



REVISED T.R. 21

May 6, 2013

Mr. Bob Oswald Colorado Department of Natural Resources Durango Field Office 691 CR 233, Suite A-2 Durango, Colorado 81303



RE: Bulldog Mine Permit No. M-1977-215
Technical Revision TR-22, Bulldog Vent Raise / 9700 Portal Modifications / Waste Rock Surface Facility / City of Creede Water Line Extension

Dear Mr. Oswald:

Firstly, Rio Grande Silver (RGS) is proposing to re-establish the previously constructed Vent Raise on existing unpatented mining claim Baker 3am within the area denoted as Area "E".

The second item we want to address is the re-working of the 9700 portal and associated surface area. The 9700 portal is located within Area "A" of our existing permit area and is currently covered in the "Existing Disturbed Area" as denoted and calculated on our recent 112 Amendment application documents.

Thirdly, we are proposing to expand the existing waste rock storage facility at the Bulldog Decline project within Area" A." The expansion will facilitate the needs of the project for the immediate future and provide for a more functional roadway to the portal.

Lastly, we are proposing to connect the existing water line from water tank located below the new Administration building. This will allow us to use City water for the Admin. Building users.

The addition of these features will not result in any increase in employees to the project.





## **EXISTING CONDITIONS**

The proposed location for these improvements is in the SW ¼, Section 25, T42N, R1W, NMPM, Mineral County. The combined total of 4.43 acres will be added to the project. All of the proposed disturbances will fall in areas that were previously disturbed during the Homestake project, with the exception of the 0.07 acre adjacent to the Monitoring Well along the road to the 9700 portal and the 0.10 acres in Proposed Area "I" adjacent to the City water tank.. The 0.24 acres at the Vent Raise area as well as the 0.10 acres in the water line corridor near the water tank is outside of the 49.7 acres covered under the 60 permitted disturbed acres.

#### PROPOSED ACTION

The proposed action will include the following facilities:

- Vent raise re-development
- Refurbishing of the 9700 portal
- Expansion of the Waste Rock Storage Facility adjacent to the 9400 Decline
- Connection to City of Creede municipal water supply

## Vent Raise re-development

The area lies outside of the currently disturbed areas as calculated and provided with our recent Amendment application. This portion of work will add 0.24 acres to the total disturbed acres for the project, but will still keep the total project disturbed areas less than the current permitted allowable area of 60 acres. The project consists of demolishing and removing an existing earthen cap and reclaimed area above the old Vent Raise. In addition to the demolition, we intend to re-establish a road and pad to the site. The extent of new road will be an approximately 350' length of gravel access road that will follow the path of the previous road to the site. The site will be graded, with all available topsoil being removed and stockpiled for use at the time of Reclamation. The new road and site will have a minimal layer of gravel installed to accommodate traffic and parking/staging for the vent rehab. We intend to install a 10' x10' x 2' thick concrete pad around the vent with a 10'tall collar and affixed grate assembly to prevent material infall and to secure the entrance.

The site will be fenced with a security fence to dissuade public access. The purpose of the structure is to assist in the ventilation of the old mine workings. Refer to attached exhibits AA (Cross-Section) and BB (Plan View)





## Refurbishing of the 9700 portal

This additional described work will not add any land to our existing permitted disturbed area. The work will consist of removing and stockpiling the available topsoil from the road and work platform. The topsoil will be stockpiled in a berm along the downhill edge of the disturbed area to be re-used upon final reclamation. The large boulders and trees in the work area will be moved to the toe of the existing uphill side of the roadway. The roadway will receive +/- 2" of gravel to assist in leveling and providing a usable surface. The existing 36" culvert and steel door covering the portal will be removed and replaced with steel-sets and decking for a distance of 30' into the hillside to intersect the existing wood-frame structural support. A new Portal Gate assembly will be installed for access control. In addition to this work we need to do a minor cut adjacent to the roadway to the portal to allow traffic to pass by the existing Monitoring Well that sits in the middle of the existing roadway. The portal area construction will affect 0.74 Acres in the previously disturbed area and the minor roadway expansion to provide clearance around the monitoring well will affect .07 Acres. See attached Exhibit CC (Plan View) and DD (Construction Details).

