

Maureen Johnson

Keetac tailings basin and mining area draft permits comments

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As a former MPCA Superfund project manager, I am encouraged by the inclusion of sulfate with a limit, but I continue to be disappointed in the MPCA's overall mining permit quality. When this mining area is done, the mine, sold several times over, will bankrupt and the soils and water cleanup and stabilization will be left to be financed by the people of Minnesota under the state superfund, while the companies walk away with decades of profitability based on local people's lives and jobs. Mines are not innocuous. They continue to discharge solutes from leftover chemicals or from exposed rock that previously was sealed away. Tailings basins are not stable --they need maintenance. Tailings basins do not drain water alone. They drain everything that was put in, all the chemicals from extraction, scrubber waste water, and solutes from the surface area of every "sand" grain of mined mineral or other rock that was not high enough quality to go out for steel making, including mercury, sulfate, nitrates from explosives, the separation and treatment chemicals. Many other unnamed chemicals can be found if the analyses include them. If they don't analyze a discharge for an input chemical, for sure it won't be found in the discharge!

Keetac has very few limits, most are "monitor only" which does not encourage a company to improve its discharges. Sulfate is one of the few I am scientifically pleased to see begin – but it should begin with the permit term beginning, not after 3 more years on top of the past decades.

Except for the few parameters with actual limits, these permits basically means that Keetac can do whatever it wants with many chemicals and mining effects on water at any time with no consequences. If I am wrong, I surely did not see it in the permits.

Ground water flow and quality is ignored, against all reason for having ground water rules in the first place. The permits need sampling and physical measurements to assure ground water is not contaminated for downflow users.

Salts and ionic conditions expressed by specific conductance can be fatal to local fauna, just as sulfate can be fatal to wild rice. Keetac should be required to meet the MPCA's already determined local natural water concentrations and conditions after the allowed amount of dilution time/volume for each discharge to state waters, from the mining/plant area and from the tailings basin. Permit needs to mention the state waters and their current conditions affected by the discharges.

This permit's WET requirements ignore fact that mining companies change recipes for extraction and technologies over time. Mining companies often change their operations formulae to fit the ore components, for efficiency, for more profitability, to test new chemical options, various reasons. Although in some mining files, I have seen reporting of the changes, I have not seen MPCA analysis or followup questions as to effects on discharge concentrations -- just a standard form approval of the change.

What WET results are negative in the past may be positive for toxicity in a few weeks if the discharge changes significantly. Testing should always be quarterly, not yearly, to accommodate seasonal changes in tolerance to discharges.

"This permit does not include a chronic WET limit...shall begin chronic toxicity testing quarterly during year three of the permit. " Why no limit? Our rules are provided to protect the quality of our waters. Permits must have ability to enforce protection. That is MPCA's job too, as unpleasant as it is.

I agree with Water Legacy's comments.

MPCA's draft Keetac permits would not require compliance with Minnesota's sulfate standards until April 30, 2030. From 2011 through 2016, MPCA already went through a planning, study, and testing process for Keetac sulfate reduction water quality treatment. There is no need to start over. The U.S. EPA, in September 2024, told MPCA that more delay for compliance with the wild rice sulfate standard would not be appropriate. The new owner of U.S. Steel, Nippon Steel, has promised \$11 billion in capital upgrades in order to increase U.S. Steel profits to \$1.7 billion per year. Keetac sulfate treatment should be included in those upgrades.

MPCA's draft Keetac permits do not include protection of groundwater which is required under state law. The permits have no groundwater monitoring locations and don't disclose how much polluted wastewater is seeping into groundwater, particularly from the tailings basin.

MPCA's draft Keetac permits don't adequately protect aquatic life. MPCA permits let Keetac wait three years before even starting to test if its discharge is toxic to aquatic life. No justification is given for this delay. The permits only require biological assessments "once every five years" with no date to start the testing. Since there is no testing, there are also no limits on pollution (salts and ions) that kill sensitive aquatic life.

MPCA's draft Keetac permits add mercury monitoring at discharge points, but don't require monitoring for mercury in surface water. Downstream waters are impaired for mercury in fish. Sulfate pollution increases mercury released from sediments to water and mercury bioaccumulation in the food chain.