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Via Electronic Transmission

California Regional Water Quality Control Board,
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Attn: Philip Woodward
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California Regional Water Quality Control Board,
Central Valley Region
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114
Attn: Kenneth Landau, Assistant Executive Officer
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Re: Comments on Proposed NPDES Permit and Waste Discharge Requirements for the Bullion River Gold Corporation, French Gulch (Nevada) Mining Corporation and U.S. Department of the Interior, Bureau of Land Management, Washington Mine, Shasta County

Dear Messrs. Woodward and Landau,

Please accept these comments on behalf of the French Gulch – Upper Clear Creek Resource Management Group (“RMG”) regarding the proposed NPDES permit and waste discharge requirements for the Washington Mine in Shasta County. RMG consists of about 300 concerned citizens, most of whom reside in or near the town of French Gulch about two miles downstream of the Washington Mine and its highly polluted discharges. RMG’s mission is to educate and support the community of French Gulch in the management of historical, cultural, and natural resources and to manage the Upper Clear Creek watershed area to the benefit of all its inhabitants, including present and future generations. RMG has a long-standing concern about pollution discharging from Washington Mine to French Gulch and its tributary, Scorpion Gulch. For many years, the operators of the mine as well as the Bureau of Land Management have failed to take the actions necessary to comply with both state and federal water quality laws.

By proposing an NPDES permit, RMG believes that the Regional Board is taking a critical step to end the decades of regulatory neglect at the site. However, RMG’s review of the proposed permit’s effluent limitations indicates that one of the most important proposed limitations – arsenic – has not been adjusted to reflect the proposed one-month averaging period. In addition, given the extremely high pollution levels being discharged from the mine and the operators’ and owners’ neglect for many years to comply with the most basic requirements of the Porter-Cologne Water Quality Control Act and the federal Clean Water Act, RMG believes that the Regional Board should accelerate the compliance schedule proposed in the accompanying cease and desist order

for some of the adits at issue. For these and other reasons specified below, RMG recommends that the Regional Board amend the proposed permit to assure justifiable effluent limitations and reduce the length of the time schedules proposed in the CDO.

A. The Proposed Average Monthly Effluent Limitation for Arsenic is Inconsistent With the Basin Plan's Water Quality Objective for Arsenic and Not Supported by the Weight of the Evidence

The effluent limitations proposed in the permit, for the most part, apply the formula contained in the State Implementation Policy that translates an acute or chronic water quality objective into an average monthly effluent limitation. One clear exception is the limitation proposed for arsenic. Currently, the permit proposes to include an average monthly effluent limitation for arsenic of 10 ug/L. Permit, § IV.A.1.a, Table 6. The Fact Sheet indicates that the only basis for the 10 ug/L concentration is the U.S. EPA's Primary Maximum Contaminant Level ("MCL") for arsenic. The Fact Sheet and permit overlook the Basin Plan's water quality objective for arsenic, also 10 ug/L, though dissolved. Basin Plan, Table III-3.0. The Basin Plan's arsenic objective is established as a "maximum concentration" without any averaging period. To the extent staff believes the MCLs are comparable to 30-day effluent objectives, the Basin Plan's "maximum concentration" objective for arsenic is the more stringent controlling objective to be applied in the permit.

As the Fact Sheet notes, the federal regulations require that effluent limitations be established as daily limitations and average monthly effluent limitations. 40 C.F.R. § 122.45(d). The State Implementation Policy applicable to the metals criteria established by the California Toxics Rule ("CTR") provides for an equation as well as a table by which the CTR's criteria based on 1-hour and 4-day averages are translated into average monthly effluent limitations. All of the CTR-based effluent limitations proposed for the permit apply the formula translating the CTR based objectives into an average monthly effluent limitation. Permit, § IV.A.1.a, Table 6. Each of the daily effluent limitations proposed for those pollutants employs the objective itself. *Id.* The one other pollutant included in the proposed permit that is based on the Basin Plan's numeric objectives set forth in Table III-3.0 – cadmium – also applies the SIP's equation to establish an average monthly effluent limitation for that pollutant. Fact Sheet, p. F-22. The same rationale should apply to arsenic in order to implement the Basin Plan objective.

An average monthly effluent limitation for arsenic of 10 ug/L will not achieve compliance with a "maximum concentration" objective of 10 ug/L. A "maximum concentration" objective, like an acute or chronic water quality objective based on a 1-hour average or 4-day average, must be reduced in allowable concentration in order to establish a meaningful monthly average effluent limitation. Simply applying a maximum concentration for arsenic as an average monthly limitation is not sufficient to protect beneficial uses. The Regional Board should establish a 10 ug/L daily effluent limitation for arsenic and calculate a lower average monthly effluent limitation to include in the permit as well.

