings impoundment and the reclaim water pipe back to the mill will both be constructed as pipe-in-pipe such that the outer leak detection pipe will gravity drain back into the WMU. Required pipe size will be determined by the Project Applicant, but will be one of the following combinations: 2-inch HDPE inside 4-inch HDPE; 3-inch HDPE inside 6-inch HDPE; or 4-inch HDPE inside 8-inch HDPE. An HDPE wear sheet shall be installed at the discharge point in the WMU, and wherever else required to protect the liner from abrasion. Wear sheets will be anchored at the WMU crest by either welding the wear sheets to the existing liner or constructing a second anchor trench outside the WMU crest. Wear sheets will be inspected weekly and replaced as necessary to protect the primary WMU liner.

Additional design details are referenced to **Appendix B**, sections 5.5.1 through 5.6.8 that present storage capacity, water/solids balance, stability analyses, storm water diversion, overliner seepage collection system, and construction standards.

### *1.8.3.2 Electrical Power*

Southern California Edison supplies electrical power via an existing power line. The mill operates on 440-volt, three-phase power and will draw an estimated 937,320 kWh of electricity per year. Other facilities in the Project area operate on 220- and 110-volt power. The Project includes no back up power sources.

### *1.8.3.3 Water Supply*

Water is supplied via an on-site production well, PW-3. Throughout the milling process, approximately 1,000 gallons of water will be used per ton of ore, or up to 96,000 gallons per day at the maximum operating capacity. A large portion of the processing water is recycled at the thickener tank and the remaining water is reclaimed from the WMU after the tailings are allowed to settle out. Although most of the water will be recycled, there will be some losses due to evaporation and moisture content with the

concentrate products. These losses will require replenishment from the on-site production well, as needed.

#### **1.8.4 Geochemical Characterization of Off-Site Ore**

Representative ore samples for each source and/or lithological variant of ore that is shipped to the Project area will be collected for analysis for the same constituents identified in Table 3-4 of **Appendix B**, prior to processing. Each sample will be submitted to a certified laboratory for leachable solutes (e.g., Meteoric Water Mobility Procedure and Acid Base Accounting analyses or equivalent).

#### **1.8.5 Exploration**

No exploration at the Project area is proposed.

#### **1.8.6 Work Force**

Up to seven (7) workers will be employed at the facility during full time operations. Technical and professional services will be contracted as needed.

#### **1.8.7 Proposed Reclamation**

##### **1.8.7.1 Goals and Objectives**

Major land uses occurring in the Project area include mineral exploration and development (including milling), livestock grazing, wildlife habitat and dispersed recreation. Following mill closure, the Project area will support the land uses of livestock grazing, wildlife habitat and recreation. The Project Applicant will work with the agencies and local governments to evaluate alternative land uses that may provide long-term socio-economic benefits from the mill infrastructure.

The objectives of the reclamation program include:

- To provide a stable post-milling landform that supports defined land uses;
- To minimize erosion damage and protect water resources through control of water runoff and stabilization of project facilities and disturbed areas (e.g., cut and fill embankments, growth media stockpiles).
- To establish post-reclamation surface soil conditions conducive to the regeneration of a stable plant community through stripping, stockpiling and reapplication of soil material;
- To revegetate disturbed areas with a diverse mixture of plant species in order to establish long-term productive plant communities compatible with existing land uses; and
- To maintain public safety by stabilizing or limiting access to landforms that could constitute a public hazard.

##### **1.8.7.2 Schedule**

The Project is proposed to operate for up to five years of active milling. One year beyond that date may be anticipated for closure activities and final reclamation. Groundwater monitoring will continue until there is no longer a threat to water quality. This schedule may be modified based on the rate of milling and future commodities prices. Concurrent reclamation will be ongoing over the life of the mill facilities

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in areas that have reached final reclamation configurations. The estimated time to complete reclamation assumes average precipitation occurs during the years following reseeding, noting that periods of drought could delay revegetation. Reclamation activities (i.e., regrading and slope stabilization and revegetation) are expected to be completed within about one year.

### 1.8.7.3 Area of Disturbance

Reclamation of disturbed areas resulting from activities outlined below will be completed in accordance with federal and state regulations. The Project disturbance areas are summarized in Table 1. The areas proposed for disturbance can be divided into the following: roads, buildings, tailings impoundment and yard areas.

**Table 1**

#### Project Area Disturbance Estimates for Reclamation

Facility	Existing (acres)	Proposed (acres)	Total (acres)
Roads	1.05	0.33	1.38
Buildings	0.28	0.008	0.29
Yards*	5.96	0.00	5.96
Tailings	0.00	1.47	1.47
<b>Total</b>	<b>7.29</b>	<b>1.80</b>	<b>9.10</b>

Source: Table 3-3 of Appendix A

Notes: \* Includes the area for the 2006 waste material that was relocated and covered in 2006. The Project proposes no disturbance of this material, which is being considered under a separate remedial action.

### 1.8.7.4 Project Measures to Minimize Disturbance

Surface management regulations 43 CFR §3809.420 establish the performance standards that apply to the Project. Measures to be taken to prevent unnecessary and undue degradation at the Project area are listed below. These measures will be implemented during the design, construction, operation, and closure of the Project:

- Regulated components of the Project will be designed and constructed to meet or exceed the Water Board and/or BLM design criteria;
- Roads will be constructed to the minimum necessary width;
- Regulated wastes will be managed according to relevant regulations;
- Surface disturbance will be minimized while optimizing the recovery of mineral resources;
- Fugitive dust and other air emissions from disturbed and exposed surfaces will be controlled in accordance with regulations and permits;

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- The Project Applicant will comply with applicable federal and state water quality standards, including the Federal Water Pollution Control Act, as amended (30 U.S.C. 1151 et seq.);
- Surface water drainage control will be accomplished by diverting storm water, isolating facility runoff, and minimizing erosion;
- Where suitable as a growth media, surface soils will be managed as a growth media resource and removed, stockpiled, and replaced during reclamation;
- A Reclamation Plan will be implemented which addresses earthwork and recontouring, revegetation and stabilization, detoxification and disposal, and monitoring operations necessary to satisfactorily reclaim the project area disturbance including: roads, processing facilities, tailings impoundment, ancillary buildings, equipment and any remaining ore stockpiles.

#### ***1.8.7.5 Growth Media***

Where possible, growth media will be salvaged prior to construction of any mill component. Growth media will be recovered, targeting minimum reclamation cover volumes for nearby components. Growth media will be hauled or otherwise placed to facilitate preservation through milling activities (e.g., stockpiles), and stockpiles will be strategically located to reduce reclamation costs associated with reuse. Since all proposed activities are taking place on previously disturbed areas, it is anticipated that minimal growth media will be available for salvage.

#### ***1.8.7.6 Revegetation, Seeding and Planting***

Reclaimed surfaces will be revegetated to control runoff, reduce erosion, provide forage for wildlife and livestock, and reduce visual impacts. Seed will be applied with either a rangeland drill or with a mechanical broadcaster and harrow, depending upon accessibility. Seedbed preparation and seeding will take place in the fall after grading and top soiling (if necessary) of reclaimed areas. A final reclamation seed mix will be developed and coordinated with the BLM.

#### ***1.8.7.7 Post-Milling Contours and Topography***

The final grading plan for the Project is designed, in part, to minimize the visual impacts of the disturbance proposed by the Project Applicant. Slopes will be re-graded with mobile equipment (examples include, dozers, trucks, loaders, scrapers) to blend with surrounding topography, interrupt straight line features and facilitate revegetation, where practical.

#### ***1.8.7.8 Final Gradient Slope Stability Technical Criteria***

Soils salvaged from Project components, as well as some of the near-surface alluvial material, may be used as soil cover materials during reclamation. Recent similar experience indicates that the use of erosion control best management practices (BMPs) during reclamation activities will greatly reduce the sediment migration from the facilities until vegetation can be established. The Project Applicant will maintain BMPs at the base and (where applicable) diversion at the head of those reclaimed slopes having excessive erosion until vegetation has established. Re-graded slopes will include slight breaks in slopes to reduce overall slope lengths to reduce surface water flow velocities and erosion.

#### ***1.8.7.8 Reclamation of WMU***

If stockpiled ore remains unprocessed after operations have terminated, the residual ore material will either be sold and transported off-site or will be disposed of in the WMU prior to construction of final cover. The liner of the WMU will remain for reclamation and permanent closure of the Project.

In accordance with 27 CCR 22510(I) Tailings Pond Closure, a 24-inch foundation layer of cover material will be placed on the tailings and overlain by a 60-mil Linear Low Density Polyethylene (LLDPE) membrane to create an impermeable layer over the tailings. An 8-ounce geotextile material will be placed over the entire surface, covered with a minimum of 18 inches of growth media, and the surface will be re-graded to drain water away from the center of the WMU at a nominal 5 percent grade. The surface will be seeded with the reclamation seed mix. Soils salvaged from stockpiled excess soils from tailings impoundment construction and the near-surface alluvial material may be used as soil cover materials during reclamation.

The Project takes no action towards the 2006 waste materials that were generated, relocated and covered by a previous operator, as described in section 1.8.1, Project Background. Characterization and disposal of these waste materials are not within the scope of the Project and are not analyzed in this IS.

#### ***1.8.7.9 Reclamation of Road Features***

Roads without a defined post-milling use will be reclaimed concurrently as they are no longer needed for access. Where the original topography exceeds 3H: 1V, the cross-section will be blended to ensure no steeper than 2.5H:1V slopes. Roads and safety berms will be re-contoured or re-graded to approximate the original contour using excavators or dozers as appropriate. Some access roads will be needed to access monitoring points. As monitoring is completed and the Project is closed, the access road will be reclaimed. Upon completion of re-contouring the surface will be seeded with the reclamation seed mix.

#### ***1.8.7.10 Disposition of Structures and Ancillary Facilities***

Structures and facilities associated with the Project will be removed from the Project area during the salvage and site demolition phase. Those building materials that are suitable for salvage, and meet the solid waste disposal criteria, will be disposed of in a Class III landfill located in Bishop. Concrete foundations and stem walls would be demolished to natural grade, broken up to allow drainage through slab foundations and buried in place. Fill would be used to fill subgrade portions of the foundations.

Prior to demolition the mill processing components would be rinsed with fresh water to remove any residual ore and reagents. The rinse water would be directed to the WMU and allowed to evaporate. The reclamation cost estimate, however, includes costs associated with the demolition and disposal of all buildings and ancillary facilities to establish a land use similar to adjacent undisturbed lands. All reagents, chemicals and other hazardous or toxic chemicals will be removed from the Project area. The above surface pipelines will be removed. Underground pipelines will be capped and left in place. Power poles will be cut off at ground level and removed. Perimeter fences will also be removed.

BLM determined that roads on public lands suitable for public access, or which continue to provide public access consistent with pre-milling conditions, will not be reclaimed at mill closure. Narrower access roads may remain on large haul roads after they have been re-contoured.

