

# How long will PolyMet need to treat water?

*The Supplemental Draft Environmental Impact Statement (SDEIS) does not reveal what PolyMet, the Minnesota DNR, and the federal agencies know about the length of time over which contaminated water from the NorthMet mine will need to be treated in order to meet water quality standards.*

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**T**he SDEIS says only that the water will be treated as long as necessary and that treatment is expected to be “long-term.”

**B**ecause PolyMet stopped its models at 200 years for the mine site and at 500 years for the tailings basin, past reports have used those time frames to describe the predicted length of treatment. But the modeling indicates that water quality at year 500 will not come close to meeting water quality standards. While it is true that the company and the DNR do not know how long treatment will need to continue, the information that they have indicates that it will need to continue far longer than 500 years.

**T**he graph from PolyMet’s “Water Modeling Data Package Vol. 1” (back page, bottom) shows the predicted level of copper in the West Pit “lake” after the mine closes. This is water that will spill out of the lake and form a surface tributary to the Partridge River if it is not collected and treated. The water quality standard for copper in the Partridge River is likely to be 9.2 µg/L. This graph indicates that the discharge may *never* meet the standard for copper.

**T**his example is representative of predictions for a number of pollutants at both the mine site and the tailings basin. These predictions were not

included in the SDEIS itself, nor does the SDEIS include any information about the quality of the water that would be released to the Partridge and Embarrass Rivers, and ultimately to the St. Louis River and Lake Superior, if treatment does not continue indefinitely.

**If treatment ends prematurely, the Partridge, Embarrass, and St. Louis Rivers are likely to become heavily polluted by copper, lead, sulfate, and other pollutants.**

**T**o state the obvious, we cannot assume that our current governmental and financial systems will remain in place (or will be peacefully replaced without interruption) for over 500 years. The entire course of human history counsels against it. Minnesota law requires a mining company to provide financial assurance to cover its post closure maintenance requirements. *No financial instrument can be assured of continuing value and viability over this kind of time frame.*

**T**he DNR and other PolyMet supporters talk as though creating pollution that will require treatment for many centuries, with no known end date, should be allowed as a matter of course. To

the contrary, the practice of knowingly creating long-term toxic waste that will have to be dealt with indefinitely by future generations is a moral issue that *must* be fully considered and vetted in the EIS process. New Mexico and Michigan have outlawed the practice. A similar issue all but halted the nuclear power industry. As the State of Washington Pollution Control Hearings Board put it when addressing a mining proposal for bonding to insure perpetual treatment,

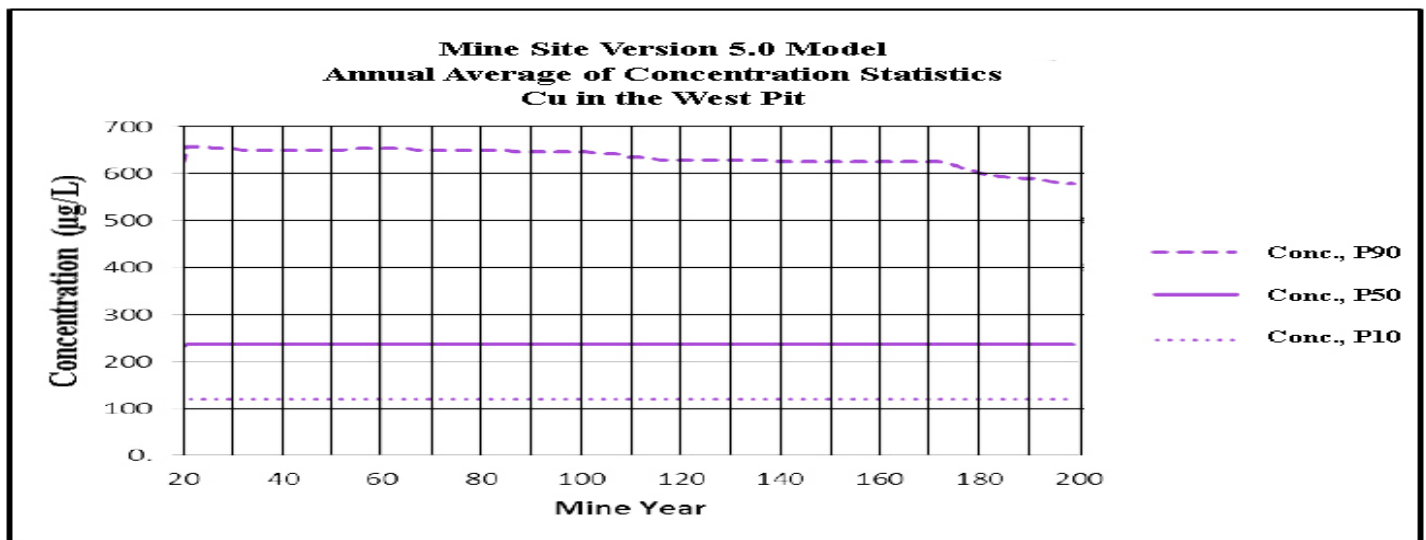
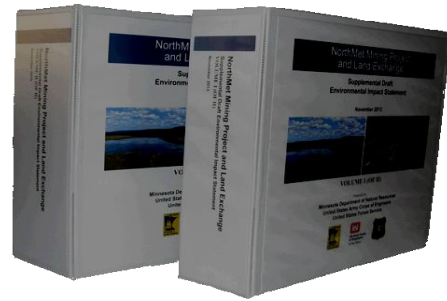
**“The only real assurance we have is the proposed bonding that the state may rely on to enforce environment laws in the future. This approach is tantamount to entering a busy interstate highway on an exit ramp against the traffic. The availability of insurance in that circumstance is no more comforting than the proposed bonding here.”**

Okanagon Highlands Alliance v. Department of Ecology, PCHB NO. 97-146 (Washington, 2000).

**F**inally, PolyMet’s stated intention to eventually switch to a “passive” treatment system cannot fix the problem, because even passive treatment systems need maintenance and monitoring. If the

future is not certain enough to guarantee that mechanical treatment will continue for more than 500 years, it is not certain enough to guarantee that “passive” treatment would continue for the same time frame. Furthermore, we have no indication that passive treatment will be possible for all of the contaminated water sources at the site; at the very least, on-going pumping and piping of water to treatment sites would likely continue.

**R**eference in the SDEIS to the possibility of “passive” treatment is nothing more than a statement of hope that at some point over the coming centuries, a way will be found to treat the contamination in a less mechanical (and thus less expensive) way.



**Estimated Long-term Copper Concentrations in the West Pit**