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October 6, 2021

## **ELECTRONIC DELIVERY**

Mr. Elliott Russell Environmental Protection Specialist Colorado Department of Natural Resources Division of Reclamation, Mining and Safety Office of Mined Land Reclamation 1313 Sherman Street, Room 215 Denver, Colorado 80203

#### RE: Permit No. M-1980-244; Cripple Creek & Victor Gold Mining Company; Cresson Project; Technical Revision 127 – Monitoring and Reporting Procedures for the High and Low Volume Solution Collection Systems and the Leak Detection System, Responses to Adequacy Review #3

Mr. Russell:

Cripple Creek and Victor Gold Mining Company (CC&V) received the Division of Reclamation, Mining, and Safety (DRMS) second adequacy review response to comments on Technical Revision 127 (TR-127) to Permit No. M-1980-244. CC&V has reviewed the comments issued in the letter dated September 27, 2021 from DRMS, and has prepared responses for each comment. The DRMS adequacy review comments (*in italics*) and the corresponding response (**in bold**) are presented below.

6. On September 17, 2021 the Division received the emailed response to two questions the Division asked via email on September 13, 2021, regarding the results and additional information of the model discussed in Adequacy Item #6. In response to the Division's first question, the Operator confirmed the model calculation was based on a scenario of the PSSA going from 80% to 100% capacity.

In response to the Division's second question, the Operator stated the modeling exercise demonstrates the VLF2 PSSA will start to see diminishing flows 24 hours from when leaching is stopped. Using a rate of 17,000 gpm, the PSSA will receive 24,480,000 gallons of solution in a 24 hour timeframe which would consume 14.7% capacity of the PSSA, leaving only 5.3% capacity for the modeled storm event and any remaining solution drain down volume flowing into the PSSA after 24 hours. The Operator has stated it will take 153 hours for the PSSA volume to increase from 80% to 100% capacity under normal application conditions including the 100yr/24hr storm event, without additional pumping. The proposed 72 hours permit criteria reporting timeframe is not acceptable when in the first 24 hours the capacity has the potential to rise from 80% to approximately 95%.

The requirement to notify the Division when the PSSA exceeds 80% capacity in a sustained manner is a longstanding permit condition. Considering the potential impacts to the environment in the event there is a loss of containment from the PSSAs, along with the Operator's above referenced responses, the Division believes it is appropriate to require notification when the PSSAs exceeds 80% capacity for 24 hours. The notification will allow the Division time to assess the situation and to coordinate emergency response efforts should the sustained exceedance of the PSSA transition into an imminent failure of the Environmental Protection Facility.

The following is the acceptable HVSCS Permit Reporting Criteria:

• The standpipe transducer level data in the PSSAs exceeds 80 percent of the total capacity of the PSSA in a sustained manner for 24 hours.

Please revise the Exhibit G (3.3 Phase 3 PSSA) and Exhibit U (18.1 Events Requiring Reporting) accordingly.

### Newmont Response:

Please see the updated sections of Exhibits G (3.3 Phase 3 PSSA) and Exhibit U (18.1 Events Requiring Reporting) below. As discussed with DRMS via conference call on 10/5/2021, CC&V will update Exhibit G and Exhibit U, and will send to the Division within 30 days of approval.

## Exhibit G Update:

#### 3.3 Phase 3 PSSA Monitoring

VLF2 Phase 3 will also have a separate Pregnant Solution Storage Area (PSSA), which will have monitoring requirements similar to existing PSSAs. Design details for the VLF2 Phase 3 PSSA are provided in Appendix 1. Monitoring requirements at the leak detection systems, the high-volume solution collection systems, the low-volume solution collection systems, the pregnant solution storage areas, and the external pond are described in Exhibit U, and various facility documents including the Water Quality Monitoring Program and the SPCC Plan (Appendix 7 and Appendix 11, respectively). The only change to VLF monitoring anticipated by Amendment 13 is the addition of monitoring requirements for the new Phase 3 PSSA.

The information presented below reflects the currently approved criteria for responding to changes in operating parameters observed as a result in monitoring activities. The situations outlined below are those that require further action.

• Underdrains: The 30-day running average of CN<sub>WAD</sub> monitoring data for an underdrain exceeds 1.0 mg/L and the 30-day running average pH value from monitoring data for the same underdrain for the same period exceeds 9.0.

- LDS: The 30-day running average of CN<sub>WAD</sub> monitoring data for a LDS exceeds 0.5 mg/L and the 30-day running average pH value for the same LDS monitoring data for the same period exceeds 9.0.
- HVSCS: The average of the water level monitoring data in the PSSAs exceeds 80 percent of the total capacity of the PSSA in a sustained manner for 24 hours.
- LVSCS, LDCRS: The transducers monitoring data in the LVSCS or LDCRS exceed two feet in a sustained manner for 72 hours.