#### ***1.8.7.11 Post-Reclamation Monitoring and Maintenance***

Following mill closure, berm and sign maintenance, site inspections, and any other necessary monitoring for the period of reclamation responsibility, will be conducted.

Monitoring of revegetation success will be conducted annually until the revegetation standards have been met and will include noxious weed monitoring and abatement as necessary.

Post-milling groundwater quality will be monitored according to the requirements established by the Water Board with the goal of demonstrating the Project has no potential to degrade the Waters of the U.S.

## BISHOP MILL PROJECT

Revegetation monitoring will be conducted for a minimum of three (3) years following implementation of revegetation activities or until revegetation success has been achieved. Revegetation monitoring will occur based on seasonal growth patterns, precipitation, and weather conditions.

Noxious weed monitoring and control will be implemented for a three-year (3) period.

#### ***1.8.7.12 Well Destruction***

Monitoring wells will be maintained until there is no longer a threat to water quality and the Water Board releases the Project Applicant of this requirement. These wells will then be destroyed according to the requirements of Inyo County.

#### ***1.8.7.13 Measures for Extended Periods of Non-operation***

The Project Applicant does not anticipate planned closures of the Project. However, in the event that continuous, full-scale production is interrupted due to economic considerations or unforeseen circumstances, interim reclamation may be initiated. Interim reclamation is outlined below:

- Power Lines - The power line would be inspected regularly and maintained as necessary;
- Roads - The main access road would receive maintenance, as necessary;
- Erosion and Sediment Control Measures - Erosion control measures and BMPs would be regularly inspected and maintained, including the ore patio and WMU;
- Structures - All building, equipment and support facilities would be protected from public access and maintained as necessary;
- Mobile equipment not needed elsewhere would be stored on-site for occasional use for maintenance of facilities (e.g., erosion control, road maintenance etc.).

The Project Applicant will notify the BLM and Water Board in writing within 90 days after any Project suspension that is anticipated to last longer than 120 days. The Project Applicant will identify the nature and reason for the suspension, the duration of the suspension and the events expected to result in either resumption of the mill facilities or the abandonment of the Project.

## **1.9 Surrounding Land Uses and Environmental Setting**

**Figure 1** provides the Regional Location Map depicting the Project location within the surrounding land uses and environmental setting.

### ***1.9.1 Topography***

The Project is located in Inyo County near the northern extent of the Owens Valley. The crest and eastern escarpment of the Sierra Nevada occupy the western half of the area and the western foothills of the White Mountains lie along the eastern margin Project area vicinity. Between the Sierra Nevada and White Mountains is a structural trough that contains the Owens and Round Valleys and the Volcanic Tableland. The Project area is located on the eastern edge of the Volcanic Tableland and drains to the east into the valley bottom which drains south eventually reaching into the Owens River. The primary land use in the immediate vicinity (five-mile radius) is ranching, mining, and milling of various minerals. Rudolph Ranch is the closest residence and is directly east of the Project area at the end of Rudolph Road. The nearest residential development is situated approximately five miles south of the Project area in the small town of Laws.

### **1.9.2 Climate**

Based on the available data from the Bishop Weather Station Observer (WSO) Airport meteorological data station (Station ID No. 040822), which is located approximately 5.7 miles south of the Project area ([www.wrcc.dri.edu](http://www.wrcc.dri.edu)), the climate is semi-arid with an average annual precipitation on the order of 5.28 inches and average daily temperatures range from 97.7 degrees Fahrenheit (°F) in July to a low of 21.8 °F in January.

### **1.9.3 Geology**

The Project is located in the southern part of the Chalfant Valley, which joins the Owens Valley approximately five miles north of Bishop, California. Chalfant Valley is a narrow alluvial plain bounded on the east by the White Mountains and on the west by the Volcanic Tableland. The White Mountains are composed predominantly of granitic rocks partially overlain by metasedimentary and metavolcanic rocks. The Volcanic Tableland is comprised of pyroclastic deposits derived from the volcanic explosions in the Long Valley caldera. The White Mountains extend to more than 13,000 feet above mean sea level (msl), while the Volcanic Tableland rises to 6,000 feet msl. The Chalfant Valley extends north from its junction with the Owens Valley to a geomorphic intersection with the Millner Creek alluvial fan, approximately 4.5 miles north of Chalfant. The Millner Creek alluvial fan dissects the valley and marks the separation of Chalfant Valley from Hammill Valley to the north. Several faults run through the valley, including the Fish Slough fault approximately 2-miles west of the Project area, and the White Mountain range front fault approximately 2- miles east of the Project area (**Appendix B**).

### **1.9.4 Soils**

Soils at the Project area consist of Yaney-Yaney loam associated and Cambidic Haplodurids-Type Haplodurids association. The Yaney-Yaney loam is described as well drained and containing sand, sandy loam and sandy loam with various amounts of gravel. The parent material is described as “Volcanic ash and/or alluvium derived from mixed”. The Cambidic soil is described as well drained and containing gravelly to extremely gravelly sandy loam with some cementation at 11 to 18 inches below ground surface (bgs). The parent material is described as “alluvium derived from mixed sources.”

### **1.9.5 Water Resources**

The Project is located in the northern region of the Owens Valley Groundwater Basin. This groundwater basin encompasses an area of approximately 1,030 square miles and is drained by the Owens River. The basin is bounded on the east by the White Mountains and on the west by the Volcanic Tableland. Recharge to the basin is derived from snowmelt and precipitation runoff from the adjacent highlands and from direct precipitation onto the valley floor. Groundwater in the Chalfant Valley region generally occurs in unconsolidated to semi-consolidated alluvial deposits and flows towards the axis of the valley. The depth to static groundwater beneath the WMU is approximately 40 bgs (**Appendix B – Bishop Mill Hydrogeology Investigation, SRK 2010**).

The capacity of the most limiting layer of each identified soil association to transmit water under saturated conditions (Ksat) ranges from 0.20 to 6.0 inches per hour. Hydraulic conductivities for soil and bedrock underlying the Project area are unknown. Groundwater recharge is primarily derived from snowmelt and precipitation runoff from the adjacent highlands, and from direct precipitation onto the valley floor. The groundwater flow direction within alluvial deposits in the Project area vicinity generally follows the axis of the topography southeast toward the axis of the valley and Bishop (SKR 2010).

Hydrogeologic investigations completed for the Project Area during August through October 2010 indicate that the aquifer beneath the WMU flows from 87 degrees west to east, towards the valley floor at an average gradient of 0.013 feet/foot, from an elevation of 4,211.9 feet msl to 4,207.2 feet msl. Average hydraulic conductivity is approximately 0.40 feet/day (SRK 2010). Background groundwater quality generally meets EPA and California drinking water MCL to comply with Title 27, section 20414(e)(6). However, analytical results indicate exceedances of the drinking water MCL for Aluminum, Arsenic and Lead in the upgradient monitoring well (SRK 2010).

There is no perennial surface water in the Project area or within a one-mile radius. The nearest perennial source of surface water is Fish Slough, located approximately 2 miles to the west. The north fork of the man-made McNally Canal, which is normally dry, crosses the southeastern corner of the greater mill claim site more than 1,000 feet south of the proposed WMU.

### **1.9.6 Vegetation**

The Project area is composed of Alkali Desert Scrub (Mayer and Laudenslayer, 1988) vegetation and contains shadescale (*Atriplex confertifolia*), black greasewood (*Sarcobatus vermiculatus*), four-wing saltbrush (*Atriplex canescens*), Fremont dalea (*Psoralea fremontii*), desert needle grass (*Achnatherum speciosum*) and indian rice grass (*Achnatherum hymenoides*). The percent cover ranges from 5 to 15 percent. The majority of the Project area is extensively disturbed with access roadways, equipment storage and previous grading for construction of the tailings impoundment, mill building and associated ancillary structures.

### **1.9.7 Wildlife**

Wildlife common in the vicinity of the project area include: Golden Eagle; Prairie Falcon; American Kestrel; Red-tailed Hawk; Cooper's Hawk; Swainson's Hawk (breeding season only); Ferruginous Hawk and Rough-legged Hawk (winter only); Barn Owl; Long-eared Owl; Great Horned Owl; Mourning Dove; Loggerhead Shrike; Black-throated Sparrow; Horned Lark; Say's Phoebe; Rock Wren; Bats (*Corynorhinus townsendii*, *Antrozous pallidus*, *Myotis spp.*, *Eptesicus fuscus*, *Parastrellus Hesperus*); Rodents (*Ammospermophilus leucurus*, *Ostospermophilus beecheyi*, *Thomomys bottae*, *Neotoma lepida*, *Microdipodops megacephalus*, *Perognathus spp.*, *Dipodomys spp.*, *Peromyscus maniculatus*); Lagomorphs (*Sylvilagus auduboni*, *Lepus californicus*); other mammals (*Canis latrans*, *Vulpes macrotis*, *Odocoileus hemionus*); Desert Horned Lizard; Zebra-tailed Lizard; Side-blotched Lizard; Desert spiny Lizard; Long-nosed Leopard Lizard; Great Basin collared Lizard; Western Whiptail; Coachwhip; Great Basin gopher Snake; Long-nosed Snake; Speckled Rattlesnake; and Sidewinder.

Wildlife may utilize the area surrounding the Project area. The chain linked fence and access gate to the Project area prohibits most wildlife from entering the Project area. Bird and bat species could access the surface of the WMU within the Project area.

### **1.9.8 Existing Facilities**

**Figure 5** illustrates the existing configuration of the Project area. The existing facilities consist of: a main mill building, (formerly the concentrate treatment building), a garage, five wells (four monitoring wells and a production well), propane tank, power line, tailings impoundment constructed by previous operators, and the 2006 waste materials that were generated, relocated and covered by a previous operator. The disposition of these waste materials will be addressed by a separate Water Board action and are not a component of the Project.

