

**REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
415 KNOLLCREST DRIVE, SUITE 100
REDDING, CA 96002**

INITIAL STUDY

I. Background

Project Title: Adoption of NPDES permit for French Gulch (Nevada) Mining Corp,
Washington Mine,

Lead Agency Name and Address: Regional Water Quality Control Board
Central Valley Region
415 Knollcrest Drive, Suite 100
Redding, CA 96002

Lead Agency Contact: Mr. Phil Woodward
(530) 224-4853

Applicant: French Gulch (Nevada) Mining Corp.
P.O. Box 106
French Gulch, CA 96033

Applicant's Contact: Mr. Tim Callaway
President and Chief Executive Officer
SHASTA GOLD CORP.
(f.k.a. Bullion River Gold Corp.)
(530) 227-8691

General Plan Designation: The General Plan Land Use designation for the site is Public
Lands (PL), Timber (T), and Natural Resources Protection –
Habitat, 40-acre minimum parcel size (N-H-40).

Zoning: The property is zoned Unclassified (U).

Introduction

French Gulch (Nevada) Mining Corporation (project proponent) submitted a Report of Waste Discharge, dated December 31, 2008 and applied for a National Pollutant Discharge Elimination System (NPDES) permit authorization to discharge up to 0.432 million gallons per day [300 gallons per minute (gpm)] of treated wastewater from Washington Mine. The mine is approximately 2.5 miles west of the community of French Gulch, Shasta County (Figures 1 and 2). The existing facility currently discharges untreated mine drainage from historic adits via gravity to surface waters of Scorpion Gulch Creek (a tributary to French Gulch Creek), French Gulch Creek, tributary to Clear Creek, and ultimately the Sacramento River. Additional mine drainage will be pumped from the New Adit to dewater the underground workings and allow access to the ore bearing zones. This Initial Study focuses only on the construction of the mine drainage treatment system comprised of a water-collection system and water-treatment facility, which will discharge treated mine drainage and Mill wastewater to Scorpion Gulch. The

remainder of the mining operation is considered “existing” or is the responsibility of local lead agency and not subject to CEQA review. Historic on-going mine drainage contains significant concentrations of natural mineral constituents that may exceed water quality objectives. The collection and treatment of the current, unregulated discharges from mine adits will reduce the concentrations of existing constituents in Scorpion Gulch and French Gulch Creeks. The proposed active pumping and dewatering of the underground workings and subsequent treatment and discharge to surface waters will reduce the baseflow of the natural mineral constituents to surface waters. By collecting and treating both the on-going historic discharges and the proposed new discharge, overall water quality in the Scorpion Gulch and French Gulch Creeks should improve.

Project Description

The Project Proponent is proposing to treat mine drainage and Mill wastewater prior to discharge to surface water. The project involves collecting on-going, historic mine drainage from various mine adits and wastewater from the Mill, and additional mine water from the proposed mining operations, treating the water to remove pollutants, and discharging it to surface water. The project involves the construction of a water-collection system and installation of a water-treatment system. The water-collection system will involve collection of water from mine adits, and conveying the water from the mine adits to the water-treatment facility. The proposed treatment system will be located near the existing Mill in an area previously disturbed by mine related activities.

The discharge from the O’Neil, Government, Robillard, I-Level, and New adits and the mine Mill will be collected and piped to the Mill area. The collection and piping locations are shown on Figure 3. The total estimated area affected by the project is less than one acre, consisting of small areas of land disturbance at the collection and treatment facility locations, and narrow trenched swaths along collection pipelines. The treatment system will be located near the Mill on previously disturbed ground and will require an approximate 30-foot by 40-foot area. Construction of the pipeline will consist of trenching, laying pipe, and backfilling the pipe trench with excavated material, and compacting. Pipelines will be constructed along existing roadways. Vegetation removal is expected to be negligible because the adits, Mill area, and roadways are already free of vegetation. Following construction, erosion-control measures may be implemented, as needed, and may include sediment barriers and/or seeding. Seeding may be conducted with native or non-native species but non-native species may be used on a temporary basis provided they do not compete with native species and will eventually naturally die out.

The proposed water treatment system at the Mill will consist of modular, skid mounted system(s) that include a bag filter to remove coarse particulates and a cartridge filter for finer particulates (pretreatment). The pretreated water will then flow through a media filter to remove heavy oils and grease and a carbon filter to remove organics. Finally, the water will be directed through several resin filters to remove metals, including copper and arsenic, and nitrates prior to discharge to Scorpion Gulch.

Influent to the system will consist of mine drainage water collected from various adits which may contain elevated metals released from the naturally mineralized deposits being mined and nitrates from the blasting agents, and effluent from the Mill which may contain metals and floatation reagents. Maximum effluent permitted flow is 300 gpm, however, it is estimated the actual flows will be less than 100 gpm.

Waste filters and media which may contain heavy metals, oil and grease, and organics, will be removed from the site by a licensed hazardous materials hauler and disposed at a properly permitted facility.

