

September 17, 2012

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-20, Core Logging Building and Access Road

Dear Mr. Oswald:

Rio Grande Silver (RGS) is proposing to construct a new core logging building, access road and ancillary facilities on patented mining property adjacent to the Bulldog mine facilities. See Core Logging Building Site Plan (Figure 1). The purpose of the building is to conduct geological core logging procedures on the core that is obtained from surface and underground core drilling activities. About 95% of planned disturbance will be on private land with the remainder (buried pipelines) on US Forest Service managed lands. Any disturbance on Forest Service land will be re-seeded upon completion of the work.

Core logging is currently being conducted in Creede. Current core logging employees will be moved to the new facility, therefore, no increase in employees are anticipated by this action.

EXISTING CONDITIONS

The proposed location for the core logging facility is in the SW ¼, Section 25, T42N, R1W, NMPM, Mineral County, and within the existing permit area as described in Permit No. M-1977-215. The building will be located on the Acanthus patented mining claim (MS 19302). The land where the building will be located was previously disturbed by past 'Homestake' mining operations and is now reclaimed. A portion of the existing buried water line is located on US Forest Service managed land. (See Figure 1)

PROPOSED ACTION

RGS proposes a new Core Logging building and associated facilities to be located approximately 200 feet from the existing administration building at the Bulldog project site. The proposed action will include the following facilities:

- > Steel Frame Building with Concrete Floor,
- Constructed Pad Area for the Building, Parking, and Storage,



- > Access Road connecting the Bulldog site to the Core Building,
- Buried Septic Sewer System, and
- Buried Water and Power Lines.

Steel Frame Building

The steel frame building will have dimensions of about 40' X 80' X 14'. The building will be insulated and will have a large open core logging area, work stations, a break room and a bathroom. There will be no shower facilities. Heating will be provided by electric heat. Propane will be used to heat water for the bathroom facilities. Waste water (sewage and gray water) will be disposed through a standard septic tank and leach field system that will be permitted and inspected by county inspectors. The water system may require a pump and pump house facility that would be located in the pending amended affected area below the proposed building. If this is the case, the work will not begin on this portion of work until the footprint area is made inclusive in the affected area through further amendment. Water will be provided through a connection to the City of Creede potable water system.

The building will be constructed on a 40' X 80' X 6" reinforced concrete slab.

Constructed Pad Area

An area of the hillside will be excavated (using Cat D6 or D8 dozers) to produce a flat area for the core logging building. The building and concrete slab will be constructed on 'cut'. Rock and dirt that is excavated will be pushed downslope producing a flat 'fill' area. The fill area will be used for employee parking and storage. Two con-ex containers (8' X 40') may be stored on site at any given time. A berm will be constructed around the perimeter of the excavated pad for safety considerations and for drainage and sediment control. The parking and storage area will be rolled and covered with an all-weather gravel surface. The constructed pad area is shown on Figure 1 and a typical cross-section of the pad area is shown on Figure 2, Pad Area Section A - A and B- B

Approximately 6500 cubic yards of material will be excavated to construct the building and the fill will be used to build up the parking pad area. The pad will be approximately 110' x 150' to allow an area around the building on all sides for access and maintenance. Prior to pad construction available growth medium, estimated at 6 inches, will be removed from the site. The growth medium will be used to construct the safety berms that will be formed around the pad perimeter. This growth medium will be replaced as part of reclamation activities. The downslope area will be dressed with berms. Straw waddles and/or silt fence will be incorporated as needed to minimize erosion.

.

Access Road



An approximate 690 foot graveled-surfaced access road will be constructed from the Bulldog mine facilities area to the core logging building. The road will be constructed entirely on private land. With the exception of snow removal and grading equipment, only small vehicles (pickups) will be allowed to use the access road. The grade of the road will range from 10% - 12.5%. The running surface of the road will be about 12 feet wide. A safety berm consisting of the vegetative materials removed from the road area during construction and/or barriers will be placed on the outside edge of the road. Runoff water from the road will be diverted down the road and will be captured on the pad area. Common Storm Water management practices will be utilized to address final runoff from the site. Drainage controls will be established at Bulldog Mine facilities area that will prevent runoff water at the mine facilities from running down the access road. The proposed location of the access road is shown on Figure 1 and a typical X-Section of the road is shown on Figure 3, Typical Road & Pipeline X-Sections B – B' & C – C'.