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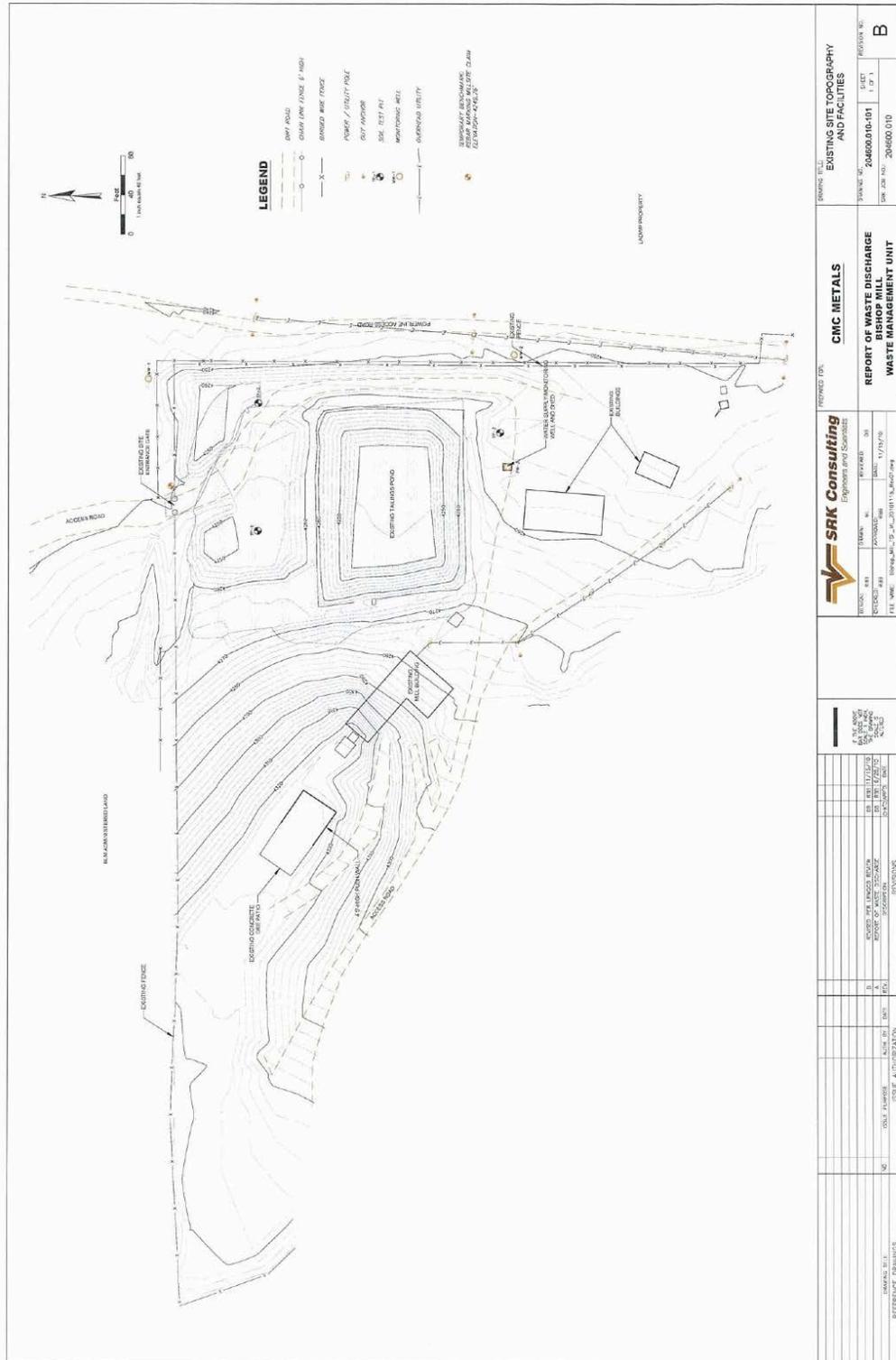
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A chain link perimeter fence encloses the facilities and equipment to be utilized for this Project. There is one partially lined tailings impoundment at the Project area that is approximately 100 foot by 120 foot, and about 20 feet deep.

Existing disturbance equals 7.3 acres of roads, yards, and facilities. The Project area is not currently authorized to conduct milling operations and is currently in a condition of temporary care and maintenance, awaiting the authorization from the BLM and Water Board to resume operations. **Figure 4** illustrates the existing Bishop Mill process components (i.e., Mill Circuit) as described in section 3.13.5 of **Appendix A**.

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Figure 5. Existing Project Area Configuration



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**1.10 Status of Other Project or Proposals in the Vicinity**

Table 2 lists projects and proposals in the project area vicinity for consideration of mandatory findings of significance (CEQA Appendix G Checklist section XVIII).

**Table 2****Projects in the Project Area Vicinity**

<b>Lead Agency</b>	<b>Project Title</b>	<b>Status</b>
BLM	Fish Slough ACEC Management Plan Update – Fish Slough ACEC	In Progress
BLM	Tamarisk Eradication Project – Owens Valley Wide	In Progress
BLM	Great Basin Air Pollution Control District – East Side Owen Lake	Complete
USDA Forest Service – Inyo National Forest	2010 Sierra Moto Xcursions Temporary Special Use Permit	Proposed – Categorical Exclusions, Public Scoping initiated 1/2011
USDA Forest Service – Inyo National Forest	Authorization of Helicopter Landings by the California Department of Fish and Game within Wilderness	Proposed – Environmental Assessment, Public Scoping 4/2011
USDA Forest Service – Inyo National Forest	Inyo National Forest Aspen Enhancement Project	Proposed – Categorical Exclusion, Public Scoping 4/2011
USDA Forest Service – Inyo National Forest	Issuance of 10 Year Priority Use Outfitter/Guide Fishing Permits	Proposed – Categorical Exclusion, Public Scoping 10/2011
USDA Forest Service – Inyo National Forest	Casa Diablo Maintenance Prescribed Burning	Proposed – Categorical Exclusion
USDA Forest Service – Inyo National Forest	Reed Flat OHV Restoration Project	Proposed – Categorical Exclusion, Public Scoping 2/2011
USDA Forest Service – Inyo National Forest	Sagehen sage-grouse habitat enhancement	Proposed – Categorical Exclusion, Public Scoping 3/2011, expected start 5/2011
USDA Forest Service – Inyo National Forest	Mono Basin Grazing Allotment Analysis	Approved– Environmental Assessment, Public Scoping 10/2010, expected start 3/2011
USDA Forest Service – Inyo National Forest	Los Angeles Department of Water and Power, Glass Mountain Communication Lease	Proposed – Categorical Exclusion, Public Scoping 5/2011, expected start 6/2011
Inyo County	Proposed Amendments to the Water Quality Control Plan for the Lahontan Region: Pesticide Prohibition with Exemption Criteria	Proposed – 3/28/2011

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<b>Lead Agency</b>	<b>Project Title</b>	<b>Status</b>
Inyo County	North Lone Pine Mutual Water Company (NLPMWC) Water Main Replacement	
Inyo County	Owens Valley Mosquito Abatement Program	Notice of Exemption – 02/17/2011 Inyo County Planning Department
Inyo County	General Plan Amendment No. 2010-03 (Renewable Solar & Wind Energy)	Notice of Exemption – 12/17/2010 Inyo County Planning Department
Inyo County	SCADA System	Notice of Exemption - 12/16/2010 City of Bishop
Inyo County	Owens Dry Lake Phase 8 Dust Control Measures	Notice of Determination – 12/07/2010 LA Department of Water and Power
Inyo County	Environmental Review - Southern California Edison Pole Yard Facility	Notice of Determination – 10/12/2010 City of Bishop
Inyo County	Zone Change - 187 Edward Street	Notice of Determination – 09/16/2010 City of Bishop
Inyo County	Owens Dry Lake Phase 8 Dust Control Measures	Notice of Determination – 09/13/2010 City of Bishop
Inyo County	Talbot Carter Professional Office	Notice of Determination – Neg Dec 08/17/2010 City of Bishop
Inyo County	Pestmaster Services Inc	Notice of Determination – Neg Dec 08/17/2010 City of Bishop
Inyo County	Renewable Energy Ordinance	Notice of Exemption – 08/17/2010 Inyo County Planning Deptament
Inyo County	Silver Peaks Multi-Family Residential Development	Notice of Determination – Neg Dec 08/17/2010 City of Bishop
Inyo County	Wye Road Intersection Improvement Project	Notice of Determination – Neg Dec 06/10/2010 City of Bishop
Inyo County	Owens Valley Land Management Plan	Notice of Determination – Neg Dec 06/02/2010 LA Department of Water and Power
City of Bishop	Emergency Shelter	Planned - Negative Declaration prepared, public comment period closed 3/14/2011

Source: <http://www.inyocounty.us/EnvironmentalDocuments/EnvDocs.php>; <http://www.ca-bishop.us/PublicWorks/Planning/CityofBishopEnDocs.html>;  
<http://www.fs.fed.us/sopa/components/reports/sopa-110504-2011-04.pdf>;  
<http://www.blm.gov/ca/forms/nepa/search.php?resultpage=1&Submit=Show%20Results&where=fo%20=%20'Bishop'%20AND%20fy='2011>

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**1.11 Other Public Agencies Whose Approval is Required**

The Project is situated on public lands administered by the U.S. Department of the Interior, BLM, Bishop Field Office. The Project contact for the BLM is:

**Steve Nelson**  
 Bureau of Land Management  
 Bishop Field Office  
 351 Pacu Lane, Suite 100  
 Bishop, CA 93514  
 760-872-5006 – Office, 760-872-5050 – Fax  
[snelson@blm.gov](mailto:snelson@blm.gov)

Inyo County exercises no land use jurisdiction except for mining reclamation pursuant to Surface Mining and Reclamation Act (SMARA), and therefore, does not require a permit from the Project Proponent (i.e., Operator). **Appendix D** presents explanation of and documentation for the exclusion of Inyo County as a responsible agency dated November 16, 2010 and December 10, 2010. Inyo County has indicated that SMARA does not apply pursuant to section 2714, subsection C, Conditions 1, 2 and 3 of SMARA because the site is a mill site and not a mining operation and is located on lands zoned for industrial or commercial uses in the Inyo County General Plan.

**1.12 Environmental Factors Potentially Affected**

This section displays each impact issue area alongside a square that may be marked to indicate that the Initial Study analysis identified an impact for the issue. The environmental factors with checked boxes are those that would be potentially affected by the Project, involving at least one impact that is identified as a “Potentially Significant Impact” in the checklist analysis.

The environmental factors checked below would be potentially affected by this Project. Please see the checklist beginning on page 24 for additional information and analyses.

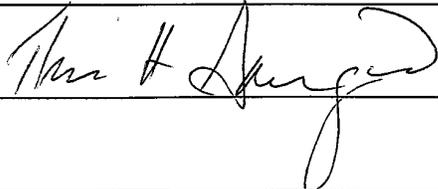
<input checked="" type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input checked="" type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input checked="" type="checkbox"/>	Cultural Resources	<input checked="" type="checkbox"/>	Geology/Soils
<input checked="" type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Hazards and Hazardous Materials	<input checked="" type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance

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**1.13 Determination**

On the basis of the initial evaluation that follows:

<input type="checkbox"/>	I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required

Signature: 	Date: 5/3/11
Printed Name: THOMAS H GAVIGAN	For: LRWQCB

## 2 Evaluation of Environmental Impacts/CEQA Appendix G Environmental Checklist

The evaluation of environmental impacts is based upon the completion of the checklist portion of the Environmental Checklist Form, and consists of the analysis of each impact issue area required under CEQA. The analysis of each checklist item identifies any significance criteria or thresholds used to evaluate each impact question, and any mitigation measure(s) identified to reduce the impact to a less-than-significant level.

