CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. R6V-2011-(PROPOSED)
WDID NO. 6B140505002

WASTE DISCHARGE REQUIREMENTS

FOR THE
BUREAU OF LAND MANAGEMENT

AND THE

CMC METALS LTD, VANCOVER, CANADA

Inyo County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

   CMC Metals Ltd (CMC Metals) operating as 0877887 BC Ltd (a subsidiary of CMC Metals) plans to re-activate the existing Bishop Mill as an independent mill located approximately one mile west of State Highway 6 on Ruldoph Road in Inyo County. The project will process up to 96 tons per day of ore transported from various off-site mining locations. The ore will be processed through the existing gravity mill.

   The project facilities are located on federal land administered by the Bureau of Land Management (BLM). For the purposes of this Board Order (Order), CMC Metals, as the Owner and Operator of the Bishop Mill, and the BLM as the Landowner, are collectively referred to as the "Discharger."

   Naming the BLM as a Discharger in this Order is consistent with past determinations made by the Regional Water Boards and the State Water Resources Control Board (State Water Board). Hereinafter, the term "Discharger" is used to assign primary responsibility to CMC Metals and secondary responsibility to the BLM. If CMC Metals fails to meet the requirements of this Order, the BLM will become the primary responsible party for complying with the requirements of this Order. Compliance with requirements of this Order may include cleanup and abatement of the effects of any pollution, threatened pollution, or nuisance associated with waste discharges at the Facility.

2. Order History

   This is a new Order.

3. Reason for Action

   The Water Board is adopting new waste discharge requirements (WDRs) to impose requirements for the disposal of waste to land associated with the operation of the Bishop Mill. These requirements include monitoring and reporting as described in Monitoring and Reporting Program R6V-2011-**(PROPOSED)**, which is made part of this Order.

4. Location

   The Bishop Mill is located approximately one mile west of State Highway 6 on Ruldoph Road in Inyo County within the SW¼ of Section 4, T6S, R33E, Mount Diablo Baseline and Meridian. Attachment A of this Order shows the Bishop Mill location.

5. Facility

   For the purposes of this Order, the Bishop Mill is referred to as the "Facility". Attachment B of this Order shows the existing general site layout.

6. Existing Site Conditions/Land Use

   Land in the vicinity of the Facility (five-mile radius) is predominantly open space and covered with native vegetation. Ranching is the primary land use in the area. Historic mining prospects and mines are located to the north-northwest of the site.

7. Description of Existing Facility Components

   a. Main Mill Building (ore processing components are shown in Attachment C)

   b. Warehouse

   c. Garage

   d. Existing Tailings Disposal Area
      A surface impoundment used during prior operation of the Mill. As described in 7(e) below, the tailings and liner were removed. This area will be used to construct the new surface impoundment (Group A waste management unit [WMU].

e. Concrete Ore Patio

Approximately 100 tons of tailings previously deposited in the existing tailings disposal area were excavated and temporarily placed on the Ore Patio (Attachment B). A 40-mil liner underlies and covers the temporary tailings stockpile on the ore patio. An earthen berm diverts stormwater run-on and contains stormwater run-off from the ore patio. CMC Metals will reprocess these tailings during re-commissioning of the mill.

f. Monitoring wells 1 though 4

g. Fuel Storage

An existing portable-stand mounted 500-gallon above ground fuel tank will be used to store diesel fuel for use in site equipment. The tank will be double-walled designed to the standards required by the Unified Program implemented by the Inyo County Environmental Health Services. Fuel will be received in bulk and lubricants will be received in steel drums or plastic. CMC Metals will prepare a Spill Prevention Control and Countermeasure Plan to be kept at the tank location. Propane is stored in a 1,000-gallon above ground tank.

h. Power

Electric power is supplied by Southern Edison via an existing above ground power line. The mill operates on 440 volt, three-phase power. Otherwise, the Facility will operate on 220- and 110-volt power.

i. Water Supply

Water for mill operations is supplied by the onsite production well, PW-3.

j. Sanitary and Solid Waste

No sanitary facilities will be located at the Facility. Instead, portable toilets will be used, approximately one for every five employees. Authorized personnel will remove wastes on an as-required basis and the wastes will be disposed of in an appropriate manner.

Reagent, solvents, waste oil, contaminated fuel and other similar residues resultant from Facility operations will be collected in proper containers and stored in a small roll-off bin or other trash bin. Handling and disposal of solid waste produced on site will be in accordance with all applicable regulations. Authorized personnel will remove wastes on an as-required basis and disposed of in an appropriate manner.

8. Description of Ore Process Steps

a. Sources of Ore

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.

b. Importation of Ore

Incoming ore of up to 100 tons per day will arrive in over-the-highway haul trucks and will be off-loaded at the existing concrete ore patio and/or the temporary ore stockpile area northwest of the ore patio.

c. Processing of Ore

The Facility will process raw ore using screening, grinding, flotation and gravity circuits within the main Mill building. The main components of the processing operations include: primary/secondary crushers, Krupp screen mill, ball mill, rake classifier, flotation cells, and a concentrate leaf/disk filter. Attachment C of this Order shows the flow diagram for the mill process circuit.

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 metal collector chemicals (Xanthate 350 or an equivalent general collector, Aero 208 or an equivalent free gold collector, and Aero 31 or an equivalent sulfide collector) creating a 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 or an equivalent 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 concentrate thickener tank.

The concentrate containing the processing reagents and precious metals will be piped to the concentrate thickener 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 will be further dewatered at the leaf/disk filter. The concentrate filter material will be dried to reduce the moisture content to around 10 percent and then loaded in drums or flexible intermediate bulk container (FIBC) 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 or an equivalent) 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 (shaker table). The shaker table will recover metallic particles that were too large or heavy to be recovered by the flotation process. The shaker table concentrates will be dewatered, filtered, and dried. The dried concentrate will than be shipped off-site for refining. The rejects from the shaker table are the solid tailings that will be piped to the WMU. The tailings piped to the WMU will be settled and dewatered and the water recirculated to the mill for reuse.

d. Dust Suppression

Any required air quality permits will be obtained for process components and land disturbance from the Great Basin Unified Air Pollution Control District. In general, dust control measures include application of water to roads and other disturbed areas, as necessary. Fugitive emissions in the process 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 in good working order to minimize emissions.

