Michigan Eagle Mine **Exception Report**

Eagle Mine must file an "exception" report to the state of Michigan each year

- https://www.eaglemine.com/ files/ugd/145c36 9fc0 8b466c944ef8a22dd0a5c5ff9642.pdf
- Annual Mining and Reclamation Report, Eagle Mine, LLC. Nonferrous Metallic Mineral Mining Permit (MP 01 2007)

Eagle Mine Anomalies Reported

- The Report listed at least 17 monitoring events that show levels of pollution and water chemistry changes outside the planned benchmark range.
- For example, at monitor point QAL023B, the mean water level readings from October 2019 -September 2020 were a maximum of 1.7 feet (ft) below the calculated minimum baseline level.
- The report also notes that water levels have generally increased in the region since the baseline was set.
- Mine attributed this drop in water levels to two main sources; pumping of the mine services well and groundwater infiltration into the mine.
- This drop in water levels is then due to an average pumping requirement of 80,000 to 150,000 gallons a day from the mine and service wells.
- If 1.7' drop is seen at these pumping rates, what happens at the Talon site where Talon estimates 2,600,000 gallons pumped per day?

Additional Eagle Mine Anomalies Reported

- Many monitoring points showed sulfate levels 1500 times higher than the MN standard for sulfates in wild rice environments.
- Water levels at many of the wetland monitoring locations fell up to six inches below pre-mining **baseline levels** in face of the fact that regionally, the overall water levels have been increasing since the baseline was established.
- TDRSA (Temporary Development Rock Storage Area) is lined with both a primary and secondary lining.
 - A leak detection system is installed between the liners to monitor primary lining integrity
 - A total of approximately 55 gallons of water was purged from the leak detection sump in 2020, a larger volume than 2019.
 - o Thus we see that the lining system does leak after only a few years of operation
 - The leak levels are currently very small at this point but as noted in the document, increasing slightly over time.

About the Michigan Eagle Mine

Eagle mine extracted 758,398 tonnes of ore in 2020 - Talon, plans to extract about 1,300,000 tonnes per year, approximately 70% more than Eagle Mine.

Only 0.6% of the world's supply of Nickel comes from the US US only possesses 0.375% of the worldwide reserves of Nickel Should we not save our meager reserves for the future? (all US Nickel reserves are in upper Michigan and Minnesota)

From the USGS https://pubs.usgs.gov/periodicals/mcs2022/mcs2022-nickel.pdf

Learn more at www.tamarackwateralliance.org