This checklist identifies physical, biological, social and economic factors that might be affected by the Project. In some cases, background studies performed in connection with the Project indicate no impacts. A “No Impact” answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS</b>				
<b>Would the Project:</b>				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
<b>Discussion:</b>				
Ia) There are no designated scenic vistas in the Project area vicinity and therefore the Project creates no impact. Ib) The Project area is not visible from a State of California Scenic Highway. Therefore, the Project creates no impact to scenic resources within a state scenic highway. Ic) The Bishop Mill is an existing facility, presently inoperable. The Project implements ore processing within existing onsite structures. The Project area is located within Visual Resource Management (VRM) II areas, as designated in the Bishop Resource Management Plan (BLM 1993). The following VRM II objective applies to the Project area: "The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen from key observation points, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line color, and texture found in the predominant natural features of the characteristic landscape". The key observation viewpoint is SR 6, located one mile to the east. The mill building was painted a tan color				

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during its construction to conform to the surrounding landforms. The structures' angular design features repeat the elements of the asymmetrical landscape creating a complete visual blend as a result of the mills color and design, and the mills location at the toe of the slope of a tan colored pumice escarpment. As a result, the mill tends to blend into the landscapes as a seen from SR 6. The small addition to the mill building will be painted the same color to blend into the landscape. The expansion of the existing tailings impoundment to a Class A WMU will not further degrade the scenic quality of the site because it will not increase the height of the structure's rim. If the Project area meets the VRM II conformance, the Project creates no impact to visual resources (BLM 2005).

The existing visual character and quality of the Project area is that of an inoperable mill site under the backdrop of the Sierra Nevada Mountains to the East and the White Mountains to the west. The Project description demonstrates the scale, placement, color, and architecture are compatible with the Project area, which is zoned for industrial and commercial uses, and the surrounding high desert tableland. The change in Project area configuration, which includes the expansion of the existing tailings impoundment to a Class A WMU and the addition of a 500 square feet of concrete pad to the southwest side of the main mill building to house the Krupp Screen, will not substantially degrade the existing visual character or quality of the site because the uses will be consistent with existing mill facilities. The WMU will be constructed with the rim of the WMU at approximately 4260 feet and the tailings impoundment liner installed at approximately 4235 feet or 25 feet bgs. The WMU will be constructed at the current tailings impoundment location, increasing the depth of excavation by another 5 feet bgs and expanding the surface area from 150 feet by 190 feet to 185 feet to 240 feet. The WMU is sited as such that the existing topography of Project area shields views of the impoundment structure. The ore to be staged temporarily on the concrete patio prior to processing is not visible from outside of the Project area. Therefore, this impact is less than significant.

Id) Interference with nighttime skies from ground level light and glare or interference with vision due to reflective glare constitutes a significant impact. The Project will operate 24-hours per day, seven days per week and require adequate exterior lighting to meet requirements for worker safety. The existing sources of exterior lighting will be used. If additional lighting is necessary, lighting will be installed in conformance with Policy VIS-1.6, control of Light and Glare, outlined in the Inyo County General Plan. To avoid impacts to night skies Outdoor light fixtures including street lighting, externally illuminated signs, advertising displays, and billboards shall use low-energy, shielded light fixtures which direct light downward (i.e. lighting shall not emit higher than horizontal level) and which are fully shielded.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE RESOURCES / FARM LANDS</b>				
In determining whether impacts to agricultural resources and farm lands are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland and the Surface Mining Control and Reclamation Act of 1977.				
<b>Would the Project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-				X

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agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
<p><b>Discussion:</b></p> <p>IIa) The Project area does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Because no lands designated Prime Farmland, Unique Farmland or Farmland of Statewide Importance exist within the Project area, the Project results in no impact to these resources.</p> <p>IIb) The Project area is not zoned for agricultural use, and does not contain any Williamson Act contracts. Because no such zoning exists within the Project area, the Project results in no impact to these resources.</p> <p>IIc) The Project area is not zoned for forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)). Because the Project area contains no lands with these designations, the Project results in no impact to these resources.</p> <p>IId) The Project does not result in the loss of forest land or conversion of forest land to non-forest use. Because forest land does not exist within the Project area, the Project creates no impact to this resource.</p> <p>IIe) Because designated Farmland does not exist within the Project area, the Project creates no impact to this resource.</p>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<p><b>III. AIR QUALITY</b></p> <p>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.</p> <p><b>Would the Project:</b></p>				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	

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c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?			X	

**Discussion:**

IIIa) The purpose of the Unified Great Basin Air Pollution Control District (GBUAPCD) is to enforce Federal, State and local air quality regulations and to ensure that the federal and state air quality standards are met. These standards are set to protect the health of sensitive individuals by restricting how much pollution is allowed in the air. To meet these standards GBUAPCD enforces delegated federal laws, state laws on stationary (as opposed to mobile) sources of pollution, and pass and enforce local regulations as they become necessary. The GBUAPCD does not generally regulate mobile air pollution sources (cars and trucks), which is the responsibility of the California Air Resources Board (CARB).

Although no specific air quality plans are applicable to the Project area, the GBUAPCD requires compliance with state and federal air quality standards. The Project Applicant must obtain permits for ore processing and land disturbance with the GBUAPCD prior to operations. Compliance with permit conditions will assure the Project does not degrade air quality. Because no applicable air quality plan exists, the Project results in no impact to such a plan.

IIIb) Project construction and operations will not cause violations to any air quality standard or contribute substantially to an existing or projected air quality violation. Based on URBEMIS emissions reports, the Project will not result in appreciable permanent reductions in air quality. Owens Lake and Mono Lake particulate sources within the GBUAPCD violate the federal PM10 standard, but these sources are 60 miles or so from the Project area. Although the GBUAPCD reports no existing air quality violations for the Project area or immediate vicinity, the Project includes air pollution control measures and practices to avoid and minimize air emissions that could contribute towards an existing or projected air quality violation. The Project proposes dust control measures for disturbed areas. Fugitive dust emissions in the processing area will be controlled at the crusher and conveyor drop points using water sprays and/or negative air pressure dust collection where necessary. Pollution control equipment will be installed, operated and maintained for optimal performance of components. For ongoing fugitive dust control the Project Applicant or its contractor will water haul roads, complete moisture conditioning of borrow material to be used for fill, and maintain in-place fill materials.

Project construction is modeled over a three-month period during the summer and early fall months, as detailed in **Appendix E**, which contains the URBEMIS summer and combined annual emissions reports for construction and operations. Unmitigated PM10 emissions could total 46 pounds/day during construction activities, but are reduced to 3.5 pound/day through implementation of soil stabilization and dust control measures. Unmitigated PM10 emissions could total 0.31 pounds/day during demolition and reclamation activities, but are reduced to 0.05 pound/day through implementation of soil stabilization and dust control measures.

The Project facilities will be powered by existing overhead power lines on the east side of the Project area that are owned by Southern California Edison and will draw an estimated 937,320 kWh per year. The Project does not propose back up power from fuel run generators. Over-the-highway haul trucks will deliver up to 75 tons of ore per day to the Project area over a 5-year time span. Four (4) trucks per day and seven (7) worker trips were modeled to assume a worst-case scenario for operational emissions. Operational emissions could contribute 0.8 pounds/day of PM10 emissions.

Given the relatively small contributions towards PM10 emissions, the Project will not contribute substantially towards existing non-attainment of PM10 standards during construction, operations, or demolition and

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reclamation phases.

IIIc) The Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Although there are portions of Inyo County within non-attainment areas for Federal and State PM10 (particulate matter 10 microns or less in diameter) ambient air quality standards, the primary source for this pollution is the Owens dry lake, located more than 80 miles from the Project area. As a result of proposed dust control measures, the project will not increase PM10 pollutants over existing levels, and the project will have a less than significant impact on PM10 levels.

IIIId) A sensitive receptor is generally defined as a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant than is the population at large. Sensitive receptors (and the facilities that house them) in proximity to localized CO sources, toxic air contaminants or odors are of particular concern.

Project operations will be performed within buildings and processing equipment that minimize the creation of air borne pollutants. Should airborne pollutants be released during operations, the prevailing wind direction at the Project area is to the north, where no sensitive receptors are located within 1 mile of the Project area. The nearest residential development is approximately one mile east of SR 6 on Rudolph Road, which is approximately two miles east of the Project area. Because the Project will not release substantial pollutant concentrations and because the Project area is not located in close proximity to sensitive receptors, no impact occurs.

IIIe) The Project will not create objectionable odors affecting a substantial number of people because most mill operations will occur within buildings and by processing equipment designed to contain and/or neutralize objectionable odors. Up to seven (7) full time employees will work at the mill site and will be provided with appropriate protective equipment.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES / THREATENED OR ENDANGERED SPECIES/WETLANDS AND RIPARIAN ZONES</b> <b>Would the Project:</b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act (including, but not limited				X

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to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

**Discussion:**

IVa) To determine which federal threatened, endangered or candidate species may be present in the Project area, a species list was obtained from the US Fish and Wildlife Service (USFWS), Ventura Office. The Project area is located on the Laws 7.5 minute Quad map. This list identifies species which are federally listed as Threatened or Endangered that are known to occur within the Project area or those species that may be affected by projects in the area. The USFWS species listed as shown in **Appendix F** include: Southwestern Willow Flycatcher (*Empidonax traillii extimus*), Owen’s Pupfish (*Cyprinodon radiosus*), Owen’s Tui Chub (*Siphateles bicolor snyderi*), and Sierra Nevada Bighorn Sheep (*Ovis Canadensis californiana*).

The California Natural Diversity Database (CNDDDB) was searched for federal and state threatened, endangered or sensitive species that are known to occur or have occurred in the past within the areas on the Laws 7.5 min Quad map. The CNDDDB search resulted in seven species that have occurred within the Laws 7.5 min Quad map. The CNDDDB species listed as shown in Appendix E include: Swainson’s hawk (*Buteo swainsoni*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*), Bank Swallow (*Riparia riparia*), Owen’s Tui Chub (*Siphateles bicolor snyderi*), Owens Pupfish (*Cyprinodon radiosus*), Owens Valley Checkerbloom (*Sidalcea covillei*), and July gold (*Dedeckera eurekensis*). Of the species listed above, none have the potential to exist within the Project area. A brief description of the habitat requirements for each of the above species is outlined in **Table 3** and a determination as to why the habitat is not suitable. Fish Slough’s springs support the threatened Owens pupfish and Fish Slough milkvetch. Based on hydrogeologic investigations, Project operations are unlikely to affect the aquifer.

The Project will not result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or USFWS because no suitable habitat for any of the above species exists onsite as noted above in **Table 3**.

However, because the WMU will contain Group A mine waste within an open body of water (i.e., 185 feet by 240 feet at WMU crest) with approximately one-acre of surface area, the potential exists for sensitive bird and bat species to be attracted to this water surface. The chain linked fence surrounding the project area excludes most wildlife species from access to the WMU, but bird and bat species coming in contact with Group A mine waste held within the WMU could be exposed to direct and indirect adverse impacts. Mitigation measure BIO-1 is necessary to reduce this potential impact to wildlife to a level of less than significant.