# Expansion of the Waste Rock Storage Facility adjacent to the 9400 Decline

This work will consist of removing and stockpiling the available growth medium from the new WRSF area. The growth medium will be set aside for re-use upon reclamation. The expansion area will be bermed on its perimeter and waddles installed as needed to control erosion and run-off. The expansion will be done consistent with existing approved practices for sloping and construction methods. This expanded area will add 3.2 Acres to the WRSF. The new area remains within the previously disturbed area and does not add any additional acreage to the 60 acres of permitted disturbed area. See attached exhibits EE (Operational Plan View) and FF (Operational Cross-Section) as well as exhibits GG (Post-Mining Plan View), HH (Post-Mining Cross-Section), and II (Final Reclamation Cross-Section) for project details.

# Connection to City of Creede Municipal Water supply

This work consists of connecting the existing 1  $\frac{1}{2}$ " PVC water line that extends from the water tank on USFS property below the Admin. Building, and running approximately 750 lineal feet of electrical conduit and wire to supply power to the pumping system. We will be installing a buried 6' x 12' x 5'-4" tall pre-cast concrete vault adjacent to the water tank in which we will install a pump, backflow preventer, power distribution center, and convenience outlets. The only part of the tank that will be visible is the access lids (2),





which will be set to grade. We have received an approval from the City of Creede to do this work. The

USFS approval is pending, and included in the EA which is expected to be final by the middle of May, 2013. The total area of this project will be 0.18 acres of disturbance. The area will be immediately back-filled and re-seeded upon installation of the improvements( see attached exhibits JJ( Plan View) and KK( Vault Details)

## DISTURBANCE ACREAGE

The estimated disturbance caused by the proposed action on private and US Forest Service managed lands is shown on Table 1, TR22 – Estimated Disturbance Acreage

Table 1, TR22 – Estimated Disturbance Acreage

FACILITY	LENGTH (feet)	PRIVATE (acres)	US FOREST SERVICE (acres)	TOTAL (acres)
Vent Raise Development	n/a	0	0.24	0.24
9700 Portal Refurbishment	n/a	0.30	0.51	0.81
WRSF Expansion area	n/a	0	3.2	3.2
City Water Connection	770 l.f.	0.08	0.10	0.18
Total	n/a	0.38	4.05	4.43

As show on this table, it is estimated that 3.98 acres of US Forest Service managed land will be disturbed.

#### DRAINAGE AND SEDIMENT CONTROL

The following drainage and sediment control measures will be employed to reduce erosion and sediment at the site:

All access roads and parking pads will be dressed as needed with an all-season gravel to reduce sediment yield.





All area will be fitted with waddles and berms as shown to address run-off issues and storm-water control measures

## HAZARDOUS MATERIALS

No hazardous materials such as explosives or bulk petroleum products will be stored at any of these areas area.

#### RECLAMATION

RGS will implement the same reclamation measures for these new areas as is approved for the Bulldog Mine facilities area.

Most of the project site was previously disturbed by Homestake for its Bulldog Mine operations and was reclaimed. RGS plans to principally contain its proposed facilities within the boundaries of that previous disturbance. Past Homestake reclamation practices has shown that the site can be successfully reclaimed.

The emphasis of RGS-proposed reclamation at the site will be as follows:

- > Removal of fence:
- > Fertilize, mulch and seed.

Compacted areas will be ripped or disked or otherwise left in a roughened condition. The site will be seeded using the species list contained in the Stage 2 District-Wide Exploration Plan of Operation that was approved by the Forest Service in 2009. RGS will monitor reclaimed sites for reclamation success according to the requirements of the Forest Service and state of Colorado. Areas to be monitored will include revegetation success, erosion, and undesirable and noxious weeds.

#### ENVIRONMENTAL MANAGEMENT AND MITIGATION

All management and mitigation measures described in the approved operations plan for the Bulldog Decline and facilities area will apply to this TR.RGS will utilize management





and mitigation practices that are based on company policies, governmental laws and regulations, current technology, and accepted management practices. The objectives of these practices are to reduce or avoid impacts to the environment and to reclaim disturbed areas.

The new areas will not be visible from the City of Creede. Operating hours of the improvements could at times be 24/7 with noise being limited in accordance with city of Creede standards. Any outside lighting will be directed down and towards the parking and building area and away from the city.

RGS will be responsible for snow removal in the winter and road grading operations.

Please find enclosed a Rio Grande Silver check in the amount of \$175.00 as payment for the Technical Revision fee. Please do not hesitate to contact me if you have any questions, concerns, or comments. It is our desire to begin this work as soon as we receive your approval.

Sincerely,

Randy McClure

General Manager

Rio Grande Silver, Inc.

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