

Newmont Corporation Cripple Creek & Victor Gold Mining Company 100 North 3<sup>rd</sup> St P.O. Box 191 Victor, CO 80860 www.newmont.com

October 28, 2022

# **ELECTRONIC DELIVERY**

Ms. Amy Eschberger 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 132 – ECOSA Monitoring Plan Update

Ms. Eschberger,

Newmont Corporation's Cripple Creek and Victor Gold Mining Company (CC&V) hereby provides this Technical Revision (TR) 132 to Permit M-1980-244, as required by the Colorado Division of Reclamation Mining and Safety (DRMS) notification received on September 20, 2022. The contents of this TR include a revision to the surface water monitoring plan and map to incorporate the new Grassy Creek monitoring location, as well as a detailed monitoring and reporting program for the East Cresson Overburden Storage Area (ECOSA) seeps. Additionally, this TR includes a short-term management plan for the seeps during active mining operations and a commitment to submit an additional TR by June 30, 2023, which will contain a long-term plan for the ECOSA seeps at closure to minimize or prevent further impacts to the hydrologic balance by the ECOSA.

### Background

The ECOSA facility was approved for construction by DRMS within Amendment 10 (Mine Life Extension #2) to mining Permit M-1980-244. In August 2021, as part of the quarterly DRMS water monitoring program, CC&V collected a water sample from monitoring well GVMW-25. Upon receipt of the analytical results CC&V provided an exceedance report to DRMS specifying parameter exceedances for the sample collected. Subsequent to this notification, DRMS requested CC&V collect monthly water quality samples from monitoring well GVMW-25, GVMW-8A, GVMW-8B, GVMW-22A, and GVMW-22B. These data results were submitted to DRMS from October 2021 to January 2022, when DRMS informed CC&V that starting in February 2022, only monitoring location GVMW-25 would be included within the monthly reporting going forward.

CC&V continued monthly sampling and reporting of water quality data for monitoring well GVMW-25, and saw some increases in parameter concentrations in August 2022, similar to increases observed in August 2021. Shortly after the receipt of monitoring well GVMW-25 monthly water quality information from August 2022, DRMS notified CC&V on September 30, 2022 of the requirement for this technical revision. The following sections address the components requested.

### **Revised Surface Water Monitoring Plan**

Surface water quality and flow monitoring will be conducted as stated in previous submittals on a quarterly basis. The following locations are recognized as compliance surface monitoring locations: one station down-gradient of Valley Leach Facility 1 (VLF1) in Arequa Gulch (AG-2.0); one station downgradient of the East Cresson Mine area in Theresa Gulch (T-2); a station downgradient of the operations on Wilson Creek just below the confluence with Bateman Creek (WCSW-01); and three stations in Grassy Valley (GV-02, GV-03, and GV-06). No surface water monitoring station is located downgradient of the VLF2 in Squaw Gulch as this is a zero-discharge facility. VLF2 Phase 3 also will be a closed loop facility. Samples collected at the surface water monitoring stations, shown in Table G-1 below, and on Figure G-1. A list of surface water parameters is provided below in Table G-2. This program provides downgradient flows and water quality from major site drainages as a means of monitoring for potential changes to the character of the surface water systems.

Site Number	Location	Monitoring Frequency
AG-2.0	Arequa Gulch Downstream	Quarterly
GV-02	Grassy Valley adjacent to ECOSA	
GV-04	Grassy Valley Downstream	Quarterly
GV-06	Lower Grassy Valley Downstream	
T-2	Wilson Creek (Theresa Gulch) Downstream	Quarterly
WCSW-01	Wilson Creek Downstream	Quarterly

#### **Table G-1: Surface Water Monitoring Sites**

Parameters				
pH (Field)	Temperature (°C)	Cyanide [WAD]		
Ammonia (mg/L as N) Total	Antimony (mg/L) Total Recoverable	Manganese (mg/L) Total Recoverable		
Cyanide [FREE] (Dissolved)	Arsenic (mg/L) Total Recoverable	Mercury (mg/L) Total Recoverable		
Fluoride (mg/L)	Barium (mg/L) Total Recoverable	Molybdenum (mg/L) Total Recoverable		
Nitrate (mg/L as N)	Beryllium (mg/L) Total Recoverable	Nickel (mg/L) Dissolved		
Nitrite (mg/L as N)	Cadmium (mg/L) Dissolved	Selenium (mg/L) Dissolved		
Boron (mg/L)	Cadmium (mg/L) Total Recoverable	Silver (mg/L) Dissolved		
Chloride (mg/L)	Chromium (mg/L) Dissolved	Thallium (mg/L) Dissolved		
Sulfate (mg/L)	Copper (mg/L) Dissolved	Uranium (mg/L) Dissolved		
Aluminum (mg/L) Dissolved	Iron (mg/L) Total Recoverable	Zinc (mg/L) Dissolved		
	Lead (mg/L) Total Recoverable			

# Table G-2: Surface Water Monitoring Parameters



**Figure G-1 Surface Water Monitoring Locations** 

# **ECOSA Monitoring and Reporting Program**

As requested by DRMS, CC&V will implement a monthly monitoring program for specific monitoring locations within Grassy Valley for water quality downgradient of CC&V's ECOSA facility. This monitoring program will collect monthly samples from the following monitoring locations:

Site Number	Location	Monitoring Frequency
GVMW-25	Grassy Valley Downgradient of ECOSA	Monthly
GV-06	Lower Grassy Valley Downstream	Monthly
Seep-1	ECOSA Toe	Monthly
Seep-2	ECOSA Toe	Monthly

# Table G-3 ECOSA Monitoring and Reporting Program Monitoring Locations

Monitoring locations specified in Table G-3 are all to be analyzed for the same constituents. Within correspondence from DRMS dated September 30, 2022, the following is stated:

"These samples must be analyzed for the same constituents that GVMW-25 is currently analyzed for, enabling comparability of results."

Monitoring analytical results will be transmitted to DRMS on a monthly basis. These results will also include the following information:

- A map that clearly shows each sample location.
- Field sheets for each sample location
- QA/QC sample results
- QA/QC Field Sheets
- Comparison of GV-06 to CDPHE stream standards as specified within Colorado Regulation 31/32

### ECOSA Monitoring Plan Warranty Estimate

CC&V has determined that the changes within this technical revision do not warrant an increase in the reclamation financial warranty.

### Schedule

Monthly monitoring for the ECOSA Monitoring and Reporting Program has been initiated with samples being collected October 4, 2022. CC&V will continue the monthly sampling and reporting program specified above going forward.

The technical revision fee payment in the amount of \$1,029 was made electronically via the DRMS webpage on October 27, 2022. The payment confirmation number associated with this payment is 196719784. Should you require further information please do not hesitate to contact Ronald Parratt at 719-851-4019 or Ronald.Parratt@newmont.com or myself at Katie.Blake@Newmont.com or 719-851-4048.

Regards,

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Katie Blake Sustainability & External Relations Manager Cripple Creek and Victor Gold Mining Company

EC: A. Eschberger – DRMS P. Lennberg - DRMS M. Cunningham – DRMS M. Crepeau – Teller County L. Morgan – Teller County K. Blake – CC&V R. Parratt – CC&V J. Gonzalez – CC&V N. Townley – CC&V

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