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**Table 3****Special Status Species That May Occur In Project Vicinity**

<b>Species</b>	<b>Habitat Description</b>	<b>Likelihood of Occurrence Within Project Area</b>
Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> )	Wet meadow and montane riparian habitats from 2000-8000 feet in elevation. Occurs in wet meadows with willow shrub component.	No riparian habitats exist within the Project area and, therefore species is not expected to occur.
Swainson's hawk ( <i>Buteo swainsoni</i> )	Open desert or grassland containing large trees for nesting. Nest locations mostly occur within riparian areas.	Large trees not present within or adjacent to the Project area, therefore area not suitable for nesting.
Bank Swallow ( <i>Riparia riparia</i> )	Nests and feeds within riparian habitats but also over brushland, grassland, wetlands and water. Requires vertical banks and cliffs with sandy soils near streams, rivers, ponds and lakes for nesting.	No active streams or water bodies in area with vertical banks for nesting in or adjacent to the Project area, therefore this species is not expected to occur.
Sierra Nevada Bighorn Sheep ( <i>Ovis Canadensis californiana</i> )	Feeds in open habitats, such as rocky barrens, meadows, and low sparse brush lands. Uses rocky, steep terrain for escape and bedding. Remains near rugged terrain while foraging.	Steep rugged terrain not located adjacent to Project area therefore species not expected to occur.
Owen's Tui Chub ( <i>Siphateles bicolor snyderi</i> )	This fish species requires undercut banks and aquatic plants in lakes and irrigation ditches to provide cover.	No lakes, ponds or aquatic habitats present within or adjacent to the Project area, therefore this species is not expected to occur.
Owens Pupfish ( <i>Cyprinodon radiosus</i> )	This fish species occurs in shallow water locations within the Owens Valley. Warm clear waters without exotic fishes are necessary as well as firm substrate for spawning.	No lakes, ponds or aquatic habitats present within or adjacent to the Project area, therefore this species is not expected to occur.
Owens Valley Checkerbloom ( <i>Sidalcea covillei</i> )	Plants occur within alkaline meadows and freshwater seeps, with sandy loam soils between 3,500 – 4,750 feet in elevation.	No meadows or freshwater seeps located within or adjacent to Project area, therefore this species is not expected to occur.
July gold ( <i>Dedeckera eurekensis</i> )	Plants are located on rocky ridges, cliffs and talus slopes on carbonite soils.	The Project is located on a ridge, cliff, talus slope, but is not located on carbonate soils; therefore this species is not expected to occur within the Project area.

Source: HBA 2011

**Required Mitigation:**

**BIO-1. Protection for Bird and Bat Species** – *The Project Applicant shall install exclusion measures that prevent bird and bat species from coming in contact with the WMU surface. The measures shall comply with the requirements of CDFG.*

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IVb) The Project creates no substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS. Of the sensitive natural communities listed in the Inyo County General Plan (December 2001), none are present within or adjacent to the Project area. No riparian habitat or sensitive natural communities are present within or immediately adjacent to the Project area. Because the Project area contains no such habitats, the Project creates no impact to these resources.

IVc) The Project will not have a substantial adverse effect on federally protected wetlands as defined by section 404 of the Clean Water Act. No wetlands are present within or adjacent to the Project area. All construction will be within previously disturbed areas and will not impact wetlands or Waters of the US. Because the Project area contains no federally protected wetlands, the Project creates no impact to this resource.

IVd) The Project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The Round Valley Deer heard migration corridor is located approximately 12 miles to the west of the Project area. The Winter range of the Round Valley Deer heard is primarily located to the west of Bishop and to the east of Mt. Tom and Wheeler Ridge. The deer migrate to the north over Swall Meadows and then west into Long Valley and into the Sierra Nevada. The project is not located within any known migration route. The Project includes committed practices for the protection of wildlife; most importantly the monitoring of the main gate to assure that this primary entrance point is not utilized by wildlife to circumvent the doubled fenced Project area.

IVe) The Inyo County General Plan identifies Goals and Policies to protect biological resources. Goal BIO-1: Maintain and enhance biological diversity and healthy ecosystems throughout the County. The proposed project does not impact any wildlife corridors, sensitive natural communities or species and therefore meets Goal BIO-1 of the Inyo county General Plan. Goal BIO-2: Provide a balanced approach to resource protection and recreational use of the natural environment. The project does not include any recreational uses and therefore complies with this goal. The Project, therefore, creates no conflict with local policies or ordinances protecting such resources.

IVf) The Project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because no such plans exist for the Project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES</b>				
<b>Would the Project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource (i.e., fossils) or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

**Discussion:**  
 Va) BLM archaeologist, Greg Haverstock, performed a complete pedestrian cultural resource survey in March

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2011 covering the entire Area of Potential Effects (APE). The cultural resource inventory report (CA170-11-30) submitted to the regional Information Center contains the negative survey results. Surveys identified no sites that are potentially eligible for the National Register of Historic Places and identified no unevaluated cultural resources.

Because historical resources as defined in PRC section 15064.5 will be disturbed within the Project area, the Project will not cause substantial adverse change in the significance of a historical resource or create a significant impact.

Vb) No archaeological resources have been identified within the Project area. The Project will not cause a substantial adverse change in the significance of an archaeological resource because avoidance of such resources will occur during project construction and long-term operations. If avoidance is not possible, or is inadequate to prevent adverse changes, mitigation measures CUL-1 and CUL-2 are necessary to reduce potential impacts to archaeological resources to a level of less than significant.

**Mitigation Measure CUL-1. Eligibility Evaluations** - *Ground disturbing activities in the vicinity of the resource shall cease if the archaeological monitor determines that continuation of activity shall affect a significant historical or archaeological property, or if human remains are identified. If the archaeological monitor identifies cultural material but is unable to determine whether the resumption of the construction activity will affect historical or archaeological resources that may be eligible for listing in the NRHP or California Register of Historic Resources (CRHR), the monitor shall contact the appropriate agency official. The agency official shall determine appropriate measures to be completed before resumption of ground disturbing activities in the affected area and shall ensure compliance with regulations pertaining to the evaluation of significance, assessment of effects, and consultation with the State Historic Preservation Officer and the Advisory Council on Historic Preservation, as appropriate (36 CFR, part 800.4 through 800.9).*

**Mitigation Measure CUL-2. Data Recovery Plan and Programmatic Agreement** - *If avoidance of the important archaeological resource is not feasible, the Lead Agency shall require an excavation plan for mitigating the effect of the Project on the qualities that make the resource important. If an excavation plan is prepared, it shall:*

*1. Be a brief summary of the excavation proposed as part of a mitigation plan; 2. Be available for review only a need-to-know basis; and 3. Not include the specific location of any archaeological resources if the plan will be made known to the general public. An excavation plan shall: 1. List and briefly discuss the important information the archaeological resources contain or are likely to contain; 2. Explain how the information should be recovered to be useful in addressing scientifically valid research questions and other concerns identified in subdivision (a); 3. Explain the methods of analysis and, if feasible, display of excavated materials; 4. Provide for final report preparation and distribution; and 5. Explain the estimated cost of and time required to complete all activities undertaken under the plan. The Lead Agency may require a mitigation plan to be carried out as a condition of approval of the project.*

*A Memorandum of Agreement (MOA), or Programmatic Agreement (PA) between the applicable agencies, executed pursuant to 36 CFR 800.6(c), shall set out specific steps for avoiding or reducing harm to cultural resources formally determined eligible to the NRHP and/or CRHR. The MOA shall identify requirements for proposed disturbance to eligible resources and shall ensure that construction activities be restricted to the direct area of impact, during project construction.*

Vc) The Project is located in the Chalfant Valley, a narrow alluvial plain bound on the east by the White Mountains and on the West by the Volcanic Tableland. The White Mountains are composed predominately of granitic rocks partially overlain by metasedimentary and metavolcanic rocks. The Volcanic Tableland is comprised of pyroclastic deposits derived from the volcanic explosions in the Long Valley Caldera. Based on the absence of sedimentary rocks, the Project requires an additional five (5) feet depth of excavation in an area that has already been excavated and that is not a high or moderate resource potential geologic deposit, formation or rock unit. Therefore, the level of impact to paleontological resources is less than significant.

Vd) No dedicated cemeteries exist within the Project area, and during prior development of the Project area no human remains were encountered. However, the Project requires the development of an additional 1.80 acres for installation of the WMU. The existence of, or probable likelihood of human remains within the Project area, is low. However, the mitigation measure CUL-3 further reduces the potential impact to undiscovered human remains to a level of less than significant.

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<b>Mitigation Measure CUL-3. Protect Undiscovered Human Remains</b>				
<i>In the event of discovery or recognition of any human remains there shall be no further excavation or disturbance of the site or nearby area reasonably suspected to overlie adjacent human remains until:</i>				
<i>1. The coroner of Inyo County has been informed and has determined that no investigation of the cause of death is required, and 2. If remains are of Native American origin, a. The descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC section 5097.98, or b. The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission.</i>				
<i>As part of the objectives, criteria, and procedures required by section 21082 or as part of conditions imposed for mitigation, the Water Board (i.e., CEQA Lead Agency) will make provisions for archaeological sites accidentally discovered during construction. These provisions include an immediate evaluation of the find. If the find is determined to be an important archaeological resource, contingency funding and a time allotment sufficient to allow recovering an archaeological sample or to employ avoidance measures. Construction work could continue on other parts of the building site while archaeological protection takes place.</i>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>VI. GEOLOGY AND SOILS</b>				
<b>Would the Project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X

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e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
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**Discussion:**

VIa) The potential for the Project to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides is less than significant.

i) Figure 2-1 of **Appendix B** presents the Project area surface geology with respects to regional faulting and Figure 2-3 maps Holocene faulting in the Project area vicinity. The Fish Slough Fault approximately 2 miles west of the Project area and the White Mountain range front fault approximately 2 miles east of the Project area are defined as Alquist-Priolo Special Studies Zones, but the Project area is not located within an identified Alquist-Priolo fault zone.

ii) Based on information obtained from the California Geologic Survey website Probabilistic Seismic Hazard Mapping Ground Motion page for Bishop, California, ground motion for the Project area expressed as a fraction of the acceleration of gravity (g) range between peak ground acceleration (PGA) of 0.329g for firm rock and 0.376 for alluvium (Note: 10 percent probability of exceedance in 50 years). The WMU has been designed to sustain a PGA of at least 0.37g, as detailed in section 5.5.3 of **Appendix B**.

iii) To assess the potential for seismic-related ground failure, including liquefaction, for the Project area, static and pseudo-static analyses of the stability of the critical tailings impoundment embankment section were performed using the computer program SLIDE (Version 5.026). SLIDE is a 2-D slope stability analysis program designed for evaluating the factor of safety or probability of failure of circular or non-circular failure surfaces in a defined slope. SLIDE analyzes the stability of slip surfaces using vertical slice limit equilibrium methods (e.g., Bishop, Janbu, Spencer, etc). Defined surfaces are analyzed, or random search methods are applied to locate the critical slip surface for a given slope under both static and pseudo-static conditions.