9. <u>Description of Ore</u>

a. Ore Source Description

The Ballarat Mining District, which includes the Gold Bug and Radcliffe Mines, is underlain by schist, dolomatic limestone, and gnesis of Precambrian age, which in places have been cut by granitic dikes. The ore deposits consist of quartz veins containing free gold and occasionally abundant sulfide.

b. Ore Mineralogy

The Gold Bug mine consists of two distinct vein systems and mineralogies. The lower vein system contains vein quartz and consists of free gold in an iron-stained white quartz with calcite and trace copper carbonates, manganese oxides and barite. The upper vein system contains sulfide ore containing free gold and silver, lead, copper and iron sulfide.

Because mining at the Radcliffe mine has not advanced into the gold bearing vein, descriptions of the ore are not yet available. However, it is expected that the gold bearing veins will be similar to that described for the Gold Bug mine.

The Darwin ore is associated with a copper bearing skarn that hosts a high-grade copper-silver-zinc deposit. The primary sulfides are mostly argentiferous galena, sphalerite and pyrite with lesser amounts of pyrrhotite and chalcopyrite. Scheelite is also common.

c. Geochemical Characterization of Ore

A representative sample for each source and/or lithogic variant of ore hauled to the Facility will be collected prior to processing. The geochemical characteristics of the ore proposed for processing will be evaluated prior to transport to the Facility to ensure that the ore is compatible with the mill process.

10. Description of Wastes

The wastes produced by the Facility's milling process will consist of tailings and process solution. The WMU includes an over-liner seepage collection system (Finding 14) and floating sump pump that serves to de-water the tailings and return much of the process solution to the mill for re-use.

The mill tailings will be a fine-grained (silt and fine sand sized) inorganic material. Chemical analysis of mill tailings in 2007 indicated that concentrations of lead and copper exceeded their respective soluble threshold limit concentrations. Because the Facility will accept different types of ores, metals in addition to lead and copper, may be present at concentrations that pose a significant threat to water quality. These tailings may produce weak acids from the oxidation of remaining minerals including sulfides.

The process solution is composed of water (approximately 1000 gallons per ton of ore), metal collector reagents, flotation reagents, surfactants, and pH adjuster.

- general metal collector (Xanthate 350, or equivalent to chemical family sodium/potassium amyl xanthate): diluted at 0.5 lbs Xanthate 350 per gallon of water (approximately 6% solution by weight); fed at a rate of approximately 0.5 milliliters of solution (or 0.00006 lbs Xanthate 350) per ton of ore.

- free gold collector (Aero 208, or equivalent to chemical family phosphorodithioate salt): a free gold collector; diluted at 16 ounces Aero Float 208 per gallon of water (approximately 12.5% by volume); fed at a rate of approximately 1 milliliter solution per minute (approximately 60 milliliters Aero Float 208 per ton of ore).

- sulfide collector (Aero 31, or equivalent to chemical family aryl dithiophosphoric acid); diluted at 16 ounces Aero 31 per gallon of water (approximately 12.5% by volume); fed at a rate of approximately 0.75 milliliter solution per minute (approximately 40 milliliters Aero 31 per ton of ore)

- an alcohol-based frothing agent (Orfom F2 Frother or equivalent); fed at a rate of approximately 0.3 milliliter per minute (approximately 20 milliliters Aero Froth per ton of ore)

- Shaklee's Basic H: a surfactant; diluted to 2 ounces Shaklee's Basic H per gallon of water (approximately 1.5 % by volume); fed at a rate of approximately 0.5 gallons per hour.

- soda ash: pH adjuster; added as needed to maintain pH near 6.8.

Because the Facility will be operating as a custom mill, different ores will be processed. Depending on the ore type being processed, reagents, and pH adjustments will come into the circuit at different points. If other reagents not from the chemical families named above are desired for use, the Discharger will submit an material data safety sheet of the proposed product to the LRWQCB for acceptance by the Executive Officer.

11. Description of WMU

The slurry of ore tailings and process water that will be disposed in the WMU may contain metals and chemicals that pose a threat to water quality. To maintain operational flexibility as a custom mill, the WMU has been designed, sited, and will be constructed to Group A mining waste standards (sections 22480 and 22490, Title 27, California Code of Regulations [CCR]).The proposed WMU will be approximately 185 feet by 240 feet at its crest and approximately 25 feet deep with 2H:1V side slopes. Attachment D shows the proposed Facility layout and WMU.

The side slopes and base of the WMU will be constructed with locally-derived soil, and compacted to a minimum of 90 percent of the maximum dry density at ± 2 percent of optimum moisture content as determined by ASTM D1557, modified proctor testing.

The design configuration provides capacity for storage of approximately 550,000 cubic feet of tailings up to the required freeboard level of two feet below the side slope crest. The estimated total capacity of dry tailings is approximately 24,000 tons, assuming a dry density of 85 pounds per cubic foot. The anticipated operations life of the WMU is approximately 5 years.

The design includes a double liner system with a leachate collection and recovery system (LCRS).

12. Description of WMU Liner System

The Discharger may install a double liner containment system that follows either the prescriptive standard liner system for a Group A mining waste surface impoundment (sections 20320, 20330(a, d) and section 22490(f), Title 27, CCR) or an engineered alternative liner system.

The prescriptive standard consists of:

- An inner liner that can be clay or synthetic with a hydraulic conductivity of 1×10^{-7} centimeters/second (cm/sec);
- A blanket-type leachate collection and recovery system installed between the inner and outer liner; and
- an outer clay liner that is a minimum of two feet thick with a hydraulic conductivity of 1×10^{-7} cm/sec or less and has a minimum relative compaction of 90 percent.

