

**California Regional Water Quality Control Board
Central Valley Region
Board Meeting – 23 and 24 June 2016**

**Response To Written Comments For
Tentative Waste Discharge Requirements For
Meridian Beartrack Co. and Meridian Gold Company
Royal Mountain King Mine
Calaveras County**

At a public hearing scheduled for 23 and 24 June 2016, the Central Valley Water Board will consider prescribing Waste Discharge Requirements (WDRs) for discharges from the Meridian Beartrack Co. and Meridian Gold Company, Royal Mountain King Mine (facility).

This document contains responses to written comments received from designated parties and interested persons regarding the tentative WDRs. Written comments were required by the public notice to be received by the Central Valley Water Board by 20 May 2016 to receive full consideration. The Discharger was the only party to submit comments.

Based on the comments, Central Valley Water Board staff revised the tentative WDRs and made minor changes to correct typographical errors.

ROYAL MOUNTAIN KING MINE (DISCHARGER) COMMENTS

On 19 May 2016, the Discharger provided eight narrative comments, and attached redline/strikeout versions of the tentative WDRs and the tentative Monitoring and Reporting Program that provided suggested changes. Board staff found the vast majority of the changes proposed by the Discharger to be reasonable, and made the suggested changes, sometimes with very minor modifications. Below, Board staff provide an explanation for where we do not propose to change the tentative WDRs and Monitoring and Reporting Program precisely in accordance with the Discharger's suggestions.

Narrative Comments

Discharger Comment #1 (North Pit Status): the Discharger states, "We do not believe it is necessary to classify North Pit at this time as a Waste Management Unit ("WMU"). North Pit does not now hold any mining waste and therefore does not meet the Title 27 WMU definition ("a unit at which waste is discharged"). Title 27 C.C.R. ("Title 27") § 20164. North Pit has never been identified as a WMU in any prior Waste Discharge Requirements issued by the Regional Board."

"However, after discussion with Regional Board Staff, we understand that the basis for classification is that North Pit is part of a contingency plan that could be implemented in the extraordinary event that Skyrocket Pit Lake liquid needs to be pumped there if Skyrocket Pit Lake risks overtopping the dam. The Regional Board has informed us that, unless and until that contingent event occurs, Meridian would only be required to sample North Pit water once a year through a grab sample and that only one compliance point, located in the downgradient area, would need to be identified and utilized for compliance purposes (we propose GWM-30R). Moreover, Meridian would not be required to conduct formal "closure" of the unit at a later date unless it had been previously utilized as such a transfer location for Skyrocket Pit wastes. Based on all of these understandings, Meridian will not object to the designation of North Pit as a WMU. We have made appropriate textual modifications in the Tentative WDRs to reflect our understanding regarding this approach."

Discharger's Proposed Change to Finding 104 (Finding 103 of the Discharger's Comments): The North Pit was excavated during mining and allowed to fill with water when mining ceased. Historically, the North Pit has not been classified as a WMU and, therefore, is primarily filled with groundwater and surface water. The North Pit has reached an equilibrium level of approximately 1030 feet MSL. The spill

elevation of North Pit is 1070 ft amsl. North Pit is only being classified as a WMU based on its future potential contingent use as a unit to which Skyrocket Pit water waste could be transferred in an emergency situation. Accordingly, unless and until that event occurs, the only compliance sampling required for North Pit is an annual grab sample for the parameters set forth in the Monitoring and Reporting Program. The Compliance Point for North Pit to determine containment will be GWM-30R. There will not be any requirement to “close” North Pit under Title 27 unless and until it receive wastes from Skyrocket Pit.

Response: Staff is in agreement with the Discharger’s proposed revisions to Finding 103, with minor modifications. However, Staff clarified that after water is transferred into the North Pit from Skyrocket Pit, a new Point of Compliance may need to be identified for the North Pit.

Changes to the WDRs/MRP Proposed by the Discharger in the Redline/Strikeout Versions

Discharger’s Proposed Change to WDR Finding 2: Mining activities at RMKM were originally regulated by Waste Discharge Requirements (WDRs) Order 88-176, which addressed the removal, transport, processing, and disposal of mined material. Since mining ceased, the Board has issued three WDRs for the closure of this site: WDRs Orders 97-165, 5-01-040, and R5-2008-0021. This Order supersedes all prior WDRs Orders and is intended as the Closure WDRs for the RMKM facility.