Environmental Setting

The Washington Mine was originally located in 1852 and thus ranks among the earliest lode locations in California. The existing Mill building was constructed in 1939. The project site and site vicinity have been used for hard-rock gold mining for over one-hundred years. Because of the nature of the mining operations and processing, the site has seen significant disturbances to the land features. Much of the project site is denuded with little recovery of natural vegetation. Surface waters in the project vicinity may be impacted by historic mining and unregulated mine discharges along with natural processes throughout the watershed.

Responsible and Trustee Agencies

Regional Water Quality Control Board
Central Valley Region
415 Knollcrest Drive, Suite 100
Redding, CA 96002

Bureau of Land Management
Redding Field Office
355 Hemsted Drive
Redding, CA 96002

II. Environmental Impacts

The environmental factors checked below could be potentially affected by this project. See the checklist on the following pages for more details.

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

Air Quality will likely be impacted during installation of the collection and discharge piping and construction of the treatment facility.

Hazards and Hazardous Materials may be affected slightly by changes in management of chemicals and wastes but are expected to result in improved use, storage, and hazardous materials/waste management.

Hydrology/Water Quality will be impacted, however, as an improvement to the existing discharges.

Noise will likely be increased temporarily during construction with negligible noise during future treatment-system operation.

Traffic will be temporarily affected during construction of collection-system piping.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is an active mine. The land at the mine site and surrounding lands have been previously disturbed and continue to be disturbed. The project will not have an impact on aesthetics because of the already disturbed conditions.

2. AGRICULTURAL AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental impacts, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping & Monitoring Program of the California Resources Agency, to non-agricultural uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

non-agricultural use or conversion of forest land to non-forest use?

The project site is an active mine. The land at the mine site and surrounding lands have been previously disturbed and continue to be disturbed. The project will not have an impact on agricultural and forest resources because of the already disturbed conditions.

3. AIR QUALITY. 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. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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 that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will not produce any continuing air emissions, deteriorate ambient air quality, create objectionable odors, or alter air movement, moisture, or temperature or any change in climate, either locally or regionally once completed. The installation of the collection system and construction of the treatment facility will likely produce emissions from construction equipment on a temporary basis. The impact of fugitive dust emissions from construction vehicles, most of the PM₁₀ emissions, would be temporary, but could be potentially significant. The proponent proposes to control dust by applying dust control techniques during any soil disturbance activities associated with the construction of the water treatment system, thereby reducing the impact to less than significant.

The operation of the water treatment system is not expected to conflict with any applicable air quality plan, violate air quality standards, expose sensitive receptors to substantial pollutant concentrations, or produce objectionable odors.

4. BIOLOGICAL RESOURCES. Would the project:

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 DFG or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 DFG or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the federal Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is not expected to create disturbance to lands not already disturbed by the existing mine operations. The project site can be classified as disturbed habitat. Disturbed habitats include areas that have been graded or cleared or that have rocky or dirt debris piles scattered within them. Most of these disturbed areas have been compacted. The degree of disturbance likely would limit the future succession of native and non-native species such as those found in the local manzanita chaparral.

5. CULTURAL RESOURCES. Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located within an area of high sensitivity and a site-specific archeological study was conducted as part of the reclamation plan Initial Study prepared in 1996.¹ The study resulted in the conclusion that monitoring shall be performed by the Planning Division as part of its annual mine inspection and at the time of mine reclamation. The study also recommended that an archeological reconnaissance should be conducted prior to ground disturbance, if such is planned for locations outside of the original study area. The project is not expected to cause an adverse change to lands not already disturbed by the mine operations because the treatment facility will be constructed adjacent to the New Adit and the Mill, the collection features will be located at existing adits, and the pipelines will be constructed on existing roadways.

6. GEOLOGY and SOILS. Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated in 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 & Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

¹ Archeological Reconnaissance for the Proposed Reclamation Plan of the Washington Mine, French Gulch, Shasta County, California,” prepared by Trudy Vaughn, Coyote and Fox Enterprises, Redding, CA, dated June 1994.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is not expected to adversely affect the geology of the project site or vicinity or result in substantial soil erosion or loss of topsoil. The total area affected is less than one acre, so a construction stormwater permit is not required. The project will, however, require narrow trenching along existing roads, which may erode following heavy, prolonged rainfall. Following construction, erosion control measures, such as installation of straw wattles, sediment traps, and seeding, will be implemented, as needed. If non-native species are used for seeding, they will only be used provided they do not compete with native species and will eventually naturally die out. Construction of the treatment facility will not create a substantial risk to life or property, and no discharge to septic is proposed as part of this project.

7. GREENHOUSE GAS EMISSIONS -- Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The project is not expected to generate air emissions including greenhouse gas emissions and does not conflict with any applicable plan, policy, or regulation of any agency.

8. HAZARDS and HAZARDOUS MATERIALS. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 a public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Chemical reagents, including copper sulfate, methyl isobutyl carbinol, and potassium xanthate, are used during ore processing at the Mill. The Mill currently operates as a closed-loop process. The project proposes to treat the liquid Mill wastes along with drainage from the mine adits. Wastes from the treatment system, which may include sediments from filtration and used system filters, may contain hazardous concentrations of metals and other waste constituents. Storage methods for hazardous materials used and hazardous wastes generated as a result of operation of the treatment system will be included in the mine's hazardous materials business plan. Proper containment and disposal of filtration waste materials will be implemented to prevent exposure of heavy metals to workers or adverse environmental impacts. Hazardous wastes will be removed from the site by a licensed hazardous-materials hauler and disposed of at a properly permitted facility.

