



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

May 15, 2015

Dianna Stoopnikoff
Fortune Revenue Silver Mines, Inc.
PO Box 564
Ouray, CO 81427

Re: Revenue Mine, Permit M-2012-032, Amendment AM-1, Technical Adequacy Review Letter

Dear Ms. Stoopnikoff,

The Division has been reviewing the amendment application for the Revenue Mine, and has identified numerous items in the amendment materials that require your response for clarification or correction. These items are listed and explained in the paragraphs below. Topics or exhibits that are not included in this letter are considered adequate at this time.

Please respond to each item below, and arrange and label the responses to facilitate our review and inclusion in the amendment materials.

Exhibit C – Mine Plan Maps

The series of mine plan maps does not fully include depiction of a couple features that are important and which should be added to the maps. On the set of maps for the Revenue Mine complex (Map C-1 through C-4), the lacking features specifically are: the underground decline leading from the mill level down to the crushing gallery; and the surface pipe(s) that convey portal discharge water to the mine pond. Please ensure that the upland diversion ditches are shown in their correct locations.

Please provide more information about these features that appear on the Revenue Mine area maps (such as Map C-4, for example): the “potentially contaminated concrete lined tailings storage area” near the thickener, and the “temporary wet tailings storage area (unlined)” behind the dry building.

On the set of maps for the Governor Basin area (Maps C-7 through C-9), it appears that the features that have been overlaid on the topographic base area “shifted” to the southeast by about 150 feet. This makes the drainages, roads, pads, dump materials (to be removed by excavation), etc., not fit the topographic setting defined by the contour lines. Please correct this discrepancy in a set of revised maps.

Also, please ensure that when the locations for the set of shifted features are corrected, the proposed permit boundary lines in the Governor Basin area encompass all areas that where the removal of old tails and ore is proposed.

The cross sections shown on Map C-10 should be examined to ensure their features are integrated with the topography too.



May 15, 2015

On the Governor Basin area maps, there are some symbols that are either not identified in the legend, or that are not consistent on the map. Specifically, please identify or explain: the solid purple line (on west side of map) that changes to a purple dash and two dots; the “Revenue Controlled Property” symbol on the map does not match its symbol in the legend; while most roads are dark brown, one appears to be a thin green line; and there is a thin purple dashed line superimposed by a thin green line, possibly a road or drainage. Please clarify or correct these features, by providing brief description and corrected maps.

Exhibit D – Mining Plan

Regarding the concrete apron to be installed outside the filter building, please confirm that the narrative on page D-6 mistakenly states that the apron will be sloped to drain to the south, whereas it actually will drain to the north (away from the building) toward the gutter.

The narrative on page D-15 identifies three “storage areas”: the Revenue area, the Atlas area, and the “East end,” where tailings and waste rock will be stored (presumably permanently disposed). Please clarify or confirm that the East end storage area will only hold waste rock, and no tails.

The narrative for Section 7.1 on page D-19 states that mine water drains into waste rock, though this is not the case anymore. Please confirm that all mine water is piped to the lined mine water pond.

The narrative for Section 7.2 on page D-20 discusses the Atlas waste pile. Please clarify whether it will be 90 feet high or 60 feet high.

The narrative for Section 8 on page D-24 mentions an ore storage pad to be built. There is no follow-up description of the site preparation or construction details for this pad, though it is required. Detailed drawings that will be provided should include a cross section. Please provide this information.

The narrative for Section 11 on page D-26 mentions the shop and storage building (which also appears on the maps) but there is no description of the stacked sec-cans presently being used on the site for storage, and they are not shown on the maps. Please provide this information.

The narrative for Section 21 on page D-32 describes the removal of ore from the vein slot, followed by backfilling of the slot with clean waste rock. Please state whether this slot conveys storm water runoff, and if so, how the backfilled material will be stabilized to not erode.

The narrative on page D-33 mentions reopening old portals, but there is insufficient discussion of control of possible discharge, diversion, or the later closure by backfilling. Please provide this information.

