

Permit M-1980-244

Cresson Project Amendment 14

Exhibit K

Climate



1 CLIMATE

The climate at the Cripple Creek and Victor Gold Mine is characterized by a semi-arid, high mountain environment with relatively short summers and longer, but moderate winters. Climatological data are available from four stations: a historic station referred to as the Victor station with a data record from February 1966 through February 1976, a station established by Cripple Creek and Victor Gold Mining Company (CC&V) in the vicinity of Bateman Creek with a data record since 1994, the Rigi station with a data record since 1999, and a seasonal rain gauge located in Grassy Valley that collects precipitation data during the warmer months. Gaps within the climatic data have been filled using climate records from the Western Regional Climate Center.

The average yearly precipitation, including snowfall, is roughly 19 inches (18.70 inches). The maximum mean monthly precipitation is 4.03 inches and occurs in the month of July. The minimum mean monthly precipitation is 0.49 inches and occurs during the month of November.

The average annual lake evaporation is estimated to be 44.3 inches. A maximum mean monthly lake evaporation of 6.54 inches is expected in June, and a minimum mean monthly lake evaporation of 2.08 inches is expected in December.

The average, maximum, and minimum temperatures were assessed at the Rigi station on a quarterly basis from January 1, 2019, through December 31, 2023. The temperature data for this period of record indicated:

- Average temperatures ranged from 56.84°F in the third quarter of 2019 to 21.22°F in the first quarter of 2023;
- Maximum temperatures ranged from 77.47°F in the third quarter of 2023 to 45.27°F in the first quarter of 2023; and
- Minimum temperatures ranged from 35.47°F in the third quarter of 2022 to -18.11°F in the first quarter of 2021.

A detailed look at temperature and precipitation data was performed as part of Mine Life Extension 2 (MLE2) - Amendment 10 permit, as part of the water balance design for the Valley Leach Facility 2 (VLF2) and Valley Leach Facility 1 (VLF1). These data may be found in the Mine Life Extension (MLE) - Amendment 9 permit and in the MLE2 - Amendment 10 permit. In addition, a water balance was updated for the VLF Expansion design as part of the Amendment 14 application, a copy of which is included in Appendix 1.

Wind direction is predominantly from the northwest. The second most dominant wind direction is from the southwest.

Cripple Creek & Victor Gold Mining Company Cresson Project Amendment 14



2 REFERENCES

- Cripple Creek & Victor Gold Mining Company, Cresson Project Mine Life Extension, Amendment 9 to the MLRB Permit No. M-1980-244, Volumes I – VII, 2008.
- Cripple Creek & Victor Gold Mining Company, Cresson Project Mine Life Extension 2, Amendment 10 to the MLRB Permit No. M-1980-244, Volumes I – VII, February 2012.