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April 21, 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

Mr. Russell,

Newmont Corporation's Cripple Creek and Victor Gold Mining Company (CC&V) hereby provides this Technical Revision (TR) 127 pursuant to the commitments made in Amendment 13 adequacy review responses. During the Amendment 13 adequacy review, CC&V committed to provide clarification to the monitoring and reporting procedures for the high volume solution collection system (HVSCS), low volume solution collection system (LVSCS), and leak detection system (LDS) associated with the Valley Leach Facilities (VLFs) at the Cresson Project.

CC&V committed to providing (1) refined monitoring procedures for the operational and proposed HVSCS, LVSCS, and LDS; and (2) information related to and/or requested by adequacy review comments #8, #66, and #67. This TR presents the data and information required by the above-referenced adequacy review comment numbers, including information relative to the queries made during DRMS's first, second, and third adequacy reviews, and to provide clarification to current monitoring and reporting procedures.

Permit and reporting criteria for monitoring of these systems are presented in Section 18.1 of Exhibit U (Environmental Protection and Emergency Response Plan) of the current permit.

Monitoring data and the criteria for further action are described in Section 3.3 of Exhibit G (Water Information) in the current permit.

Underdrain and LDS Monitoring and Reporting. Liquids recovered from the underdrain and LDS must maintain CN_{WAD} concentrations below target thresholds described in Section 3.3 of Exhibit G. On a weekly basis, CC&V personnel inspect the systems to assess if is liquid present. If two feet or more of liquid is present in the LDS, or if flow is present in the underdrain system, then the designated CC&V representative will attempt to collect a sample, which will be analyzed for pH and shipped to an off-site laboratory for analysis of CN_{WAD}. Generally, due to pump operability, it is not possible to collect a sample if less than two feet of liquid is present. CC&V proposes the following revised permit criteria, reporting timeframe, and LDS notes, listed under Section 18.1 of Exhibit U.

Scenario	Permit Criteria	Reporting Timeframe	Additional considerations
Leak Detection System (LDS)	Sample analysis data collected with both a 30-day running average of CNWAD concentrations exceeding 1.0 mg/L, and a 30-day running average of pH from the same period exceeding a value of 9.0 standard units (su) will be reported to the Division within 5 business days of receipt of analysis.	Verbal – Within 24 hours of confirmation of the initial monitoring result exceedance. Written – 5 business days after verbal notification.	Refer to section 3.3 of Exhibit G

HVSCS Monitoring and Reporting. Generally, each pregnant solution storage area (PSSA) HVSCS is equipped with pressure transducers that display readings on a screen at the HVSCS facility. Pressure transducers are contained within vertical riser pipes and directly measure the pressure of the liquid column above the transducer. These fixtures are commonly referred to as “standpipe transducers” or “pond level wells”.

Pond level readings are displayed on a control panel in the ADR control room, which is staffed by CC&V personnel. CC&V personnel compare the pond level in the PSSA to the height of liquid that corresponds to 80% of the PSSA volume capacity. The 80% PSSA volume capacity values were provided to and approved by the Division in various Certification Reports for VLF construction, and are summarized in Table 1.

Table 1 – PSSAs & Height of Liquid Corresponding to 80% of the PSSA Volume (Reporting Limit)

	Phase 1	Phase 2	Phase 3	Phase 5	VLF2
Reporting limit	63.7 ft	49.4 ft	56.5 ft	35.5 ft	94.0 ft

Pumps in the HVSCS are operated by CC&V control room personnel. Pumps are switched on by CC&V personnel as necessary to manage pond levels.

As the Division has indicated, VLF1 Phase 5 does not include "pond level wells", which usually consist of pressure transducers in vertical riser pipes (as discussed above). The height of liquid in the VLF1 Phase 5 PSSA is measured using pressure transducers on the pumps. As the division noted, the VLF1 Phase 5 PSSA drains to a lower PSSA, should the liquid level exceed the crest of the "spillway" which allows drainage to the lower PSSA. This "spillway" crest is positioned at a lower height than the height of liquid corresponding to 80% of the VLF1 Phase 5 PSSA capacity. As such, liquid levels in VLF1 Phase 5 are unlikely to exceed the liquid level reporting limit of 80% PSSA capacity.

VLF2 Phase 3 HVSCS will be equipped with, at a minimum, one standpipe transducer (i.e., "pond level well") for monitoring purposes.

CC&V proposes the following revised permit criteria, reporting timeframe, and HVSCS notes, listed under Section 18.1 of Exhibit U. Upon DRMS approval, corresponding criteria listed in Exhibit G will be updated to match these criteria.

Scenario	Permit Criteria	Reporting Timeframe	Additional considerations
High Volume Solution Collection System (HVSCS)	"The average liquid level monitoring data in the PSSAs exceeds 80 percent of the total capacity of the PSSAs for 72 hours or more."	Verbal – Within 24 hours after a sustained exceedance for 72 hours. Written – 5 business days after verbal notification.	Refer to section 3.3 of Exhibit G

HVSCS Notes:

1. "Written reporting will include a summary of the exceedance event and the corrective actions and corrective action status."
2. "The maximum liquid level observed from any VLF1 Phase 5 pump will be used when comparing liquid levels to the monitoring threshold for the VLF1 Phase 5 area."

LVSCS Monitoring and Reporting. Each LVSCS is equipped with pressure transducers, transducer readout panels, and variable frequency drives (VFD). These components are used in conjunction with pumps to control liquid levels in the LVSCS. Each transducer and VFD have an automatic high-level switch that turns the pump on when liquid levels reach a certain height (high-level threshold) in the LVSCS. Each transducer and VFD have an automatic low-level switch that turns the pump off when liquid levels reach a certain height in the LVSCS. These pumps operate to maintain a maximum head of 24 inches. Please note that the 24 inch threshold applies universally to all LVSCS phases, unlike the HVSCS. CC&V personnel obtain liquid level readings on a minimum frequency of once per week using the transducers. Readings are compared to the high-level threshold for the LVSCS.

CC&V proposes the following revised permit criteria, reporting timeframe, and LVSCS notes listed under Section 18.1 of Exhibit U.

Scenario	Permit Criteria	Reporting Timeframe	Additional considerations
Low Volume Solution Collection System (LVSCS)	The transducers monitoring data in the LVSCS and LDCRS exceed 24" for 72 hours or more.	Verbal – Within 24 hours of exceedance sustained for 72 hours. Written – 5 business days after verbal notification.	Refer to section 3.3 of Exhibit G

LVSCS Notes:

1. "LDCRS = The Leak Detection, Collection, and Recovery System for the External Storage Pond."

The technical revision fee payment in the amount of $1,029 was made electronically via the DRMS e-permitting webpage on April 20, 2021. The payment confirmation number associated with this payment is 166918952. Should you require further information please

do not hesitate to contact Katie Blake at 719-689-4048 or Katie.Blake@Newmont.com or myself at Justin.Raglin@Newmont.com.

Regards,

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