Exhibit E – Reclamation Plan

The narrative states that the Revenue portal, the mill portal and the shop portals currently contain portal doors, but that final reclamation will consist of closure by “backfilling.” Please clarify what is meant by backfilling (for example: whether the backfilling will be the installation of stronger steel doors, or replacement of the doors with earthwork, or other method).

May 15, 2015

The narrative provides a backfill measurement of 25 feet, which may be a sufficient distance in by to backfill the smaller shop portals (by earthwork method), however 25 feet is not sufficient for the 30-foot-plus height of the mill interior. Please clarify or revise the description, and describe whether it pertains to the outer building door or the inner mill door.

Are there two or three shop portals? Please provide dimensions of all of them.

Section 8 covers topsoil. The reclamation plan requires topsoil replacement, and a significant amount of the required quantity is not generated onsite. Since the amount available and the land area to be topsoiled are variable but pertinent to the bond amount, how will the quantities necessary for reclamation be tracked over time?

Table E-2 on page E-7 shows the areas needing topsoil for reclamation and the amounts needed. However, there are areas shown on the reclamation map as needing topsoil that are not shown on the table. Please clarify and provide figures for all areas.

The “mine water perforated pipe” continues to be included in the narrative and map exhibits as a primary mine water conveyance, yet it is no longer the primary structure that is used for conveying (or disposing of) mine water. Please update references to this item in the exhibit narratives (such as in Section 11, for example).

Please clarify what the earthwork will consist of for removing the sediment ponds. Will it be simply breaching the impoundment dams, fully removing the dams by spreading that dam material, or filling the impoundments up to the top of the dam heights? This earthwork item affects the bond amount.

Exhibit F – Reclamation Maps

According to the Reclamation Plan in Exhibit E, all affected sloped areas are to be reduced to a maximum 3H:1V gradient. However, the slope gradient shown for Waste Rock Area 3 (East End) on Map F-1 is not 3:1. Please correct this.

It is permissible for the maps to continue to include the leach pond and the lines leading into and out of it, because they were previously approved for the plan, even though they may not actually be installed. However, please clarify and/or correct these labeled features also on Map F-1: mine water perforated buried pipes to the mine pond, and the perforated pipe crossing in front of the mill filter building.

The topography shown for the road and slope located northwest of the crusher is far steeper than 3H:1V, though this slope should be reduced to 3:1. Please revise the contours to correct this area too.

The Exhibit E narrative says the compressor building will be removed, yet it still appears on the Reclamation Map F-1. Please clarify or correct the map, for this detail.

May 15, 2015

Section 10 of Exhibit E states that all access roads will be permanent, but the Atlas access road is not shown (besides by the new bridge location) on the reclamation map. Please show this road on a revised Map F-1.

Map F-1 shows the green "land use boundaries" to delineate areas to be topsoiled and seeded from those that will not be. There are four locations where that boundary is depicted as a double line, which is unclear. These areas are: on the East Waste Rock area by the gabion wall; east of Atlas Creek; a strip of land above and south of the Atlas tailings area; and the area bordering the new (west) bridge. Please clarify this by cleaning up the boundary line or explaining what is meant by the double line.

Exhibit G – Water Information

The comments and questions below pertain to the exhibit narrative and to the maps. Please respond to the items as appropriate.

The narrative on page G-7 references Table G-1, but the table does not appear in the exhibit. Please provide this table.

Primary discharge will be from the mine pond, which will be treated if necessary. As it appears increasingly likely that treatment will be necessary, please describe what treatment options are being considered, whether they will need structures built onsite, and where they may be located.

Some of the symbols used on Map G-1 cannot be easily differentiated, especially certain similar colors, when the maps are scanned and projected on a computer monitor (as our permit file documents are). On future map revisions, please provide clearer distinction between symbols for diversion ditch basins and streams or channels.