In the pseudo-static approach, a sustained horizontal force is applied to simulate inertial forces due to earthquake motions. The horizontal inertial force is estimated as a fraction of the weight (vertical force) by a horizontal pseudo-static seismic coefficient. This approach is applicable to slope materials that don't liquefy or lose shear strength with seismic shaking (Seed 1979). Section 5.5.3 and Attachment F of **Appendix B** reports this slope stability analysis.

The Project proposes no change to the existing buildings and the ore patio expansion of the Mill building will be constructed to comply with Inyo County building codes applicable to Seismic Hazard Zones 3 and 4, which are identified throughout the county. The WMU embankment will be constructed using on-site native soils. The WMU will be double-lined with LCRS and the potential for seepage through the embankment and subsequent liquefaction or shear strength reduction is therefore considered less than significant.

iv) Because the Project area contains no landforms that could contribute to landslide potential, the Project has no effect towards exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

VIb) The Project includes committed practices for erosion and sediment control during construction and during long-term operations. BMPs will be used to limit erosion and reduce sediment in precipitation runoff from project facilities and disturbed areas during construction, operations, and initial stages of reclamation. BMPs may include, but are not limited to, diversion and routing of storm water using accepted engineering practices, such as diversion ditches, and the placement of erosion control devices such as sediment traps, and rock and gravel cover. Revegetation of disturbed areas will reduce the potential for wind and water erosion. Following construction activities, areas such as cut and fill embankments and growth media stockpiles will be seeded as soon as practical and safe. Concurrent reclamation will be maximized to the extent practical to accelerate revegetation of disturbed areas. Sediment and erosion control measures will be inspected as outlined in the WDR issued by the Water Board, and repairs performed as necessary. Appendix D contains the tentative WDR for the Bishop Mill.

The Project reduces impacts from substantial soil erosion or the loss of topsoil to a level of less than significant through implementation of these committed practices. Additionally, the Storm Water Pollution Prevention Plan (SWPPP) required for Statewide Phase II NPDES construction permitting will include standard erosion and

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sediment control measures required for dischargers.

In summary, the Project will conform to BMP requirements as set forth by the Inyo County Public Works Department, Inyo County of Inyo Environmental Health Services Department, the Water Board and BLM. Compliance with regulatory programs and systems avoids or minimizes potential impacts.

VIc) The Project is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

According to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS 1996), soils at the Project area consist of Yaney-Yaney loam associated and Cambidic Haplodurids-Type Haplodurids association. The Yaney-Yaney loam is described as well drained and containing sand, sandy loam and sandy loam with various amounts of gravel. The parent material is described as “Volcanic ash and/or alluvium derived from mixed”. The Cambidic soil is described as well drained and containing gravelly to extremely gravelly sandy loam with some cementation at 11 to 18-inches bgs. The parent material is described as “alluvium derived from mixed sources.”

Three test pits were excavated on April 28, 2010, both north and south of the existing tailings impoundment to evaluate the near surface materials available for WMU embankment construction. The locations of the test pits are illustrated in Attachment A of **Appendix B**. The test pits were advanced to approximately 15 feet bgs. Soils encountered during test pitting were bulk sampled in 5-gallon buckets and the samples were submitted to Sierra Geotechnical Services, Inc., of Bishop, California for laboratory analysis. The results of the analyses are included in the Attachment B of **Appendix B** and indicate Project area soils can be generally described as non-plastic, sandy silt to very silty sand with a trace of gravel.

No soil conditions that would preclude project construction or operations were identified. Adherence to standard building techniques and practices ensures that project facilities withstand probabilistic seismic hazards and localized geologic and soils conditions. Compliance with relevant local, State, and federal rules, regulations, policies, and procedures works to ensure less than significant impacts resulting from soil stability.

VIId) The Project is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code. Yaney and Cambidic soils have low soil moisture characteristics and low percentages of clay content. The Project creates no substantial risks to life or property from development on expansive soils (<http://soils.usda.gov/technical/classification/osd/index.html> - Accessed March 30, 2011).

VIe) Septic tanks must comply with Inyo County General Policy S-2.2 and Environmental Health Department and Water Board requirements for siting and installation. The Project does not propose installation of septic tanks and therefore has no impact to this resource.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VII. GREENHOUSE GASES</b>				
<b>Would the Project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

**Discussion:**

VIIa) The Project will not directly contribute to greenhouse gas emissions because Project facilities include components to control fugitive emissions resulting from ore processing and disposal. As discussed in section III of this checklist, the Project includes committed practices to control fugitive emissions, reducing potentially

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significant impacts from pollutant emissions to less than significant levels. The Project also includes committed practices for water conservation, reducing energy demands associated with extracting groundwater for use in ore processing.

Indirectly during construction of the Project, greenhouse gas emissions will occur on a temporary and intermittent basis from construction equipment, which is estimated at 5,860 pounds/day of CO<sub>2</sub> during the construction period and 803 pounds/day of CO<sub>2</sub> during the demolition and reclamation period.

Indirectly during operations, greenhouse gas emissions will occur from vehicles accessing the Project area. Limited emissions are anticipated from vehicles of workers commuting to and from the Project area for operations and maintenance. Limited emissions will result from over-the-highway haul trucks delivering ore to the Project area. URBEMIS model results estimate 138 tons annually of unmitigated CO<sub>2</sub> emissions from energy use for ore processing, over the highway haul trucks, and worker vehicles. In comparison with CARB estimates for annual CO<sub>2</sub> emissions, the worstcase scenario of 45 daily trips associated with long-term Project operations, the contribution of the Project towards statewide greenhouse gas emissions is nominal.

VIIIb) The Project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases because such plans specific to the Project area and vicinity do not exist. Over the long-term, the Project will support State of California plans, policies, and regulations to reduce greenhouse gas emissions and adapt Project facilities and processes to evolving legislation and best science.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS</b>				
<b>Would the Project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the Project area?				X
f) For a project within the vicinity of a private				X

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airstrip, would the project result in a safety hazard for people residing or working in the Project area?				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

**Discussion:**

VIIIa) Hazardous materials will be transported, stored, and used in accordance with federal, state, and local regulations (e.g., Clean Air Act, Clean Water Act, Comprehensive Environmental Response, Compensation and Liability Act and the Toxic Substances Control Act). At the local level, fire departments screen inventories of substances and inspects sites, the Inyo county Health Department is responsible for reviewing hazardous materials plans and the GBUAPCD evaluates project for possible toxic emissions and issues permits as necessary.

Transport. When transported in vehicles, activities associated with hazardous materials transportation (packaging, identifying, loading, and warning the public of the hazard) are regulated by the California Highway Patrol and the U. S. Department of Transportation (USDOT). Most of California’s hazardous material safety regulations are found in Title 13 of the California Code of Regulations, Division 2, Chapter 6. The federal hazardous material safety regulations are found in 49 CFR, parts 171 through 180.

Substance or material defined in Title 49 of the Code of Federal Regulations (49 CFR), section 171.8 that is capable of causing an unreasonable risk to human health or safety or the environment when transported by vehicle, used incorrectly, or not properly stored or contained, is a hazardous material. Hazardous materials can be a liquid, a solid, or a gas. Examples of hazardous materials are explosives, flammables, corrosives, radioactive materials, and poisons. Transportation of such materials is highly regulated to ensure the safety of the motoring public.

Chemicals required for ore processing will be transported to the Project area. Trucks for hire must meet the general requirements regarding the transportation of hazardous materials as governed by sections 31301-34510 of the Vehicle Code. The Project will not involve the transportation of explosives, inhalation hazards or radioactive materials.

Use. Employees will be trained in the proper transportation, use, and disposal of hazardous materials, including used solvent, liquids drained from aerosol cans, accumulations of mercury fluorescent lights and antifreeze. Ore processing related reagents are stored within the mill building. A portable, stand-mounted 1,000-gallon tank will be placed at the Project area to contain diesel for use in equipment. The stand will be placed in an area with secondary containment (lined with plastic) to contain leaks or spills. Reagents used at the facility are listed in Table 3-1 of **Appendix B**. Chemicals not listed on this table will be removed from the Project area prior to commencing operation. Copies of the Material Safety Data Sheets for each chemical will be maintained onsite for inspection.

The purpose of the Project is to produce concentrates that will be shipped off site for further smelting and refining to metal. Refined metals will not be produced at the Project area. Chemicals to be used for the flotation and concentrating of the ores will be commonly used industry standard, biodegradable chemicals. Mercury and cyanide will not be used in the concentration process for any of the ores being considered. As ore from different locations are proposed, a metallurgical test will be performed to ensure the facility can adequately recover the minerals of interest. Prior to processing and contracting the delivery of the ore, a list of metallurgical chemicals required to process the ore will be forwarded to the BLM and Water Board to confirm the constituents are able to be used in reference to the type of WMU design proposed.

Disposal. Residual wastes in the WMU will be analyzed for constituents of concern as laid out in the Monitoring and Reporting Program of the WDR issued by the Water Board. The method of disposal and the classification of

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the solids will be determined based on the laboratory analysis. Based on the laboratory analysis, any hazardous materials will be disposed of off-site at an appropriate disposal facility in accordance with applicable regulations. Compliance with codified regulations described above avoids and minimizes potential hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials.

VIIIb) Project design and committed practices and compliance with federal and state regulations and permit programs avoid and minimize hazards to the public or the environment involving the release of hazardous materials into the environment. The Project operations are not anticipated to result in the creation of health hazards following compliance with health and safety regulations and WDRs.

In utilizing two synthetic-liners comprised of HDPE, the design of the Bishop Mill WMU meets the requirements of section 20320 – General Criteria for Containment Structures. The containment design of the WMU is shown on the design drawings described in section 5.1 and illustrated in Attachment A of **Appendix B**.

The Group A WMU waste, however, will likely contain constituents at concentrations that are hazardous and could impair water quality if released to the environment. Depth to groundwater beneath the WMU is a minimum of 25 feet bgs and averages 40 feet bgs. Although the WMU is designed to prevent the waste from contacting the underlying land surface, the Water Board finds that the character of the waste and the shallow depth to groundwater compels a requirement for financial assurance for remediation of a reasonably foreseeable release. The Project Applicant is responsible for providing this financial assurance. To minimize potential impact resulting from accidental spills or release, preparation of a Spill Response Plan, which is a required component of construction and operational SWPPPs, is necessary.

VIIIc) The Project is not located within one-quarter mile of an existing school. The City of Bishop and Inyo County have no schools proposed in the vicinity of the Project area.

VIIIId) The Project is not located on a known hazardous waste and substance site. The Project area is not identified on the Cortese List, which is updated and submitted at least annually to the Secretary of Environmental Protection pursuant to section 65962.5 (<http://www.envirostor.dtsc.ca.gov/public/>).