The Discharger has provided an engineered alternative liner system for the WMU pursuant to sections 20080 and 22470(a), Title 27, CCR. Section 20080(b), Title 27, CCR requires that alternatives shall only be approved where the Discharger demonstrates that: (1) the construction of the prescriptive stand is not feasible because it is unreasonably and unnecessarily burdensome and will cost substantially more than alternatives, which meet the criteria, or is impractical and will not promote attainment of applicable performance standards; and (2) there is a specific engineered alternative that is consistent with the performance goal of the prescriptive standard and affords equivalent protection against water quality impairment.

From the top down, the engineered alternative liner system will consist of the following components.

1. 80-mil thick (where 1 mil equals 0.025 millimeters), smooth, high-density polyethylene (HDPE) geomembrane upper liner, and either:
2. geotextile fabric overlying a 60-mil lower HDPE Agru Super Gripnet Liner (which incorporates both drain media and liner), or
   a geonet overlying a 60-mil smooth HDPE lower liner;

3. 1-foot thick soil subliner compacted to a minimum relative compaction of 90 percent.

OR

1. 80-mil thick (where 1 mil equals 0.025 millimeters), smooth, high-density polyethylene (HDPE) geomembrane upper liner;
2. geonet;
3. 60-mil smooth HDPE lower liner;
4. 1-foot thick soil subliner compacted to a minimum relative compaction of 90 percent.

All liner seams will be wedge welded and tested for any leaks. The proposed HDPE membranes are commonly used as a long-lasting (>100 years) and impermeable ($<1x10^{-7}$ cm/sec) flexible barrier to prevent contamination of the soil and groundwater by the chemical separation solutions used in mining. The outer membrane combined with the 1-foot-thick subliner is consistent with the performance goal of the prescriptive standard and affords equivalent protection against water quality impairment.HDPE liner systems are chemically compatible with the low concentrations of collector and flotation chemicals, and surfactants used in the process solutions. HDPE liners are also chemically compatible with weak acidic solutions that may be generated by the oxidation of sulfide minerals remaining in the WMU.

13. Tailings Discharge

The tailings will be deposited as a slurry via direct discharge from the mill at a constant level of approximately three feet below the top of the WMU embankment. Discharge locations will be varied to maximize areal distribution and depositional densities within the WMU. HDPE wear sheets (80-mil HDPE) will be used at all discharge locations to protect the primary liner. Wear sheets will be anchored at the pond crest by welding to the existing liner or constructing a second anchor trench outside the pond crest.

The discharge pipe from the Mill to the WMU will be constructed as pipe-in-pipe such that the outer leak detection pipe will gravity drain back into the WMU. Wear sheets will be inspected weekly and replaced as necessary to protect the primary WMU liner.

14. Overliner Seepage Collection System

An overliner seepage collection system consisting of a perforated pipe with overlying sand and gravel drain wrapped in geotextile will be installed over the primary liner to dewater the deposited tailings and maximize deposited tailings densities. The perforated pipe will drain into an overliner sump. Liquids collected in the sump will be pumped via submersible pump onto the surface of

the WMU to be evaporated or returned to the Mill for re-use as process water. A floating sump pump will return the water to the Mill via a pipe-in-pipe discharge line such that the outer leak detection pipe will gravity drain back into the WMU should the inner discharge pipe leak. Attachment E of this Order shows details for the overliner drain system layout.

15. Description of Leachate Collection and Recovery System (LCRS)

The Discharger may install a LCRS that follows the prescriptive standard for a Group A mining waste surface impoundment (section 22490(g) and sections 20340(b-e), Title 27, CCR).

The Discharger may also install an engineered alternative LCRS as provided in the RoWD should the engineered alternative liner system be installed. The upper liner will consist of an 80-mil HDPE flexible membrane liner. The drainage layer and lower liner will consist of either:

- geotextile fabric overlying a 60-mil HDPE Agru Super Gripnet geomembrane, or
- geonet overlying a 60-mil smooth HDPE flexible membrane liner.

The Agru Super Gripnet incorporates drain media into the liner so no other fluid transmission medium is needed. The Gripnet geomembrane or the geonet will drain to a 10-foot by 10-foot by 2-foot deep gravel-filled sump constructed between the upper and lower liners. A 6-inch diameter riser pipe extends from the sump to the top of the WMU berm. Attachment F of this Order shows details for the engineered alternative LCRS.

16. Description of Vadose Zone Monitoring System

Before the WMU receives any waste, two single suction cup lysimeters will be installed beneath the LCRS sump and at an appropriate background location to be determined. The background lysimeter will provide a base line against which the data collected from the LSCR sump lysimeter can be compared.

17. Description of the Groundwater Monitoring System

Groundwater quality will be monitored by using monitoring wells MW-1 through MW-4. MW-1, MW-2 and MW-4 are downgradient from the WMU, though depending on seasonal changes in groundwater flow direction, one or more of these wells may be cross gradient. MW-3 is an upgradient well. Attachment D shows the existing wells locations. The groundwater monitoring program is

further described in the Monitoring and Reporting Program R6V-2011-**(PROPOSED)**.

18. Stormwater Discharges

Run-on flow from the west will be diverted around the WMU to both the north and the south in a v-ditch diversion channel designed to accommodate the 100-year, 24-hour design storm. Attachment D shows the diversion channel. Stormwater run-on will be regulated under the requirements contained in the General Construction and Industrial Activities Stormwater Permits as set out in Section II.B of this Order (Requirements and Prohibitions, Stormwater Discharges).

Waste in discharges of storm water must be reduced or prevented to achieve the best practicable treatment level using controls, structures, and management practices.

19. Waste Classification

The waste discharged to the WMU is Group A mining waste as defined in section 22480(b)(1), Title 27, CCR.

20. Authorized Disposal Site

The only authorized disposal site for the processed ore tailings and waste process solutions is the Group A WMU.

21. Water Quality Protection Standards

A Water Quality Protection Standard (WQPS) is required for the Facility by this Order, and consists of constituents of concern (COC), concentration limits, monitoring points, and the Point of Compliance. The WQPS applies over the active life of the Facility, the closure and post-closure maintenance period, and the compliance period. The COC, concentration limits, monitoring points, and Point of Compliance are further described in Monitoring and Reporting Program R6V-2011-**(PROPOSED**) and Section III of this Order.