B. The Proposed Average Monthly Effluent Limitations for Cobalt, Molybdenum, and Vanadium Are Inconsistent With the Guidance Cited in the Fact Sheet

The permit includes limits for cobalt, molybdenum, and vanadium based on the United Nation's report entitled "*Water Quality for Agriculture*, Food and Agriculture Organization of the United Nations—Irrigation and Drainage Paper No. 29, Rev. 1 (R.S. Ayers and D.W. Westcot, Rome, 1985) as well as the Basin Plan "Policy for Application of Water Quality Objectives." The limits proposed for each of these three pollutants also are not adjusted from a maximum concentration to a monthly average. The U.N. Report referenced in the Fact Sheet recommends "maximum concentrations" for each of the three pollutants. U.N. Report, Table 21. Establishing those maximum concentrations as monthly averages will not assure their attainment on any given day, week, or multiple week period. Nothing in the U.N. Report or the fact Sheet justifies treating those maximum concentrations as monthly averages. The maximum concentrations referenced by the proposed permit should be established as daily limitations. The Regional Board should apply its best professional judgment to adjust those maximum concentrations to lower concentrations appropriate to establish as average monthly effluent limitations consistent with the methodology employed in the SIP for CTR pollutants.

C. The Time Schedule Proposed in the Cease and Desist Order Does Not Assure the Earliest Possible Attainment of Effluent Limitations

The time schedule proposed in the Cease and Desist Order does not "assure compliance at the earliest possible date" as required by the State Board's regulation. 23 California Code of Regulations § 2243(b). The State Board has provided guidance on the information required to be submitted by a discharger in order to justify a schedule of compliance. *See* State Water Resources Control Board, Resolution No. 2008-0025, Policy For Compliance Schedules In National Pollutant Discharge Elimination System Permits, § 4; SIP, p. 21. Although neither of these documents is binding on the Regional Board to establish a time schedule in a CDO, RMG believes they provide the Regional Board suitable guidance to assure the Board has sufficient evidence upon which to find that a proposed schedule will achieve compliance as soon as possible. In this instant, the discharger submitted a brief letter in support of the proposed five year schedule. *See* Letter from French Gulch (NV) Mining Corp. to Regional Board (Sept. 22, 2009). RMG appreciates that the Board did not accept all of the dischargers suggested time frames. Nevertheless, the schedules proposed for the Robillard, I-Level, Government and O'Neil adits are not well supported by the discharger's brief letter.

As for the Robillard Adit, the CDO proposes a two-year schedule. This does not appear to be the soonest possible timeline for installing "a collection tank, pump and pipeline" and "re-installing power" via existing service. RMG recommends that the schedule for Robillard be reduced significantly to no more than one-year.

The discharger provides no rationale for the four year schedule requested for the Government Adit. Hence, the CDO's proposal of a four year schedule for that adit is equally unsupported. RMG recommends that the installation of a gravity pipeline should not take longer than one-year.

In regard to the I-Level Adit, it is important to remember that BLM is a permittee as well. Any necessary right-of-way from BLM should not delay installation of required treatment for this adit. RMG believes that the work summarized for this adit should not take longer than two years.

Lastly, as for the O'Neil Adit, obtaining an encroachment permit and constructing a pipeline to deliver water should not require five years to complete. RGM believes a two-year deadline to complete this work would better comport with the earliest possible attainment date for this adit.

D. The Permit and Fact Sheet Do Not Indicate The Location From Where the Samples Analyzed for Hardness Were Taken and May be Contrary to the State Implementation Policy

The federal regulations require permit writers to use the hardness of the ambient receiving waters, i.e. waters upstream of any waste discharges. 40 CFR 131.38(c)(4), governing application of the CTR, states that “[f]or purposes of calculating freshwater aquatic life criteria for metals from the equations in paragraph (b)(2) of this section, for waters with a hardness of 400 mg/l or less as calcium carbonate, the actual ambient hardness of the surface water shall be used in those equations.” (emphasis added). The Federal Register published in support of the CTR explains that “[i]f it appears that an effluent causes hardness to be inconsistent with alkalinity and/or pH the intended level of protection will usually be maintained or exceeded if either (1) data are available to demonstrate that alkalinity and/or pH do not affect the toxicity of the metal, or (2) *the hardness used in the hardness equation is the hardness of upstream water that does not include the effluent.*” 65 Federal Register 31692 (May 18, 2000) (emphasis added). Both the U.S. fish & Wildlife Service and the National Marine Fisheries Service emphasize the obvious need to avoid relying on hardness values elevated by a discharger’s effluent to formulate numeric water quality criteria:

to obtain a site hardness value, samples should be collected upstream of the effluent source(s). Clearly stating this requirement in the CTR would avoid the computation of greater-than-intended site criteria in cases where samples were collected downstream of effluents that raise ambient hardness, but not other important water qualities that affect metal toxicity (e.g., pH, alkalinity, dissolved organic carbon, calcium, sodium, chloride, etc.). Clearly, it is inappropriate to use downstream site water quality variables for input into criteria formulas because they may be greatly altered by the effluent under regulation. Alterations in receiving water chemistry by a discharger (e.g., abrupt elevation of hardness, changes in pH, exhaustion of alkalinity, abrupt increases in organic matter etc.) should not result, through application of hardness in criteria formulas, in increased allowable discharges of toxic metals. If the use of downstream site water quality variables were allowed, discharges that alter the existing, naturally-occurring water composition would be encouraged rather than discouraged.

