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Michigan Department of Environmental Quality  
Mr. Rick Ruzs, Chief  
Groundwater Permits Unit  
Water Resources Division  
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**RE: COMMENTS ON DRAFT PERMIT GW1810162, EAGLE MINE**

Dear Mr. Ruzs:

Thank you for accepting these comments on the proposed renewal of the Eagle Mine Groundwater Discharge Permit (the permit).

**Exceedances and MDEQ's Failure to Act and Backwards Regulation**

During the current permit period, the mine has exceeded its limits at least 47 times, in at least the following constituents and characteristics:

- pH;
- arsenic;
- copper;
- lead;
- molybdenum;
- silver; and
- vanadium.

MDEQ has taken no enforcement action. In fact, the mine has exceeded its vanadium limit more than 20 times. Instead of enforcing the limit, in this renewal permit, MDEQ is easing the limit. This is completely backwards. The MDEQ’s role is regulator, not conciliator. The limits were set, supposedly based upon sound science, as MDEQ strenuously argued during the months-long contested case that encompassed the current groundwater discharge permit. Now, rather than protecting water quality, the draft simply increases the limits to industry’s preferred levels. The facility’s performance should be required to meet the regulatory standards rather than the regulatory standards being adjusted to meet the facility’s performance.

**Permit Limits Allow Egregious Degradation from Baseline Water Quality**

Further MDEQ staff repeatedly assert that limits set in this renewal permit are based upon “background levels” at the site. That could not be farther from the truth. Below is a table comparing today’s proposed permit levels with baseline levels reported in Rio Tinto’s 2004 Environmental Baseline Study Stage 1 Hydrology Report, Table 9, “Quaternary Deposit Groundwater Quality Data, Eagle Project.” For appropriate comparison, both sets of data reference wells in the A or D zones of the quaternary aquifer:

<b>PARAMETER</b>	<b>UNITS</b>	<b>DRAFT PERMIT LIMIT</b>	<b>2004 RIO TINTO BASELINE DATA</b>
Lithium	ug/L	88	<10
Antimony	ug/L	5	<5.0
Arsenic	ug/L	6	<2.0 (except values of 4.8 and 8.4)
Barium	ug/L	1000	<20 (except values of 47, 39 and 27)
Beryllium	ug/L	3	<1.0
Boron	ug/L	285	<100
Cadmium	ug/L	3	<0.5
Chromium	ug/L	52	<5.0
Cobalt	ug/L	23	<10
Copper	ug/L	10	<5.0

Lead	ug/L	3	<1.0
Manganese	ug/L	50	<20 (except values of 64, 52, 140 and 180)
Molybdenum	ug/L	22	<10 (except values of 15 and 40)
Nickel	ug/L	57	<25
Selenium	ug/L	5	<1.0
Silver	ug/L	0.4	<0.2
Zinc	ug/L	17	<10 (except one value of 17)
Chloride	mg/L	250	Values <1.0 up to 3.7
Sulfate	mg/L	250	Values <5.0 up to 33
Sodium	mg/L	120	Values <0.5 up to 29

**Scope of Monitoring and Regulation is Insufficient**

In addition to the false justifications for the draft permit’s limits reflecting baseline values, as was the case with the original permit, the scope of monitoring and compliance is far too small to assess impacts to the aquifer that inevitably extend beyond the postage stamp this permit purports to regulate. The monitoring and compliance wells just graze if they extend at all beyond the mine’s fence line. With significant underground disturbance from mining itself, dewatering of the mine, a supply well and the 504,000 gpd influx allowed by this permit, these influences on groundwater flow and quality are ignored by this permit. Please note that Attachment VI, “Groundwater Contour Map” is from the mine’s 2007 permit and does not even attempt to represent the current groundwater contour scenario.

**MDEQ Continues Ignoring its Statutory Duty to Regulate Surface Water Discharge**

MDEQ continues to refuse to regulate, as required by the Clean Water Act, the surface water discharge at the seeps, where the water regulated by this permit indisputably expresses to surface water. The draft permit, in Part III, No. 1 on p. 22 states:

**Discharge to the Surface Waters**

This permit does not authorize any discharge to the surface waters. The permittee is responsible for obtaining any permits required by federal or state laws or local ordinances.

Unfortunately, this permit does regulate surface water discharge to the seeps. It does so illegally and inadequately, but it is the only regulation MDEQ has ever imposed on the discharge to the seeps. Michigan has been delegated by the United States the authority to regulate surface water

discharges via the Clean Water Act's National Pollutant Discharge Elimination System. Its failure to do so is egregious. This is particularly evident given MDEQ's refusal to apply any numeric limitations on: mercury, uranium, calcium, iron and magnesium. Mercury is of great concern in the Great Lakes basin due to the rampant impairment of nearly every surface water body in the region. Yet, at the Eagle Mine, no limit is imposed even though this water ends up in the Salmon Trout River and Lake Superior.

**Limits on Uranium and Other Constituents Must At Least Match Federal Limits**

In 2013, uranium was found in the wastewater stream at the Eagle Mine. The permittee makes unsubstantiated assertions that the origin of the uranium is some unknown off-site location from which it obtained building materials. MDEQ has the responsibility to regulate uranium, and every other federally-regulated constituent, to federal levels. It is failing to do so with the proposed limits and the numerous "report only" constituents, including uranium.

Last, I am aware that many citizens have requested a public hearing on this matter; I join in their requests. Should you wish to discuss any of these topics, you may reach me at 906-361-0520.

Yours truly,



F. Michelle Halley

c: Dr. Susan Hedman, EPA Region 5 Administrator  
Janette Bailey  
Steve Casey  
Ginny Pennala