



February 28, 2024

Amber Gibson
Division of Reclamation, Mining and Safety
1313 Sherman St., Rm. 215
Denver, Colorado 80203

Re: New Elk Mine
Permit C-1981-012
2023 Annual Hydrology Report

Dear Mrs. Gibson:

The New Elk Mine annual Hydrologic Monitoring Requirements are summarized in Table 27 Hydrologic Monitoring Frequency Requirements and Table 28 Water Quality Laboratory Analysis attached to this letter report.

In general weather conditions at New Elk Mine were dry. There were only a couple snowstorms at the beginning of the year. There were substantial precipitation events during the spring and early summer. The end of the year did not have very many precipitation events.

There were no discharges throughout the year as detailed below. All required monitoring of refuse, surface, and groundwater wells and rain water was completed in 2023. NECC stopped actively mining in May of 2023.

NPDES Discharge Monitoring

All NPDES discharges were monitored and reported to CDPHE on Discharge Monitoring Report forms (DMRs). Copies of these reports have already been submitted to the Division (DRMS) and are not duplicated herein.

Discharge Monitoring Site 001 did not discharge during 2023. Water flow to/from is managed by a system of pumps with a gravity flow discharge through the primary if the water level exceeds the discharge elevation of the primary decant spillway. And there was some withdrawal in the pond by pumping the water to the mine water tank to be reused. Water stopped being pumped to and recycled from pond 001 when mining activity ceased. These volumes and evaporation

losses are tracked and reported to the Pueblo District of the Colorado Division of Water Resources. These losses were compensated to the stream by water New Elk has under lease from the Hill Ranch.

Discharge Monitoring of Site 004 (Pond 4) is no longer a requirement of the NPDES permit. Throughout the year water levels were minimal and no discharges occurred. Pond 4 was used as a storage pond for excess water from pond 6, pond 7, and pond 8 when these ponds were filling from rain water.

Discharge Monitoring of Site 007 (Pond 7) held water throughout most of 2023. The pond did not have any discharges throughout the year. The pond did fill rapidly in July and August from being near empty, but the pond never discharged.

Discharge Monitoring of Site 008 (Pond 8) held minimal water throughout 2023. There were no discharges throughout the year. The pond has held minimal water in it until July and August when there was a huge flow of surface water to the pond.

Discharge Monitoring of Site 010 (SAE south of Pond 7) with minimal rainfall throughout the year with no discharges. The outfall was monitored carefully throughout the year and maintenance on the SAE was done. The maintenance included minor fixes to a silt fence, cleaning of ditches, check dams, and sumps.

RDA Monitoring Wells

Three monitoring wells, **Th-201**, **TH-202**, and **TH-203**, are located on the three lower reclaimed benches of the mine's Refuse Disposal Area. These wells penetrate the compacted refuse down to the contact with the basal bedrock of the disposal area.

The intent is to monitor ground water at the refuse/bedrock contact and alert the operator to potential problems that could arise from accumulation of ground water. The monitoring plan calls for recording depths to water for these sites on a quarterly basis.

Readings were taken quarterly and this data is summarized in Table 1 RDA Monitoring Wells following this report. No significant changes were noted for any of the wells.

Surface and Groundwater Monitoring

Field data was taken in the second and fourth quarter for the Surface Water, Groundwater, and Mine Water monitoring wells. The field data is compiled in Table 2 Field Data – Surface Water, Table 3 Field Data – Groundwater Wells, and Table 4 Filed Data – Mine Water and notes for the field data are shown in **Appendix A Field Notes**. The past five years of data is compiled in the tables as well, with the exceptions NE-1-10, NE-6-10a, and NE-6-10b. Where there is not five years of historical data. Flow rate for PRS-1 and PRS -4 remain to be the most common change from 2023 to the past years. All other data remained close to the average. Depths remained consistent for Paw 1, Paw 2, Paw 8 and Paw 9. All other data remained consistent as well. Depth, Ph, Conductivity remained close to average for the mine water monitoring wells.

The analytical lab results for these samples are compiled in Table 5 Surface Water, Table 6 Groundwater Wells, and Table 7 Mine Water. All of the results can be found in **Appendix B Lab Analytics**. This data was compared to the historical information available in previous AHRs and the tables starting in 2017, four years prior to active mining (see 2008 for best tabulation): All observed data fell within the historical range of each parameter.

Analysis of Alluvial Groundwater Data

The groundwater wells did not show much change and remain consistent with previous year's data. All data form 2023 is close to the average as shown in the tables that follow.


Rain Water Monitoring

2023 was a relatively average year with minimal snowfall, followed by a wet spring and early summer seasons. The rest of the year was dry until snowfall began in November. Rain Water Monitoring data is compiled in Table 8 New Elk Rain Gauge Data.

Comments

Please advise me if any additional information is needed.

Regards

A handwritten signature in black ink, reading "John Terry". The signature is written in a cursive style with a long horizontal stroke extending from the end of the name.

John Terry