22. Closure and Post-Closure Maintenance

a. Closure and Post-Closure Maintenance Plan

A Closure and Post-Closure Maintenance Plan is required in accordance with section 22510(b), Title 27, CCR. The discharger will submit a Final Closure and Post-Closure Maintenance Plan upon notification of closure, no

later than 180 days before beginning any final closure activities. If new methods are proven prior to development of the Final Closure and Post-Closure Maintenance Plan, the Discharger may revise the current proposal to incorporate such technologies.

b. Regrading, Revegetation, and Roads

Slopes will be regraded with mobile equipment (dozers, trucks, loaders, and scrapers) to blend with the natural surroundings topography to facilitate re-vegetation, where practicable.

c. WMU

The Discharger proposed that after approximately 5 years of operation, the WMU would be closed in-place as a landfill. Per section 21400(b)(1), Title 27, CCR, closures of this type requires a demonstration that it is infeasible to attempt clean-closure.

d. Miscellaneous Disturbed Areas

All process equipment will be removed upon final site closure. Permanent structures will be dismantled and removed or converted to another use compatible with the accepted closure. Foundations will be broken up and covered with clean fill to a minimum depth of one foot. All surplus materials and storage containers will be recycled or disposed offsite. Disturbed areas will be ripped with a dozer, or scarified with a grader, and seeded with native vegetation.

Once monitoring is no longer required, the monitoring wells and vadose zone monitoring points will be destroyed according to applicable regulations.

23. Financial Assurance

Prior to discharge of waste to the WMU, and annually thereafter, the Discharger is required to obtain and maintain Financial Assurance Instruments for:

a) closure activities and post-closure maintenance activities pursuant to sections 22510(f), 22207(b), and 22212(b), Title 27, CCR; and

b) initiating and completing corrective action for all known or reasonably foreseeable releases from the WMU during operation, closure, and post-closure maintenance periods.

24. Topography

The existing topography at the Facility is generally flat to moderately sloped to the east. Elevations range from 4,250 feet above mean sea level (MSL) along the western perimeter fence line to 4,325 at the existing concrete ore pad.

25. Climate

The climate is semi-arid. The average daily temperatures at the Bishop Airport station range from a high of 97.7 °F in July to a low of 21.8 °F in January.

Monthly precipitation is in the range of 0.12 (August) to 1.15 (January) inches (data from Bishop Airport, NOAA meteorological data station [period of record 1948-2009]) with an annual precipitation of 5.28 inches. Evaporation data are not recorded at the Bishop or Benton climate stations. The maximum expected 100-year, 24-hour storm precipitation is 4.0 inches.

26. Wind

Data recorded at the Bishop Airport show monthly average wind speeds ranging from 6.8 miles per hour in January to 10.4 mph in April. The prevailing wind direction in the area of the facility is primarily from the north, except in July and August when the winds are primarily from the south-southeast.

27. Site Geology

a. Setting

The facility is located in the southern part of the Chalfant Valley, which joins the Owens Valley approximately five miles north of Bishop. Chalfant Valley is a narrow alluvial plain bounded on the east by the White Mountains and on the west by the volcanic tableland which grades westerly into the Sierra Nevada Mountains.

The White Mountains are predominantly composed of granitic rocks partially overlain by metasedimentary and metavolcanic rocks. The volcanic tableland is comprised of pyroclastic deposits derived from volcanic explosions in the Long Valley caldera. The White Mountains extend to more than 13,000 feet above MSL, while the volcanic tableland rises to 6,000 feet above 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.

b. Soils

The Facility soils are generally described as Yaney-Yaney loam and Cambidic-Haplodurids-Type Haplodurids associations. The Yaney-Yaney loam is a well-drained sand, sandy loam, and sandy loam with various amounts of gravel. The parent material is best described as volcanic ash and/or alluvium derived from mixed sources The Cambic soil is a well-drained gravelly to extremely gravelly sandy loam with some cementation at 11 to 18 inches below ground surface. The parent material is described as alluvium derived from mixed sources.

c. Faulting/Seismicity

The Facility is located within the Eastern California Shear Zone, a broad zone of strike-slip and normal faults distributed across the Owens Valley, Mohave Desert, and eastern Nevada, and northeastern California.

Several Holocene fault zones run through the valley, including the Fish Slough fault zone, approximately 2 miles west of the facility, and the White Mountain fault zone, approximately 2 miles east of the Facility. However, there are no Holocene faults mapped in the vicinity of the Facility and the Facility is not located within an identified Alquist-Priolo Fault zone. Six additional faults are mapped near the Facility with a distance from 5.6 miles to 50 miles from the Facility to the nearest reach of the fault.

The Discharger performed a stability analysis on the proposed WMU. Results of the static and seismic slope stability analyses indicate that the proposed WMU configuration is stable under both static and pseudostatic conditions.

28. <u>Hydrology</u>

a. Surface Water/Springs

There are no surface waters within a one-mile radius of the Facility. The nearest surface water (perennial) is Fish Slough, located approximately 2 miles to the west. The north fork of the man-made, earthen, and ephemeral McNally Canal crosses the southeastern corner of the Facility. The McNally Canal is located more than 1,000 feet south (cross-gradient) of the proposed WMU.

Seven unnamed springs are also located within a five-mile radius of the Facility.

b. Groundwater

The Facility is located in the Owens Valley groundwater basin. The groundwater flow at the Facility is due east with a groundwater gradient at approximately 0.013 feet/foot. Depth of groundwater typically ranges from approximately 35 to 48 feet below ground surface.

Groundwater recharge is primarily derived from snowmelt and precipitation runoff from the adjacent highlands, and from direct precipitation onto the valley floor. Groundwater generally occurs in unconsolidated to semi-consolidated alluvial deposits and flows towards the axis (north-south) of the valley.