VIIIe) The Project is not located within an airport land use plan and is not within two miles of a public airport or public use airport. The Project therefore has no impact to human safety hazards in designated airport influence areas.

VIIIIf) The Project is not located in the vicinity of a private airstrip, and therefore creates no impact to human safety hazards in designated airstrip influence areas.

VIIIg) The primary evacuation route is SR 6 to US 395 with secondary evacuation routes via SR 6 to SR 120 or SR 6 to Benton Crossing Road, which connects back to US 395. The Project is required to comply with applicable Inyo County codes for emergency vehicle access.

VIIIh) The Project does not expose people of structures to a significant risk involving wildfires because the Project area does not contain sufficient vegetation to spread catastrophic wildfire, is not located adjacent to urbanized areas, and does not involve residences.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY</b>				
<b>Would the Project:</b>				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater		X		

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table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?			X	

**Discussion:**

IXa) The Project includes replacement of the existing tailings impoundment with a new WMU for purposes of compliance with Federal and State water quality standards and the Water Board issued WDR. The Project proposes removal of 100 tons of previously generated tailings in the existing tailings impoundment, disposal of the existing liner and construction of a new double-lined WMU at the site of the existing tailings impoundment. The new WMU will include a LCRS between the primary and secondary liners, designed in accordance with California Title 27 CCR for a Group A WMU as presented in section 5.0 of **Appendix B**.

The Project poses little impact to surface waters because no perennial surface waters exist within a one-mile radius of the Project area, process-related reagents will be properly stored and handled within the Mill Building, and the Project includes the committed practice to install BMPs to limit and control erosion and reduce sediment. Additionally, disturbed areas will be revegetated to reduce the potential for wind and water erosion. BMPs include, but are not limited to, diversion and routing of storm water using diversion ditches, sediment traps and rock and gravel cover. Section 5.5.4 of **Appendix B** described the design of the proposed diversion channel located upgradient from the WMU. Following construction activities, areas such as cut and fill slopes and growth media stockpiles will be seeded as soon as practical.

The WMU has been designed to contain up to 500,000 cubic feet (approximately 24,000 tons, assuming a dry

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density of 85 pounds per cubic foot) of dry tailings. A minimum of two feet below the WMU embankment crest will be maintained at all times. This freeboard is sufficient to accommodate direct precipitation within the WMU perimeter and the potential runoff from contributing areas. As such the Project has been designed and will be operated as a zero-discharge facility. Therefore, no release from the WMU to a surface water body is anticipated. The Project design and committed practices reduce and minimize potential impacts to surface water.

Vadose and groundwater monitoring as well as a Water Quality Protection Standard (WQPS) will occur in accordance with Monitoring and Reporting Program outlined in the WDR.

State Water Board Resolution No. 68-16 "Statement of Policy With Respect to Maintaining High Quality of Waters In California," known as the Nondegradation Policy, requires whenever the existing quality of water is better than the quality of water established in the Basin Plan, such existing quality shall be maintained unless appropriate findings are made under Resolution No. 68-16. The Project as proposed would not purposefully discharge any waste that will degrade water quality.

IXb) The Project creates additional impervious surfaces that are associated with the small expansion of the Mill building and ore-staging patio and the expansion of the existing tailings impoundment by 1.4 acres to accommodate the Group A WMU and comply with California Title 27 CCR. The additional impervious surface associated with the Mill building and ore patio will not significantly affect groundwater recharge. The additional impervious surface associated with the WMU liners, which serve to contain tailings and prevent waste material seepage into underlying groundwater for the protection of groundwater quality, will increase impervious surfaces within the Project area but will not substantially interfere with groundwater recharge given the extent of uncovered lands within the 9.1 Project area and the greater mill claim site.

The milling process requires 1,000 gallons of water per ton of ore or up to 96,000 gallons per day at maximum capacity. Initially, processing water will be supplied from the existing on-site production well PW-3. Some water will be lost through processing and to evaporation from the WMU. The overall demand is reduced by recycling most of the processing water at the thickener tank with the remaining water reclaimed from the WMU after the tailings settle out. Although most of the water will be recycled onsite, evaporation will result in some water loss that will be replenished from PW-3, as necessary to meet the process circuit water requirements, at an estimated rate of 20 gpm during summer months.

Attached in **Appendix B**, Figure 2-5 identifies four agricultural wells within a one-mile radius of the Project area boundary. Groundwater in the Chalfant Valley region generally occurs in unconsolidated to semi-consolidated alluvial deposits and flows towards the axis of the valley. SRK completed a hydrogeologic investigation of the aquifer beneath the Project area in October 2010. Table 2-5 of **Appendix B** summarized the aquifer characteristics. The maximum yield of the production well (PW-3) is 86.3 gpm, with a drawdown of 5.0 feet and a radius of influence of 95 feet. Drawdown decreases to less than 0.5 feet outside the radius of the sphere of influence (SRK 2010).

Noting the distances of the four agricultural wells located within a one-mile radius of the Project area, the Project will not substantially deplete groundwater supplies or create a net deficit in aquifer volume or a lowering of the local groundwater table level that will impact the production rate of these pre-existing nearby wells. The level of impact to groundwater supplies is less than significant.

IXc) The Project area contains no streams or rivers. The Project does not create additional impervious surfaces beyond hardscape associated with the expansion of the Mill building to include an ore-staging patio and Krupp mill pad. This additional impervious surface will not be substantial enough to alter existing drainage patterns of the Project area. A diversion channel and berm will be constructed upgradient from the WMU for purposes of diverting storm water runoff around the WMU from 0.4 acres of contributing watershed areas for a 100-year, 24-hour storm event. This changing in existing drainage pattern is necessary to maximize the storage capacity of the WMU. The Project proposes no collection or holding facilities for control of storm water, as the v-ditch diversion channel will dissipate conveyed flow velocities and sheet flow and infiltrate runoff within the Project area so that substantial erosion or siltation will not occur on or off-site.

IXd) See checklist question IXc. The Project does not increase impervious surfaces to the extent of substantially increasing the rate or amount of surface runoff in a manner that would result in flooding on or off-site. The WMU design minimizes the potential for impoundment breach and resultant localized flooding. The WMU is designed to include freeboard for accommodation of precipitation falling over the WMU surface extent and storm water

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runoff from impoundment slopes.

IXe) The Project area does not have direct connections to existing storm water drainage systems and no municipal storm water systems. Storm water runoff is captured, conveyed and infiltrated onsite.

Waste in discharges of storm water will be reduced or prevented to achieve the best practicable treatment level using controls, structures, and BMPs. The Project will install hydrologic and sediment source control BMPs to limit erosion and reduce sediment in precipitation runoff from site facilities and disturbed areas during construction, operations, and initial stages of reclamation. BMPs may include, but are not limited to, diversion and routing of storm water using accepted engineering practices, such as diversion ditches, and the placement of erosion control devices such as sediment traps, and rock and gravel cover. Revegetation of disturbed areas will reduce the potential for wind and water erosion.

Currently, there are no collection or holding facilities planned for the control of storm water at the Bishop Mill facility. Installation of such facilities could be stated as a condition of the forthcoming WDR. An earthen berm will be constructed around the ore patio to divert storm water run-on and contain storm water runoff from the ore stockpile. The operating level within the WMU will be two feet below the embankment crest to provide for storage of incoming precipitation. Storm water diversion will consist of the construction of a v-ditch diversion channel on the slope above the WMU to divert storm water volume generated from the 25 year, 24-hour storm. Attachment E of **Appendix B** illustrates the storm water diversion design for the WMU.

The Project Applicant will file a Notice of Intent and comply with State Water Board’s Waste Discharge Requirements for Discharges of Storm Water Discharges Associated With Construction Activity, General Permit No. CAS00002 and Waste Discharge Requirements For Discharges of Storm Water Associated With Industrial Activities, General Permit No. CAS00001 and all subsequent revisions and amendments.

Because the Project controls and treats runoff volumes within the Project area, the Project will not provide substantial additional sources of polluted runoff. The level of impact to storm water is less than significant.

IXf) See response to checklist question IXa. Additionally, the design of the WMU and continuation of the monitoring program reduce potential impacts to groundwater quality through adequate containment and treatment of tailings and ongoing monitoring of WMU effectiveness for detection of unanticipated release to vadose zone or the groundwater. The WMU will be doubled-lined and equipped with a LCRS to collect any fluid resulting from failure of the WMU’s primary liner system. Leaked fluid will be directed to a sump for proper management without release to the environment.

IXg) The Project involves no placement of housing and the Project area contains no delineated flood hazard area.

IXh) See response to checklist question IXg.

IXi) The Project constructs a new Group A WMU that will impound up to 24,000 tons of tailings. As discussed for checklist question IXa, the Project has been designed to operate as a zero-discharge facility and no release from the WMU is anticipated. However, localized flooding could result from liner failure combined with slope failure.

The WMU design incorporates the results of the slope stability analysis (see section 5.5.3 of **Appendix B**) to maximize the factor of safety built into the Project. The WMU liner will be visually inspected on a weekly basis for indication of excessive wear, wrinkles, rips or tears. Observed breaches in liner integrity will be repaired as soon as possible and if necessary, processing operations will be suspended to accommodate liner repair. Wear sheets comprised of 80-mil liner scraps or other approved materials will be placed below the tailings potential discharge points and anchored either by welding to the primary liner or by constructing a new dedicated anchor trench outside the primary anchor trench. Wear sheets will be inspected weekly during the inspections of the WMU liner and replaced as often as required to protect the primary liner from damage.

The Project design and committed practices reduce the risk of flooding as a result of failure of the WMU to a level of less than significant.

IXj) The Project is not located in an area susceptible to inundation by tsunami or mudflow. Given the relatively small surface area of the WMU, wave action from a seiche will be accommodated by the two-foot freeboard requirement and the level of impact from inundation as a result of a seiche is less than significant.

	<b>Potentially Significant</b>	<b>Less Than Significant with</b>	<b>Less Than Significant</b>	<b>No Impact</b>
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	Impact	Mitigation Incorporation	Impact	
<b>X. LAND USE AND PLANNING</b>				
<b>Would the Project:</b>				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
<b>Discussion:</b>				
<p>Xa) The Project will not physically divide an established community. The primary land uses in the vicinity of the Project area (i.e., a five-mile radius) are ranching, mining and milling of various minerals. The closest residential development is located approximately one mile east of SR 6 on Rudolph Road, which is approximately two miles east of the Project area. A second small residential community development is located four miles south of the Project area in the small town of Laws. The Project will not affect the land use or character of these communities.</p> <p>Xb) The Project is located on lands managed by the BLM, and the BLM Resource Management Plan for the Bishop Management Area applies to the Project area. Inyo County General Plan designates the Project area for Natural Resources land use and the zoning ordinance identifies the Project area for industrial or commercial uses. No incompatibilities between the Project and these plans have been identified. Projects consistent with the zoning and compatible with the surrounding uses result in no impact to land use.</p> <p>Xc) The Project does not conflict with a habitat conservation plan or a natural community conservation plan because no such plans exist for the Project area.</p>				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XI. MINERAL RESOURCES</b>				
<b>Would the Project:</b>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	
<b>Discussion:</b>				
<p>For purposes of CEQA analysis, “mineral resources” refers to aggregate resources, which consist of sand, gravel and crushed rock. The State Mining and Geology Board classifies mineral deposits through maps and report at: <a href="http://www.conservation.ca.gov/cgs/minerals/mlc/Pages/Index.aspx">http://www.conservation.ca.gov/cgs/minerals/mlc/Pages/Index.aspx</a>. The map and accompanying text provides general information about the current availability of California's permitted aggregate resources. The map compares projected aggregate demand for the next 50 years with currently permitted aggregate resources in 31</p>				

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regions of the state. The map also highlights regions where there are less than 10 years of permitted aggregate supply remaining.