Map G-1 (Surface Hydrology) does not include the three sediment ponds. Please add these ponds and all related necessary features.

Map G-1B does not show an inlet pipe delivering water to the mine pond.

Map G-1B does not show the upland diversion ditch above the Revenue Mine portal and filter building in the proper location, as it appears to be too low on the slope.

Map G-1C suffers from the same "shifted features" issue for Governor Basin that was discussed above, under Exhibit C, and should be similarly corrected.

Map G-1C shows the pond at the toe of the area to be excavated and the collection ditches. Please provide the dimensions of the pond and the ditches. A cross section of the slope and the control structures would be helpful.

May 15, 2015

Section 3.4 on pages G-16 and G-17 mentions the old portals in Governor Basin. Please state whether there is any observed seepage or suspected mine pool, and how sufficient precautions will be taken to completely control any exposed water. Please explain whether this water should be directed to the sediment pond or diverted around the control structures.

The right-hand column of Table G-5 on page G-22 was cut off in the printing of that page. Please provide a full Table G-5.

Revenue Portal discharge is variously described as being conveyed to the mine pond (page G-16) or through the perforated pipe (page G-25). Please clarify which of these is correct.

Map G-10 depicts the two perforated pipes along the toe of the hill slope, and Map G-11 also shows the details of this. Please clarify if this is to be considered the most current plan for the mine water.

Map G-16 and Map G-17 contain the same “shifted features” issue for Governor Basin that was discussed above, under Exhibit C, and both maps should be similarly corrected.

Detail C of Map G-17 shows the bench trench drains to the southwest. The narrative on page G-30 (paragraph 2) misstates this direction of flow.

Exhibit J – Vegetation Information

The plant communities in Governor Basin, in Sections 3 and 4 on page J-6, does not contain any explanatory text. There is no vegetation information shown on Map I-J for Governor Basin. Please provide the missing information for this area.

Exhibit L – Reclamation Cost

As requested under Exhibit E, above, please describe the method of reclaiming the sediment ponds.

Please describe the term “backfilling” for portal closure.

Please clarify what will be the reclamation of the concrete around and under the thickener.

Please list the various type of reclamation equipment anticipated to be used in Governor Basin (for the shaft headframe, sea-containers, concrete slabs, etc.)

Exhibit M – Other Permits and Licenses

Please update this list, since it should include US Forest Service for the road use, and CDPHE for all of the discharge permitting. You may copy the list provided in Exhibit T on page T-37 if it is complete.

Exhibit T – Environmental Protection Plan

Tables T-1 through T-4 do not appear on the pages where their captions appear (pages T-19 through T-22). Please provide the missing tables.

May 15, 2015

In the narrative on page T-26 the concrete apron is described. It incorrectly states that it will be sloped to the south away from the building, with a trough along the southern end. It should read "sloped to the north" with a trough on the northern edge.

The narrative on page T-28 states that the avalanche path is shown on the Exhibit C maps, but the path is not shown on those maps.

Proof of Filing with County Clerk

The proof of filing the initial amendment application materials was sufficient. Please be aware that all further amendment materials that are submitted by you or your agent must be additionally filed at the county clerk's, and a receipt obtained therefor. Please ensure that you file all such materials, obtain a receipt, and provide the receipt to the Division.

Decision Date

The Division's decision date for this amendment is June 11, 2015, by which time all amendment items must be found adequate for approval, or an extension must be requested.

All responses and other correspondence regarding this amendment must be mailed or delivered to the Division's Denver office. To ensure more timely review of response materials, an additional copy may be mailed to me at the Division's Durango office, at: 691 CR 233, Room A-2, Durango, CO 81301.

If you have further questions, I may be reached by phone at 970-247-5193, or by email at:
bob.oswald@state.co.us.

Sincerely,



Bob Oswald
Environmental Protection Specialist

Ec: Russ Means, DRMS Grand Junction
Greg Lewicki, Greg Lewicki and Assoc.