Buried Septic Tank/Leach Field System

Sewage and gray water will be controlled by connecting the core shed building bathroom facilities to a septic tank/leach field system located adjacent to the proposed core shed location. The sewer line will be buried about 6 feet deep and be 6 inches in diameter to conform to Mineral County regulations. The planned location of the sewer line is shown on Figure 1 and a typical cross-section of the excavated pipeline trench is shown on Figure 3, Typical Road & Pipeline X-Sections B-B' & C-C'. Permits will be obtained from Mineral County .This permitting process will be complete prior to construction.

Buried Water and Power Lines

Potable water will be provided to the core logging building by connecting to the City of Creede potable water system. Permits will be obtained from the City of Creede prior to construction. In addition, the water line may be extended to the newly refurbished administration building to provide potable water to the mine site. A tee in the line is planned to extend from the main water line to the core logging building. The water line will be buried about 6 feet deep and be 2 inches in diameter to conform to good engineering practices and City of Creede/Mineral County regulations. The planned location of the water line is shown on Figure 1 and a typical cross-section of the excavated pipeline trench is shown on section drawing attached hereto.

NOTE: No infrastructure will be installed until approved and permitted by applicable permitting agency. Also, any proposed work outside of the currently approved affected area will not begin until the amendment to include said area is submitted and approved.

DISTURBANCE ACREAGE

The estimated disturbance caused by the proposed action on private and US Forest Service managed lands is shown on Table 1, TR19 – Estimated Disturbance Acreage

Table 1, TR19 - Estimated Disturbance Acreage



FACILITY	LENGTH (feet)	PRIVATE (acres)	US FOREST SERVICE (acres)	TOTAL (acres)
Building Pad (includes Building)	n/a	0.38	0	0.38
Access Road	690	0.24	0	0.24
Sewer Line/Septic Tank/Leach Field System	n/a	0.10	0	0.10
Water & Power Line	150/325	0.11	0.01	0.12
Total	na	0.83	0.01	0.84

As show on this table, it is estimated that about 0.01 acres of US Forest Service managed land will be disturbed. However, this will be a temporary disturbance. As soon as the water pipeline is installed the trenches will be backfilled. Re-vegetation of the pipeline area will commence as soon as weather conditions permit in the spring.

DRAINAGE AND SEDIMENT CONTROL

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

- Storm water runoff will be prevented from flowing down the access road from the bulldog mine facilities area; sediment control waddles or straw bales will be placed at the toe of the constructed road fill slope and at strategic points along the hillside edge of the road;
- > Runoff from the access road surface will be controlled on the constructed pad. The pad will be bermed around its perimeter; water will only be allowed to flow off the pad through sediment control structures such as waddles or straw bales;
- Both the access road and the constructed pad will be lined with an all-season gravel to reduce sediment yield;
- > Sediment control waddles or straw bales will be placed at the toe of the pad fill slope; and
- In the spring of the year, the fill slopes of the access road and constructed pad will be seeded with the approved interim seed mix.

HAZARDOUS MATERIALS

No hazardous materials such as explosives or bulk petroleum products will be stored at the core logging building or pad area.

RECLAMATION

RGS will implement the same reclamation measures for the access road and constructed pad 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 structures and facilities;
- > Re-contour and re-grade the area to close the original condition;
- > Replace salvaged growth medium; and
- Fertilize, mulch and seed.

The steel building, conex containers and all other ancillary facilities will be removed from the site. The concrete floor and building foundation will be broken up and hauled to and placed in the 9400 portal.

Compacted areas such as the access road and the constructed pad will be ripped or disked or otherwise left in a roughened condition prior to growth medium material replacement. The constructed pad area will be re-graded and contoured to conform to the natural topographic conditions. Growth material (estimated at 6 inches) will be spread on top of the re-contoured surface and 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 growth medium placement, re-vegetation success, erosion, and undesirable and noxious weeds.

The buried septic tank/leach field system and water pipeline serving the facility will be removed at reclamation.

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 core logging building will be visible from the City of Creede. Operating hours of the facility will likely be limited to typical working hours but 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.

No large equipment will be operated at the site after construction is complete except 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.

PO Box 610 112 East 12th Street

Ranch McChurc

Creede, Colorado 81130