XIa) The Project is not located in Mineral Resource Zones 1 through 4 classification areas.

The Project will process ore-bearing materials and will not impact mineral resources of value to the region and the residents of California. Reclamation of the Project area will be completed in accordance with BLM and California SMARA regulations. The purpose of Subpart 43 CFR 3809 – Surface Management is to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. Anyone intending to develop mineral resources on public lands, including mineral beneficiation on mill-site claims, must prevent unnecessary or undue degradation of the land and reclaim disturbed areas. This subpart establishes procedures and standards to ensure that operators and mining claimants meet this responsibility and provide for the maximum possible coordination with appropriate state agencies to avoid duplication and to ensure that operators prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws.

XIb) The Project area does not contain an economically feasible extraction operation. The Project will implement ore processing and this proposed use would not preclude a mining operation adjacent to or surrounding the Project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XII. NOISE</b>				
<b>Would the Project result in:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the Project area to excessive noise levels?				X

**Discussion:**

Noise sources can be grouped into two categories: mobile and stationary. Mobile sources are noise producers that move within Inyo County. In Inyo County, these include vehicle traffic on highways and roads, aircraft noise from

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military operations, and noise from general and commercial aviation. Primary stationary sources in the County include mining, industrial, commercial, and utility land uses (Inyo County General Plan 2001).

XIIa) The Inyo County Noise Standards determine noise levels up to 70 Ldn normally acceptable and noise levels between 70 and 80 Ldn to be conditionally acceptable for mining, industrial, manufacturing, utilities and agriculture activities. Noise levels that exceed 80 Ldn are considered unacceptable for these activities, but notes that if existing noise standards are currently exceeded, a proposed project shall not incrementally increase noise levels by more than 3 dBA.

Project operations will generate periodic noise, but because of the distance of the Project from site boundaries, the proposed operations will not increase the ambient noise level (as measured at the greater 161-acre mill claim site boundary) above the established County noise standards.

XIIb) Construction equipment will create temporary and periodic vibration effects in the Project area, but would not expose persons to excessive groundborne vibration or noise levels. The Project does not include fulltime or backup generator power for operations.

XIIc) The Project will operate for a period of five (5) years and project operations will generate noise from ore processing equipment during this period. However, due to the topography and remote location of the Project area ambient noise levels will not substantially increase, as measured at the claim site boundary. Over-the-highway haul trucks will deliver ore to the Project area daily; however, because of the low volume of daily trips, current or future noise levels from transportation sources will not exceed 65-dB Ldn, the level of significance stated in Inyo county Policy NOI-1.4. Effects to wildlife will be minimal because sensitive wildlife habitats (e.g., riparian-based ecosystems) do not exist in the Project area.

XIIId) Project construction noise will be intermittent, and the level will vary depending on the type, location, and length of the activity. Project construction will generate temporary and periodic noise, but ambient noise will not increase substantially as measured at the claim site boundary because of the topography and remote location of the Project area. Additionally, residential uses or other sensitive receptors are not located within 500 feet of the Project area.

XIIe) The Project is not located within an airport land use plan or within two miles of a public airport or public use airport and therefore creates no exposure of people working in the Project area to excessive noise levels from air traffic.

XIIIf) The Project is not within the vicinity of a private airstrip and therefore creates no exposure of people working in the Project area to excessive noise levels from air traffic.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XIII. POPULATION AND HOUSING</b>				
<b>Would the Project:</b>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

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**Discussion:**  
 XIIIa) The Project will require between 5 and 10 temporary workers during Mill building expansion and construction of the WMU and will employ seven (7) fulltime employees during operations. The Project will not directly or indirectly induce substantial growth.  
 XIIIb) The Project displaces no existing housing and thus does not necessitate the construction of replacement housing.  
 XIIIc) The Project displaces no people and thus does not necessitate the construction of replacement housing.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES</b>				
<b>Would the Project:</b>				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

**Discussion:**  
 XIVa) The Project will not require additional public services and thus creates no impact to acceptable service ratios, response times or other performance objectives.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XV. RECREATION</b>				
<b>Would the Project:</b>				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

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<b>Discussion:</b>				
<p>XVa) The Project involves ore processing and installation of a Group A WMU for treatment of tailings. The Project does not involve actions that will increase the use of or put at risk existing recreational facilities.</p> <p>XVb) The Project does not include recreational facilities or require the construction or expansion of recreational facilities and therefore creates no adverse physical effect on the environment from such facilities.</p>				
	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XVI. TRANSPORTATION/TRAFFIC</b>				
<b>Would the Project:</b>				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
<b>Discussion:</b>				
<p>XVIa) Project operations include the transport of up to 75 tons per day of ore to stockpile at the Project area for processing. Ore for processing will arrive in over-the-highway haul trucks, up to 4 trucks per day, depending on the ore being processed and the concentrate haulage required. This increase in daily traffic from 4 trucks will not increase traffic substantially in relation to existing traffic loads along U.S. 395 and SR 6, the primary access roadways to the Project area.</p> <p>XVIb) A minimum level of service (LOS) "C" must be maintained on all roadways in the County. The addition of 4 daily over-the-highway haul truck trips will not change existing LOS.</p> <p>XVIc) The Project creates no change in air traffic patterns.</p> <p>XVIId) The Project requires no change to the current design features or uses of existing roadways and arterials.</p> <p>XVIe) The Project area is surrounded by a double perimeter chain linked fence and a controlled access gate. The gate will be staffed fulltime upon commencement of construction and operations to provide adequate emergency</p>				

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<p>access.</p> <p>XVI f) The Project does not increase the need for parking and the Project area contains adequate space for operational parking.</p> <p>XVI g) The Project results in no conflicts with Inyo County Regional Transportation Plan or section 7.5 (Bicycles and Trails) of the Circulation Element of the General Plan.</p>				
	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<p><b>XVII. UTILITIES AND SERVICE SYSTEMS</b></p> <p><b>Would the Project:</b></p>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
Xd) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
<p><b>Discussion:</b></p> <p>XVII a) The Project does not propose a sanitary sewer or connections to an existing municipal wastewater treatment plant. Instead, the Project maintains potable toilets onsite, approximately one for every five employees. The waste from each unit will be pumped and disposed by a local septic disposal contractor. The Project will comply with the wastewater treatment requirements specified in the WDR issued by the Water Board.</p> <p>XVII b) The Project will not create a demand for new water or sewer infrastructure and will not require the construction of new water or sewer or the expansion of existing facilities.</p> <p>XVII c) See checklist questions IX c through IX e. The Project requires the construction of a new storm water drainage facility to direct storm water runoff around the WMU and maintain optimal capacity and freeboard. The</p>				

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construction of this v-ditch diversion channel is determined to have a less than significant environmental effects.  
 XVIIId) See checklist question IXb. The existing on-site production well PW-3 will supply water to the Project area, the supply of which has been determined to be sufficient to serve Project operations. No new or expanded entitlements are necessary.

XVIIe) The Project will not create a demand for new sewer infrastructure and will not require the construction of new sewer or the expansion of existing facilities. The Project results in no impact to existing provider commitments or projected capacity demands.

XVIIIf) The Project Applicant does not currently operate a landfill at the Project area. Solid waste, not including processed ore, will be collected and transported to a permitted solid waste management facility for disposal, most likely one of the two Class III landfills in the Project area vicinity. Solid waster will be transferred to the Inyo County Waste Management transfer station about 12 miles from the Project area or the Chalfant transfer station about 5 miles north of the Project area. Processed ore (i.e., tailings) will be discharged by slurry to the WMU.

XVIIg) The Project will comply with federal, state and local statures and regulations related to solid waste. Portable toilets will be used, approximately one for every five employees with authorized personnel removing wastes on an as-required basis. Reagents, solvents, waste oil, contaminated fuel and other similar residues resulting from operations within the Project area will be collected and stored in a small roll-off bin or other appropriate trash bin. Employee training will include appropriate waste management practices, such as definition of allowable wastes that can be placed in municipal landfills, management of used oil filters, oily rags, fluorescent light bulbs, aerosol cans, and other regulated waste.

For Project area reclamation activities, buildings and facilities associated with the project would be removed from the site during the salvage and site demolition phase. Those building materials that are suitable for salvage, and meet the solid waste disposal criteria, would be disposed of in a Class III landfill located in Bishop. Concrete foundations and stem walls would be demolished to natural grade, broken up to allow drainage through slab foundations and buried in place. Fill would be used to fill subgrade portions of the foundations.

Prior to demolition the mill facility will be rinsed with fresh water to remove any residual ore and reagents. The rinse water would be directed to the WMU and allowed to evaporate. The reclamation cost estimate includes costs associated with the demolition and disposal of all buildings and ancillary facilities to establish a land use similar to adjacent undisturbed lands. Reagents, chemicals and other hazardous or toxic chemicals will be removed from the site. Above surface pipelines will be removed. Underground pipelines will be capped and left in place. Power poles will be cut off at ground level and removed. Perimeter fences will also be removed.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are			X	

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considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

**Discussion:**

XVIIIa) As discussed in this IS, the Project creates impacts to water, scenic and cultural resources are identified. However, the Project design, committed practices and when necessary, the proposed mitigation measures, will reduce the effects of such impacts to a point that clearly no significant impacts would occur. The Project does not have the potential to degrade the quality of the environment substantially, reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

XVIIIb) “Cumulatively considerable” means that the incremental effects of the Project would be considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects. The projects that could have a cumulative impact on the resources in the Project area, when considered incrementally with the Project, are referred to as “related projects” and are listed in Table 2 of section 1.10 of this IS. Agencies contacted and documents referenced for development of this list include: BLM, City of Bishop, Inyo County Planning Department, Mono County Planning Department and USDA Forest Service Region 4 – Bishop Field Office.

The Project, when considered in context with other past, present and reasonably foreseeable future projects, does not create impacts that are individually limited but cumulatively considerable.

XVIIIc) The Project will not substantially affect humans. The Project directly benefits the natural environment, and thus indirectly the human environment, through install a Group A WMU in compliance with California Title 27 section 22490 for appropriate containment of tailings and the protection of groundwater resources.