

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

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October 5, 2012

Mr. Randy McClure
Rio Grande Silver, Inc.
PO Box 610
Creede, CO 81130

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta E. Piñeda
Director

Re: Equity Exploration Project, NOI No. P-2011-010, Modification MD-2, Second Technical Adequacy Review.

Dear Mr. McClure:

The Division has reviewed the proposed changes for the Equity Project, as described in Modification MD-2, as well as the current responses provided by your office in response to our first adequacy letter (dated September 24, 2012). Cumulatively, the materials provided appear to sufficiently address most of the Division's questions and concerns. The Division's comments concerning all prior items appear below, but further responses from Rio Grande Silver (RGS) are required on only a few items, as indicated below.

The Figure C Map has been revised sufficiently to show the expanded affected area under this modification. No further changes are needed. It would be advisable to install visible and durable markers to indicate the extent of the affected area on the ground, to ensure that disturbances from project activities remain inside the approved boundary.

The elevation scale of cross section A-A' on Figure D has been corrected in the revised version. No further changes are needed. As waste rock is added to the piles please ensure that the slope gradients are not steeper than 1.5H:1V.

The safety and catch berms to be installed around the development rock fills have been adequately described, and no further information is needed. Please ensure that the berms are constructed early enough to catch sediments at the initiation of pile development. As these berms are also required for your stormwater management plan, please ensure that they are regularly maintained. If additional measures are needed to adequately control sediment and stormwater, please provide such.

The Division has reviewed the copy of the SPLP and ABA analyses that were performed, and the supplemental interpretation of the numbers that you provided. Since the project will generate waste rock over time and from different underground locations, periodic testing of representative samples will be required. The sampling schedule or interval you have proposed, once every 3,000 cubic yards, is appropriate for this project and is approved. The testing methods that were used, ABA and SPLP, will be the methods to be required for future analyses. Please provide copy of future analyses and commentary to the Division in a timely manner upon receipt from the lab.

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The repeat SPLP analysis you are proposing for rock samples that indicated increased metals mobility is prudent, given the earlier results. Please provide the new results and commentary to the Division when they are available.

The additional ABA tests you propose for rock that initially indicated acid-generation potential is also prudent. The commentary you provided concerning those results, adequately explains that the small particle size of the ground-up waste rock can appear to indicate acid-generating potential, when in fact the larger rock size is the norm and does not produce this leachate. However, please provide the results from the additional tests when they are available.

The Field Weathering (barrel) tests you propose appear to be an appropriate type of analysis for this application. However, we have a few questions about this sampling method. Please describe, or indicate on a map, where the test station will be installed. It is proposed to collect the accumulated leachate quarterly. Is quarterly collection feasible given winter conditions at the Equity? Four barrels are to be set up initially, with additional barrels installed as additional underground locations are accessed. Acknowledging that this is a long-term type of test, for how long is RGS proposing to collect and analyze leachate from the initial and subsequently added barrels?

The current sampling of the historically-placed waste rock and of natural talus rock from this location will provide an interesting comparison to current analysis of recently-generated waste rock. When those data are received please forward copy to this office.

Thank you for providing the surface water quality sampling results from West Willow Creek. The Division has been aware of the ongoing sampling that RGS has been carrying out throughout this watershed, though actual data are not routinely submitted to us. The range of measurements along that reach indicates extremely little or no impact to the pH of the creek and a high degree of buffering of the local geology it flows through. These sampling results are valuable in the role of providing a baseline of Willow Creek pH values. Though DRMS does not have primary jurisdiction in surface water quality, I would like to request that RGS provide updates to the pH measurements taken at these locations (WW-Recon-1B through -4) due to the potential for impacts from future placement of new waste rock.

The waste rock piles will be "plated" with talus rock when the piles reach their final size and configuration. Please state what the expected volume of talus will be for accomplishing this, and the proposed method of placement.

The need for a groundwater quality baseline is important, and RGS needs to be considering establishing the baseline through a monitoring program. Please review Hard Rock/Metal Rule 3.1.7, regarding groundwater. In this case, if there are no seeps at the toe of the talus or waste rock along the creek, and if the creek bed is not on bedrock, groundwater hydrology might not be well understood. A water monitoring well/piezometer that is located downgradient of the waste rock, drilled to the bedrock contact, and screened through the proper interval will be needed. The mine pool is not the issue, since it is far below the creek or surface level. The portal does not have a discharge, and the surface facilities area has no surface runoff. What is needed is a better picture of the water that percolates through the rock, and its possible changes over time. This is not a problem at this time, and will not delay this modification, but should be given a high priority.

This office has received sufficient information to begin to estimate the additional reclamation costs