Background water quality data for these monitoring wells is presented in Table 1 in the Monitoring and Reporting Program R6V-2011-**(PROPOSED).**

29. Basin Plan

The Water Board adopted a Water Quality Control Plan for the Lahontan Basin (Basin Plan), which became effective on March 31, 1995.

30. Receiving Waters

The potential receiving waters are the ground waters of the Owens Valley Ground Water Basin, Department of Water Resources No. 6-12 and the surface waters of the Owens Hydrologic Unit, Upper Owens Hydrologic Area (McNally Canal).

31. Beneficial Uses

The beneficial uses of ground waters of the Owen's Valley Ground Water Basin, as set forth and defined in the Basin Plan, are:

a. Municipal and domestic supply;
b. Agricultural;
c. Industrial Service Supply;
d. Freshwater Replenishment;
e. Wildlife Habitat

The beneficial uses of surface water of the Upper Owens Hydrologic Area (McNally Canal) as set forth and defined in the Basin Plan, are:

a. Municipal and domestic supply;
b. Agricultural;
c. Groundwater Recharge;

d. Water Contact Recreation;
e. Non-contact Water Recreation;
f. Commercial and Sport Fishing;
g. Wildlife Habitat.

32. Water Quality Data Evaluation

Statistical and non-statistical procedures for evaluating detection monitoring data are required to meet section 20415(e)(7), Title 27, CCR and the report titled "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities" (USEPA, March 2009, EPA 530/R-09-007).

33. Other Considerations and Requirements for Discharge

Pursuant to California Water Code section 13241, the requirements of this Order take into consideration:

a. Past, present, and probable future beneficial uses of water:
This Order identifies past, present and probable future beneficial uses of water as described in Finding No. 31. The discharge will not adversely affect present or probable future beneficial uses of water, including municipal and domestic water supply, agricultural supply, industrial, and freshwater replenishment.

b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto:
Finding Nos. 27 and 28 describes the environmental characteristics and quality of water from this hydrographic unit.

c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area:
The requirements of this Order will not result in groundwater degradation.

d. Economic considerations:
This Order authorizes the Discharger to implement closure and post-closure maintenance actions at the Facility as proposed by the Discharger. The Order accepts the Discharger's proposed actions as meeting the best practicable control method for protecting groundwater quality from impacts from the WMU.

e. The need for developing housing within the region:
The Discharger is not responsible for developing housing within the region. This Order provides WDRs for the Facility.

f. The need to develop and use recycled water:
There is currently no source of recycled water available to the Discharger; however, some of the process water will be pumped from the WMU and re-used, limiting the use of potable water at the Facility (see Finding 14).

34. California Environmental Quality Act

The Facility is subject to the provisions of the California Environmental Quality Act (CEQA) and its federal equivalent the National Environmental Policy Act (NEPA). The Water Board is the lead agency responsible for completing CEQA. Because the Facility is located on federal lands, the Bureau of Land Management (BLM) is the NEPA lead agency.

The Water Board provided a Notice of Intent to adopt a Mitigated Negative Declaration of Environmental Impact for the Bishop Mill (SCH No. 2011051005) project on May 3, 2011, for a minimum 30-day public review comment period. The Mitigated Negative Declaration is based on an Initial Study and reflects the Water Board's independent judgment and analysis. The Water Board received two public comments, but the comment letters did not identify any potentially significant impacts that were not already identified and mitigated for in the Initial Study. After considering the Initial Study and the comments received, the Water Board hereby determines there will be no significant adverse impacts to the environment with proper mitigation from the Facility and adopts a Mitigated Negative Declaration of Environmental Impact for the Facility. The documents or other material, which constitute the record, are located at the Lahontan Regional Water Quality Control Board office in South Lake Tahoe, California. The Regional Water Board will file a Notice of Determination within five days from the issuance of this order.

Subsequent to the determination filed by the Water Board, the BLM will conduct a separate environmental analysis of the proposed Bishop Mill project pursuant to the NEPA. The BLM will incorporate the findings of the Water Board into their NEPA analysis and any subsequent approval of CMC Metals' Plan of Operations for the Facility. Any BLM authorization to operate the Facility under an approved Plan of Operations will include stipulations to minimize surface disturbance and potential impacts to biological and cultural resources identified by the Water Board in the Initial Study. Any BLM authorization to operate the Facility will also stipulate what reclamation work will be required upon cessation of operations. BLM will also require CMC Metals to post an adequate financial assurance bond to cover the cost of the required reclamation work, including the removal of buildings, equipment, vehicles, personal property and any trash, debris, refuse or hazardous materials generated by the operation.

35. Notification of Interested Parties

The Water Board has notified the Discharger and all known interested agencies and persons of its intent to adopt new WDRs for the Facility.

36. Consideration of Interested Parties

The Water Board, in a public meeting on **July 13 and 14, 2011**, heard and considered all comments pertaining to the discharge of waste.

IT IS HEREBY ORDERED that the Discharger shall comply with the following:

I. DISCHARGE SPECIFICATIONS

A. Nondegradation

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 maintenance of existing high quality in surface waters, ground waters, or wetlands. 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 must not degrade water quality.

B. Receiving Water Limitations

Receiving water limitations are narrative and numerical water quality objectives contained in the Water Quality Control Plan for the Lahontan Basin (Basin Plan) for all surface waters and groundwaters of the Lahontan Region. As such, they are required to be met.

Limitations for Surface Waters of the Upper Owens Hydrologic Area

The discharge of waste to surface waters shall not cause, or contribute to, a violation of the following water quality objectives for waters of the Upper Owens Hydrologic Area.

1. Ammonia

Ammonia concentrations shall not exceed the values listed in Tables 3-1 to 3-4 of the Basin Plan for the corresponding conditions in these tables. Tables 3-1 to 3-4 of the Basin Plan are incorporated into these requirements by reference.

2. Bacteria, Coliform

   i. Waters shall not contain concentrations of coliform organisms attributable to anthropogenic sources, including human and livestock wastes.

   ii. The fecal coliform concentration during any 30-day period shall not exceed a log mean of 20/100 milliliter (ml), nor shall more than 10 percent of all samples collected during any 30-day period exceed 40/100 ml. The log mean shall ideally be based on a minimum of not less than five samples collected as evenly spaced as practicable during any 30-day period. However, a log mean concentration exceeding 20/100 ml or one sample exceeding 40/100 ml, for any 30-day period shall indicate violation of this objective even if fewer than five samples were collected.