9. HYDROLOGY and WATER QUALITY. Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project proposes to cleanup unregulated mine discharges and is not expected to violate water quality standards, deplete groundwater, or substantially alter surface drainage with the exception of collecting mine drainage to prevent existing mine-related contamination from entering surface water bodies. The project is an effort to treat the water prior to discharge into the existing surface waters of Scorpion Gulch and French Gulch Creeks.

10. LAND USE AND PLANNING. Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project does not conflict with any applicable land use plan, policy, regulation, or applicable habitat conservation plan.

11. MINERAL RESOURCES. Would the project:

a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project would augment existing mining operations and improve water quality of mine discharges.

12. NOISE. Would the project result in:

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 in or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing in or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project will involve the construction of a water treatment facility. During the time of construction, it is anticipated that an increase of noise will occur. Operation of the treatment system will include the use of electrical power and centrifugal pumps that should be relatively quiet. The project is not expected to create excess noise levels during normal operations, expose persons to groundborne vibration or noise, or affect surrounding populations. There are no airports or airstrips within two miles of the project site.

13. POPULATION AND HOUSING. Would the project:

a) Induce substantial population growth in an area either directly (<i>e.g.</i> , by proposing new homes and businesses) or indirectly (<i>e.g.</i> , through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is located at an existing mine site and will not affect populations or housing.

14. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:

a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is located at an existing mine site and will not affect public services.

15. RECREATION. Would the project:

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is located at an existing mine site and will not affect recreation.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION / TRAFFIC. Would the project:				
a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is located at an existing mine site and will not affect transportation or traffic other than temporary increase of traffic during construction of the water-collection system and treatment facility and routine maintenance. This increase is not expected to add more than four daily trips during construction and less than one trip per day for maintenance.

17. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project is located at an existing mine site and will not affect utilities or service systems. The mine site is not connected to any public water or wastewater system.

Issues (and Supporting Information Sources):

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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18. MANDATORY FINDINGS OF SIGNIFICANCE.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Based on the results of this initial study evaluation, the proposed project does not create any significant degradation to the environment from the installation of the water collection system, construction of the water treatment plant, or future operations of the collection system or operation of the treatment plant. By collecting and treating on-going mine drainage containing heavy metals, the project has the potential to improve water quality in Scorpion Gulch and French Gulch Creeks.

19. EARLIER ANALYSIS.

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case a discussion should identify the following on attached sheets:

- a) Earlier analyses used. Identify earlier analyses and state where they are available for review.

1. California Regional Water Quality Control Board, Central Valley Region, Order No. 96-289, Waste Discharge Requirements for Lion Trails Minerals, Inc., Washington/Niagara Mining and U.S. Department of the Interior, Bureau of Land Management, Washington Mine and Mill, Shasta County. The document is available for review at the RWQCB office in Redding, CA and at the Shasta County Planning Division office in Redding, CA.

2. Shasta County Environmental Assessment form, Initial Study, Reclamation Plan Number 1-94, Washington Mine, Shasta County Department of Resource Management, Planning Division, dated July 5, 1996. The document is available for review at the RWQCB office in Redding, CA and at the Shasta County Planning Division office in Redding, CA.

Issues (and Supporting Information Sources):

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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b) Impacts adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

1. Aesthetics
2. Biological Resources
3. Land Use/Planning
4. Cultural Resources
5. Mineral Resources
6. Hydrology and Water Quality

c) Mitigation measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

1. Not applicable.

DETERMINATION

On the basis of this initial evaluation

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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 NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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.

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.

Prepared By:

Original signed by

Philip Woodward
Senior Engineering Geologist
(Your Name)
(Your Title)

Date 7 April 2010

Reviewed by:

Date

Date

(Form updated 7/28/09)

Authority: Public Resources Code Sections 21083, 21084, 21084.1, and 21087.

Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.1 through 21083.3, 21083.6 through 21083.9, 21084.1, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal. App. 3d 1337 (1990).

Information Sources:

California Regional Water Quality Control Board, Central Valley Region, Order No. 96-289, Waste Discharge Requirements for Lion Trails Minerals, Inc., Washington/Niagara Mining and U.S. Department of the Interior, Bureau of Land Management, Washington Mine and Mill, Shasta County. The document is available for review at the RWQCB office in Redding, CA and at the Shasta County Planning Division office in Redding, CA.

Shasta County Environmental Assessment form, Initial Study, Reclamation Plan Number 1-94, Washington Mine, Shasta County Department of Resource Management, Planning Division, dated July 5, 1996.

Drawings (Attached):

Figure 1 Site Location Map (Lawrence & Associates)

Figure 2 Vicinity Map (Lawrence & Associates)

Water Treatment Adit Flow Sheet, Plan View Topo (French Gulch NV Mining Corp., 3/18/10)