The first response to the conditions listed above will be to verify that the measurements and data are accurate. This may involve re-sampling or revisiting the monitoring location to confirm the initial monitoring results. In the event that initial monitoring results are confirmed, verbal notice will be provided to DRMS. Recommendations will be provided to DRMS regarding further analysis of the situation and, if warranted, appropriate corrective actions will be developed and implemented. Corrective actions may include, but not be limited to, providing a written plan to DRMS regarding proposed measures for addressing the situation, changing flow rates to the various portions of the VLFs, discontinuing the addition of dilute sodium cyanide solution or make-up water, initiating detoxification operations, or other appropriate responses.

# Exhibit U Update:

# **18.1 Events Requiring Reporting**

Scenario	Permit Criteria	Reporting	Additional
		Timeframe	considerations
	NT 101 1		NY.
Release of process	None specified	Within 24 hours of the	None
solution, containing		event	
designated chemicals as			
identified in the EPP,			
outside of an EPF*			
Release of hydrocarbon	None specified	Within 24 hours of the	None
product > 1000 gallons		event	
Release of any	None specified	Within 24 hours of the	None
chemical > CERCLA		event	
RQ**			
Any other release	None specified	Within 24 hours of the	None
required to be reported		event	
by other agencies			
Failure or imminent	None specified	Within 24 hours of the	None
failure of		event	
impoundment,			
embankment, stockpile			

Scenario	Permit Criteria	Reporting Timeframe	Additional considerations
or slope that poses			
potential danger to			
human health, property			
or the environment			
Failure or imminent	None specified	Within 24 hours of the	None
failure of an EPF		event	
identified in the EPP*			
Exceedance of permit co	onditions		
Underdrains	The 30-day running	After confirmation of	Refer to section 3.3 of
	average of CN <sub>WAD</sub>	the initial monitoring	Exhibit G
	monitoring data for an	results	
	underdrain		
	exceeds 1.0 mg/L and		
	the 30-day running		
	average pH value from		
	monitoring data for the		
	same underdrain for the		
	same period exceeds		
	9.0.		
Leak Detection System	The 30-day running	After confirmation of	Refer to section 3.3 of
(LDS)	average of CN <sub>WAD</sub>	the initial monitoring	Exhibit G
	monitoring data for a	results	
	LDS exceeds 0.5 mg/L		
	and the 30-day running		
	average pH value for		
	the same LDS		
	monitoring data for the		
	same		
	period exceeds 9.0.		
High Volume Solution	The average of the	Within 24 hours after	Refer to section 3.3 of
Collection System	water level monitoring	confirmation of the	Exhibit G
(HVSCS)	data in the PSSAs	initial monitoring	
	exceeds 80 percent of	results	
	the total capacity of the		

Scenario	Permit Criteria	Reporting Timeframe	Additional considerations
	PSSA in a sustained		
	manner for 24 hours.		
Low Volume Solution	The transducers	After confirmation of	Refer to section 3.3 of
Collection System	monitoring data in the	the initial monitoring	Exhibit G
(LVSCS)	LVSCS or LDCRS	results	
	exceed two		
	feet in a sustained		
	manner for 72 hours.		

\* Facilities identified as an EPF in the EPP are: AGVLF (lined area), SGVLF (lined area), HGM Platform (lined area), ESP (lined area), ADR1 (lined area), external storage pond

\*\*Comprehensive Environmental Response, Compensation, and Liability ACT (CERCLA): Reportable Quantities (RQ)

In the event of a failure or imminent failure of a designated EPF, CC&V will provide notification to the Division within 24 hours. The notification will include the following information;

- 1. Identify that this is a notification of an emergency condition
- 2. The nature of the condition including any chemicals and toxic or acid producing materials involved
- 3. An estimate of the quantity of any chemical, toxic or acid-forming material that has been or could be released
- 4. The time and duration of the occurrence and if it is on-going, or urgency of the pending situation
- 5. Any known or anticipated impacts to human health, property or the environment
- 6. Precautions and corrective actions taken by CC&V
- 7. CC&V's contact information

For spills requiring reporting to another agency, as identified in Rule 3.1.13 of the Hard Rock, Metal and DMOs, CC&V commits to notifying the division and providing the following information;

- 1. Operation name, DRMS permit number and name of person reporting the spill,
- 2. Telephone number of a responsible company official for the Office staff to use as a contact,
- 3. Date and time of spill,

- 4. Type of material spilled (CAS number if applicable, from the safety data sheet (SDS) form),
- 5. Estimate of the amount spilled, whether any material has left the permit area, and where the spilled material went, and
- 6. Initial measures taken to contain and clean up spill.

Should you require further information, please do not hesitate to contact Katie Blake at 719-689-4048 or <u>Katie.Blake@Newmont.com</u> or myself at <u>Justin.Raglin@Newmont.com</u>.

Regards.

Justin Kaglin Justin Kaglifi<sup>4C4...</sup> S&ER Manager Cripple Creek and Victor Gold Mining Company

EC: E. Russell – DRMS M. Cunningham – DRMS M. Crepeau – Teller County L. Morgan – Teller County J. Raglin – CC&V K. Blake – CC&V J. Ratcliff – CC&V B. Rising – CC&V P. Staub – Geosyntec J. Gillen – Geosyntec

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