3. Biostimulatory Substances

   Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.

4. Chemical Constituents

   i. Waters designated as MUN (a beneficial use of surface water of the Upper Owen's Hydrologic Area) shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary MCL based upon drinking water standards specified in provisions of the California Code of Regulations, Title 22, Division 4, Chapter 15, hereby incorporated by reference into these requirements. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

   ii. Waters shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses.

5. Chlorine, Total Residual

   For the protection of aquatic life, total chlorine residual shall not exceed either a median value of 0.002 milligrams per liter (mg/L) or a maximum value of 0.003 mg/L. Median values shall be based on daily measurements taken within any six-month period.

6. Color

   Waters shall be free of coloration that causes nuisance or adversely affects the water for beneficial uses.

7. Dissolved Oxygen

   The dissolved oxygen concentration as percent saturation shall not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration be less than 80 percent of saturation.

8. Floating Materials

   i. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses.

   ii. The concentrations of floating material shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.

9. Oil and Grease

   i. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses.

   ii. The concentration of oils, greases, or other film or coat generating substances shall not be altered.

10. pH

    The pH shall not be depressed below 6.5 nor raised above 8.5.

11. Radioactivity

    i. Radionuclides shall not be present in concentrations, which are deleterious to human, plant, animal, or aquatic life nor which result in the accumulation of radionuclides in the food web to an extent, which presents a hazard to human, plant, animal, or aquatic life.

    ii. Waters designated as MUN shall not contain concentrations of radionuclides in excess of the limits specified by the more restrictive of the California Code of Regulations Title 22 Division 4, Article 5, section 64441 et seq. This incorporation-by-reference is prospective including

future changes to the incorporated provisions as the changes take effect.

12. Sediment

The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.

13. Settleable Materials

Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. The concentration of settleable materials shall not be raised by more than 0.1 milliliter per liter.

14. Suspended Materials

i. Waters shall not contain suspended materials in concentrations that cause nuisance or that adversely affect the water for beneficial uses.

ii. The concentration of total suspended materials shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.

15. Taste and Odors

Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin, that cause nuisance, or that adversely affect the water for beneficial uses. The taste and odor shall not be altered.

16. Temperature

The natural receiving water temperature of all waters shall not be altered.

17. Toxicity

i. All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.

ii. The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, shall not be less

than that for the same water body in areas unaffected by the waste discharge, or when necessary, for other control water that is consistent with the requirements for "experimental water" as defined in the most recent edition of *Standard Methods for the Examination of Water and Wastewater* (American Public Health Association, et al.).

18. Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent.

Limitations for Groundwaters of the Owens Valley Groundwater Basin

The discharge of waste to groundwaters shall not cause, or contribute to, a violation of the following water quality objectives for waters of the Owens Valley Groundwater Basin.

20. Coliform Bacteria

In groundwaters, the median concentration of coliform organisms over any seven-day period must be less than 1.1/100 milliliters.

21. Chemical Constituents

i. Groundwaters must not contain concentrations of chemical constituent in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the provisions of Title 22, Division 4, Chapter 15 of the CCR.

ii. Waters must not contain concentration of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes).

iii. Groundwaters must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

22. Radioactivity

Groundwaters must not contain concentrations of radionuclides in excess of limits specified by the more restrictive of the CCR, Title 22, Division 4, Article 5, section 64441.

23. Taste and Odor

Groundwaters must not contain taste or odor-producing substances in concentrations that cause nuisance or that adversely affect beneficial uses. For groundwaters concentrations, at a minimum, must not exceed

adopted secondary maximum contaminant levels specified in Title 22, Division 4, Chapter 15 of the CCR.

C. Authorized Disposal Site

Only process solution, tailings, or any other material associated with milling operations can be discharged to the WMU.

D. Design and Construction

1. The WMU (as specified in Findings 11, 12, 14, and 15 and the Revised November 2010 ROWD) shall comply with the requirements contained in Chapter 7, Subchapter 1, Title 27, CCR for mining waste management.

2. The liners specified in Finding 11 shall have permeability no greater than 1 x 10^{-7} cm/sec and shall be chemically compatible with the waste discharged to the WMU.

3. The Discharger shall follow ASTM (American Society of Testing and Materials) standards, or their equivalent acceptable to the Executive Officer, for liner construction and quality control tests ("ASTM Standards and Other Specifications and Test Methods on the Quality Assurance of Landfill Liner Systems," 1994, ASTM, 1916 Race St., Philadelphia, PA), to verify liner integrity prior to discharge of any waste. Water Board staff may arrange for additional independent testing to verify liner integrity and seam sealing.

4. The one foot prepared soil subliner as required in the engineered alternative liner sytem (Finding 11) shall be smooth rolled to eliminate potential damage to the lower liner of the WMU and shall be compacted to a minimum of 90 percent of maximum dry density per ASTM D1557.

5. All facilities used in the milling process and for disposal of waste shall be adequately protected against washout, inundation, structural damage, or a significant reduction in efficiency resulting from a 100-year, 24-hour storm event.

6. The Discharger shall comply, at all times, with the engineering plans, specifications, and technical reports submitted with the complete RoWD and all requirements contained within these Orders.

II. REQUIREMENTS AND PROHIBITIONS

A. General

1. The discharge of any type of nonhazardous waste to the WMU, including garbage, paper, wood, scrap metal, abandoned equipment, and construction materials without prior approval by the Water Board is prohibited.

2. The Discharger shall not cause a release from the WMU, as indicated by the appropriate statistical or non-statistical data analysis and verification procedures of the Monitoring and Reporting Program.

3. If a release is detected that exceeds the trigger values of the concentration limits of the Monitoring and Reporting Program, the continued use of all or part of the WMU may be prohibited by the Water Board, until such time as the release is corrected and there is no longer a threat to water quality caused by the release.