Response: Staff did not incorporate the requested change, since proposed Finding 22 more precisely lists the closure status of the WMUs.

Discharger’s Proposed Change to Finding 22 Table:

- Flotation Tailings Reservoir **Waste Classification – Description:** Group C Solids and Group C Liquid – 6.5 million tons of flotation tailings. The solids were classified as Group C mining waste based on the lack of acid generation. The liquid contains salts and arsenicmetals and was reclassified as Group C.
- Leached Concentrate Residues Facility **Waste Classification – Description:** Group B Liquid – 186,400 tons of leachate concentrate residue containing cyanide, salts and metals. The solids are classified as Group B based on the acid generation potential. The liquids are classified as Group B Based on the pH and cyanide concentrations.
- Overburden Disposal Sites **Waste Classification – Description:** Group C Solid – 54 million tons of overburden soil and rock with elevated salts and seleniummetals.

Response: Staff did not incorporate the request to show only arsenic and selenium instead of metals for the FTR and ODSs Waste Classification Description because other metals have been detected at elevated levels other than arsenic for the FTR and selenium for the ODSs. Staff replaced pH with acid generating potential for the LCRF Waste Classification Description to clarify that the acid generating potential and not necessarily detected pH values is the rationale for classifying the LCRF liquids as Group B.

Discharger’s Proposed Change to Finding 25: Flotation tailings liquid in the FTR were classified and managed as a Group B mining waste, based on pre-mining data that indicated the presence and potential presence of flotation reagents or their breakdown products, some heavy metals in the flotation tailings liquid, and elevated levels of TDS. All of these conditions indicated a potential threat to groundwater and surface water quality near the FTR. Subsequent FTR analytical testing data during mine operation showed that the flotation reagents, their breakdown products, and heavy metals were never detected, no longer present in the FTR liquids.

Response: Staff did not incorporate this change. The historical analytical data for the FTR show recorded detections of these constituents.

Discharger's Proposed Change to Finding 63 (Finding 62 of the Discharger's Comments):

Groundwater seeps [that once were or are now](#) also monitored include Gold Knoll Seep, West ODS 1, West ODS 2, West ODS 3, West ODS 4 and West ODS 5 as shown in Attachment F and detailed in MRP R5-2016-XXXX.

Response: Staff revised the Finding to list only the current monitoring system listed in the MRP.

Discharger's Proposed Change to Finding 100 (Finding 99 of the Discharger's Comments): From September 1993, when the mining of Skyrocket Pit ceased, until April 1999, Skyrocket Pit was a hydraulic sink, drawing in poor quality groundwater from the west, [north and south](#) and good quality water from the east.

Response: Staff did not incorporate the requested change, as the initially-proposed language is a more accurate description of the general geographic areas where good quality and poor quality groundwater are found.

Discharger's Proposed Change to Facility Specification C.6: The FTR LCRS drains may be closed allowing leachate to build up within the FTR as long as the leachate does not seep to the surface at the FTR or further downstream. If an [uncontained](#) FTR surface seep is observed, the Discharger shall:

Response: Staff did not incorporate the requested change. Observed FTR surface are more appropriately subject to the requirements of Facility Specification C.6.

Discharger's Proposed Change to MRP C.5:

<u>Cell or Module</u>	<u>Point of Compliance Monitoring Wells</u>
North Pit	GWM- 46 30R

[No other groundwater wells shall be deemed to be compliance wells for purposes of Title 27 investigative or corrective action purposes. Wells within the BPA de-designation area may be used for investigative purposes when evaluating changes in the Point of Compliance Monitoring Wells identified directly above.](#)

Response: Staff incorporated some of the requested changes. However, Staff clarified that GWM-30R would not be an appropriate Point of Compliance well and if and when water is transferred into the North Pit from Skyrocket Pit – a new Point of Compliance may need to be identified for the North Pit after such a water transfer occurs.