USFWS/NMFS Biological Opinion re: “Final Rule for the Promulgation of Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California” (March 24, 2000).

The permit does propose to use hardness levels measured within the receiving waters. Fact Sheet, p. F-17 – F-18. However, the Fact Sheet does not disclose whether the samples in Scorpion Gulch were unaffected by the mine’s waste discharges. It is clear the sample in French Gulch was taken downstream of the mine’s discharges. *Id.* The Fact Sheet acknowledges that waste from the mine would have much higher hardness results, given the very high metals levels. *Id.* at F-18. Since the dischargers’ submission of their report of waste discharge, there was ample time for the Regional Board to request appropriate upstream sampling, including ambient hardness values in order to properly apply the SIP as well as to assure the most conservative i.e., lowest hardness value be applied to the metals being discharged at the facility. If the hardness value relied upon by the proposed permit is downstream of the mine’s discharge, the Board should apply a lower hardness value of 40 mg/L, the hardness referenced for the Sacramento River in the CTR. 65 Fed. Reg. 31686 (May 18, 2000).

E. The Permit Fails To Comply With the Basin Plan’s Provisions Addressing Additive Toxicity

Metals to be regulated by the proposed permit metals have a potential for exhibiting additive toxic effects. The Basin Plan includes a *Policy for Application of Water Quality Objectives* which requires that

[w]here multiple toxic pollutants exist together in water, the potential for toxicologic interactions exists. On a case by case basis, the Regional Water Board will evaluate available receiving water and effluent data to determine whether there is a reasonable potential for interactive toxicity. Pollutants which are carcinogens or which manifest their toxic effects on the same organ systems or through similar mechanisms will generally be considered to have potentially additive toxicity.

Basin Plan, p. IV-17.00-18.00. The proposed permit does not address or implement this important Basin Plan requirement.

F. The Permit Should Reference any Groundwater Limitations Included in the Existing WDRs and, If Appropriate, Update the Discharge Requirements

Little mention is made in the proposed permit and Fact Sheet regarding the existing WDRs for the Washington Mine addressing discharges of process water to land that apparently occur at the Facility. This component of the facility and the Regional Board’s regulatory response should be better clarified in the Fact Sheet and consideration given to how the land discharges at the site may interact with the adit discharges addressed in the proposed NPDES permit.

G. The Permit Must Include an Effluent Limitation for Chronic Toxicity

The proposed Permit does not contain an effluent limitation for chronic toxicity and therefore does not comply with Federal Regulations, at 40 CFR § 122.44(d)(1)(i) and the SIP. The discharger has had ample time to collect any necessary data to implement the Basin Plan’s chronic toxicity standard. If there is no problem with chronic toxicity at the site, then including the effluent limitation will have little burden on the facility. However, if it turns out there is a chronic

toxicity problem, having an enforceable limitation will assure a prompt response by the dischargers.

H. The Permit Fails to Comply With the State and Federal Antidegradation Policies because No Antidegradation Analysis Was Prepared Despite the CDO's Proposed Five-Year Compliance Schedule for Numerous Discharges From the Mine

The proposed permit fails to apply the federal and state antidegradation policies. The Fact Sheet page F-41 states that: "... the Regional Water board has determined that an antidegradation analyses is not required to consider the possible impacts resulting from the proposed discharge following the RPA." However, when considered with the proposed CDO which will allow very high pollution levels to be discharged from other adits, there is a certainty that the proposed action may degrade water quality in French Gulch.

The Regional Board, like all state agencies, must comply with the Basin Plan whenever it takes any action. Water Code Sections 13146 and 13247 require that the Board in carrying out activities which affect water quality shall comply with state policy for water quality control unless otherwise directed by statute. The State Board has adopted Resolution No. 68-16, the state's antidegradation policy for NPDES permits. The Regional Board has incorporated that policy in the Basin Plan (also approved by the State Board).

The Regional Board must apply the antidegradation policy whenever it takes an action that will lower water quality (Memorandum from Chief Counsel William Attwater, SWRCB to Regional Board Executive Officers, "Federal Antidegradation Policy," pp. 3, 5, 18 (Oct. 7, 1987) ("State Antidegradation Guidance"); USEPA Region IX, "Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12," p. 1 (June 3, 1987). Application of the policy does not depend on whether the action will actually impair beneficial uses. State Antidegradation Guidance, SWRCB Administrative Procedures Update 90-004, p. 6 (July 2, 1990). Actions that trigger use of the antidegradation policy include, among many others, the issuance of NPDES permits and waste discharge requirements and the issuance of cease and desist orders, especially a CDO that proposes a significant delay in compliance with water quality-based effluent limitations. See State Antidegradation Guidance, pp. 7-10, Region IX Guidance, pp. 2-3). Given the CDO's proposed timelines, the Regional Board should conduct an antidegradation analysis considering other impacts in the watershed both upstream and downstream of the Washington Mine site.

RMG again thanks the Regional Board and its staff for your consideration of these comments. If staff has any questions, please do not hesitate to contact me.

Sincerely,



Michael R. Lozeau

on behalf of French Gulch – Upper Clear Creek Resource Management Group