4. The Discharger shall be prepared to correct any release from the WMU, including, but not limited to, shutting off all or part of any related processing facilities; rinsing and neutralizing the affected area; removing and properly containing tailings from the WMU; repairing and/or replacing all or part of a leaking liner; and any other corrective measures required to mitigate a potential threat to water quality caused by the release.

5. All chemical and petroleum product storage tanks on site will be constructed with secondary containment structures and/or features.

6. All hazardous material containers shall be properly secured in a storage facility that is not susceptible to the elements or accessible to the public.

B. Stormwater Discharges

Waste in discharges of storm water must be reduced or prevented to achieve the best practicable treatment level using controls, structures, and management practices. The Applicant shall 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.

These requirements do not preclude the Applicant from requirements imposed by municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to separate storm sewer systems or other water, conveyances and water bodies under their jurisdiction.

C. Detection Monitoring Program

The Discharger shall maintain a Detection Monitoring Program pursuant to section 20385(a)(1), Title 27, CCR.

D. Evaluation Monitoring Program

The Discharger shall establish an Evaluation Monitoring Program whenever there is evidence of a release from any portion of the Facility, including the Authorized Disposal Site, pursuant to sections 20420(k)(5) and 20425, Title 27, CCR.

E. Corrective Action Program

The Discharger shall institute a Corrective Action Program when required pursuant to section 20385(a)(4), Title 27, CCR.

III. WATER QUALITY MONITORING AND RESPONSE PROGRAMS

A. Water Quality Protection Standard

1. The Discharger shall propose to the Water Board any new constituents of concern proposed for discharge to the Facility at least 180 days before discharge. Before a new discharge commences, the Discharger shall estimate the concentrations for such constituents within the waste stream and submit written statistical method(s) in order to detect a release of such constituents.

2. At any given time, the concentration limit for each monitoring parameter for each constituent of concern shall be equal to the background value of that constituent.

3. If the Discharger or Executive Officer determines that concentration limits were or are exceeded, the Discharger must either immediately institute verification procedures upon such determination as specified below or submit and amended Report of Waste Discharge within 90 days of such determination in order to establish an evaluation monitoring program.

4. Monitoring wells MW-1, MW-2, and MW-4, or replacements, shall be used to define the Point of Compliance and monitor for a release from the Facility to ground water.

5. The lysimeter beneath the LCRS sump shall be used to monitor for a release from the WMU to the vadose zone.

B. Statistical Methods

1. The Discharger shall use statistical data analysis methods, acceptable to the Executive Officer, to evaluate detection monitoring data in order to determine statistically significant evidence of a release from the Facility.

2. The Discharger shall determine, within 45 days after completion of sampling, whether there is statistically significant evidence of a release from the Facility at each Monitoring Point. The analysis shall consider all monitoring parameters and constituents of concern. The Executive Officer may make an independent finding that there is statistically significant evidence of a release or physical evidence of a release.

3. If there is statistically significant evidence of a release, the Discharger shall immediately notify the Water Board by email and telephone. Subsequently, the Discharger may immediately initiate verification procedures, as specified in subsection II.D, below whenever there is a determination by the Discharger or Executive Officer that there is a statistically significant evidence of a release.

4. If the Discharger does not use verification procedures to evaluate evidence of a release, then there is an assumption that there is a statistically significant evidence of a release. The Discharger is required to submit within 90 days of deciding not to use verification procedures to evaluate evidence of a release an amended RoWD in order to establish evaluation monitoring or make a demonstration to the Water Board that there is a source other than the Facility that caused evidence of a release.

C. Non-statistical Methods

The Discharger shall determine whether there is physical evidence of a threatened impact to water quality from the WMU. Significant physical evidence may include unexplained volumetric changes in the Facility, unexplained stress in biologic communities, unexplained changes in soil characteristics, visible signs of leachate migration, concentration of constituents of concern in soil gas which may pose a threat to groundwater quality, or any other change to the environment that could reasonably be expected to be the result of a threatened

impact to groundwater quality from the WMU. If there is evidence of a release, the Discharger shall immediately notify the Water Board by email and telephone.

D. Verification Procedures

1. The Discharger shall immediately initiate verification procedures, as specified below, whenever there is a determination by the Discharger or Executive Officer that there is evidence of a release. If the Discharger declines the opportunity to conduct verification procedures, the Discharger shall submit a technical report as described in Section II(E) below (Technical Report Without Verification Procedures).

2. The verification procedure shall only be performed for the constituent(s) that has shown a statistically significant evidence of a release and shall be performed for those Monitoring Points at which a release is indicated.

3. If a determination is made that there is evidence of a release using the Prediction or Tolerance Interval Method, the Discharger may, within 30 days of such determination, update the Upper Tolerance Limit and reevaluate Point of Compliance data in order to verify evidence of a release from the facility. The Discharger must also collect three additional samples from the affected Monitoring Points and compare the results to the updated Upper Tolerance Limit.

4. The Discharger shall either conduct a composite retest using data from the initial sampling event with all data obtained from the resampling event or shall conduct a discrete retest in which only data obtained from the resampling event shall be analyzed to verify evidence of a release.

5. The Discharger shall submit to the Water Board the results of the verification procedure, as well as all concentration data collected for use in the retest, within seven days of the last laboratory analysis.

6. If the Discharger or Executive Officer verifiy evidence of a release, the Discharger is required to submit, within 90 days of such determination, a technical report pursuant to section 13267(b) of the California Water Code. The report shall propose an evaluation monitoring program or demonstrate to the Water Board that there is a source other than the Facility that caused evidence of a release.

E. Technical Report Without Verification Procedures

If the Discharger chooses not to initiate verification procedures after there has been a determination made for evidence of a release, a technical report shall be

submitted pursuant to section 13267(b) of the California Water Code. The report shall propose an evaluation monitoring program or attempt to demonstrate that the release did not originate from the Facility.

IV. PROVISIONS

A. Standard Provisions

The Discharger shall comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, as set out in Attachment G, which is made part of this Order.

B. Monitoring and Reporting

1. Pursuant to section 13267 of the California Water Code, the Discharger shall comply with and implement Monitoring and Reporting Program **No R6V-2011-(PROPOSED).**

2. Pursuant to the Monitoring and Reporting Program, the Discharger shall maintain a Quality Assurance/Quality Control Plan (QA/QC Plan) for sampling and analysis.

3. Pursuant to section 20405, Title 27, CCR, the COC shall not exceed their respective concentration limits at each compliance monitoring point. The concentration limits will be proposed by the Discharger based on assessment of background conditions and must be acceptable to the Executive Officer prior to the discharge of any waste.

4. Compliance Period

The compliance period is the number of years equal to the active life of the Unit plus the closure period. The estimated active life of the Facility is five years and the closure period is up to thirty years.

a. Release

Each time the concentration limits are exceeded (i.e., a release above the concentration limit is discovered), a Compliance Period for the affected WMU shall begin on the date the Executive Officer directs the Discharger to begin an Evaluation Monitoring Program.

b. Automatic Extension

The Discharger shall implement its Corrective Action Program in a timely manner. Pursuant to section 20410, Title 27, CCR, if the

Discharger's Corrective Action Program has not achieved compliance by the scheduled end of the Compliance Period, the Compliance Period shall be automatically extended until the affected WMU has been in continuous compliance for a least three consecutive years.

C. Closure and Post-Closure Maintenance Plan (Closure Plan)

1. The WMU at the Facility shall be closed pursuant to a Final Closure Plan prepared in accordance with all applicable requirements of Title 27 and Title 14, CCR, submitted to and approved by the Water Board.

   a. Closure Plan

      The Closure Plan submitted with the Report of Waste Discharge shall be updated/modified by the Discharger no later than 60 days prior to the discharge of waste to the WMU. The Closure Plan must be updated to meet the requirements of clean closure or to demonstrate, for acceptance by the Executive Officer, that clean closure of the WMU is infeasible. Each Annual Report shall confirm that the Closure Plan conforms to the existing operations at that time.

   b. Final Closure Plan

      The Final Closure Plan shall be submitted at least 180 days prior to beginning any partial or final closure activities. The Final Closure Plan shall be prepared by or under the supervision of either a California Registered Civil Engineer or a Certified Engineering Geologist.

2. The Discharger shall provide and maintain adequate financial assurance for closure and post-closure maintenance per Finding 22 of this Order.

D. Closure of WMU

Closure and post-closure maintenance of the WMU at the Facility shall be in compliance with section 22510, Title 27, CCR.

E. Other Provisions

1. The Discharger shall have in place adequate emergency response plans in order to clean up any spill or release of any waste at the Facility.

2. The discharger must ensure that storm water discharges and non-storm water discharges do not cause or contribute to an exceedance of any applicable water quality standards.

V. TIME SCHEDULE

A. Final Proposed Construction Drawings, Specifications, and Descriptions

At least 60 days prior to beginning construction, the Discharger shall submit final proposed plans, specifications, and descriptions associated with the construction for review and acceptance by the Executive Officer. The submittals should include specifications and descriptions for all excavation, grading, liners, LCRS components, leak detection components, precipitation and drainage control facilities, and vadose zone monitoring points. The submittals should include a proposed schedule for the construction activities.

B. Preliminary Closure and Post Closure Maintenance Plan (Closure Plan)

No later than 30 days prior to discharging waste to the WMU the Closure Plan and cost estimates must be updated to meet the requirements of clean closure or to demonstrate, for acceptance by the Executive Officer, that clean closure of the WMU is infeasible. The Closure Plan shall include an itemized and lump sum estimate of the costs of carrying out all actions necessary to close the Facility. The estimate shall include costs to prepare detailed design specifications, develop the Final Closure Plan, and perform the closure, reclamation and maintenance activities until closure is completed pursuant to section 20950, Title 27, CCR.

C. Known or Reasonably Foreseeable Release Plan (Release Plan)

No later than 60 days prior to discharging waste to the WMU, the Discharger must submit a Release Plan to this office for acceptance by the Executive Officer. Operations must not commence until the Executive Officer accepts the Release Plan. The Release Plan must include an itemized and lump sum cost estimate to implement the plan. The Release Plan and cost estimate to implement the plan must be prepared by, or under the supervision of, a California registered professional geologist or California registered professional engineer.

D. Financial Assurance Instruments

The Discharger must submit instruments of financial assurance acceptable to the Executive Officer, and adequate to cover the costs of closure, post-closure maintenance, and a reasonably foreseeable release from the WMU.

1. Separate Financial Assurance Instrument(s) providing adequate funding, secured by other means than corporate guarantees, for the Preliminary Closure and Post-Closure Maintenance lump sum estimate in V.A. of this Order must be submitted to the Water Board, pursuant to sections 22207

and 22222, respectively, Title 27, CCR no later than 60 days prior to discharge to the WMU.

2. Separate Financial Assurance Instrument(s) providing adequate funding, secured by other means than corporate guarantees, for the Known or Reasonably Foreseeable Release Plan lump sump estimate in V.B. of this Order must be submitted to the Water Board no later than 60 days prior to the discharge of waste to the WMU and operations must not commence until the Executive Officer accepts the Instrument.

3. Lump Sum Estimates shall be revised and submitted annually to the Water Board for approval by the Executive Officer as set out in V.A. and V.B. of this Order beginning on **August 15, 2012**. An increase may be necessary due to inflation, a change in regulatory requirements, a change in the approved closure plan, or other unforeseen events.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on July 13, 2011.

_____
HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments: A. Facility Location
B. Site Layout
C. Mill Process Flow Diagram
D. Proposed Facility Layout
E. Overliner Drain System Layout
F. Leachate Collection and Recovery System (LCRS) Design
G. Standard Provisions for Waste Discharge Requirements

Monitoring and Reporting Program No. R6V-2011-**(PROPOSED)**
MRP-1 Location of Monitoring Points
MRP-2 General Provisions for Monitoring and Reporting