In Minnesota, 'prove it first' legislation is crucial for the protection of our waters

By C.A. Arneson | Wednesday, Aug. 11, 2010

We have all been watching reports of the Gulf oil contamination, hearing about the lack of regulation, mourning the loss of life, environmental destruction, and economic cost to the region because industry was not required to prove that it had the ability not only to clean up spills, but also to prevent them.

Oil contamination has one tragic advantage over sulfide metals mining [sulfide mining] contamination. You can see it. Waters in Minnesota could look just fine and still be devastatingly damaged by heavy metals from sulfide mining.

In northern Minnesota, contamination seeps through the fractured bedrock to our surface and groundwater, to our drinking water. The movement of heavy metals, sulfates, and acid would be insidious and unpredictable. Experts have said the best we may be able to do is damage control.

Go here and take a moment to look at the water-rich labyrinth of our area. Is it even conceivable that sulfide mining would not contaminate waters in such an environment?

Our regulatory agencies, as in Louisiana, have allowed industry to misinform the public, avoid compliance, and dodge accountability. Regulations we do have are often ignored, amended with variances, or disregarded. When our agencies signed off on the critically flawed PolyMet/NorthMet Draft Environmental Impact Statement (DEIS) it raised the specter of incompetency or intimidation, or both. Minnesota's waters need legislative protection.

It is not business as usual for our waters

In Louisiana or Minnesota, ultimately the economic and environmental cost of a disaster is borne by the people, not by industry that continues to sell its product with clean up costs hidden in taxes and prices.

Oilbarrel.com stated on July 14: "There are only so many stories you can write about disasters, the causes thereof and the likely costs of cleaning up before the public interest begins to wane, however calamitous events have been." This observation encouraged investors that oil and gas exploration
was alive and well; bad press would pass and the industry could get right back to it.

The sulfide mining companies, like oil companies, are counting on people losing interest instead of gaining outrage at the irresponsible and uncaring use of one resource to the irreparable damage of the most important resource of all: our waters.

I have heard people in Minnesota say, "We are going to have a PolyMet/NorthMet Supplemental Draft Environmental Impact Statement (SEIS); now we can ask PolyMet and our agencies to make sure our waters will be safe."

Maybe Oilbarrel is right, because it seems folks have already forgotten that it was the sulfide mining industry, our agencies, and many politicians who told us that the DEIS would "prove" that NorthMet and sulfide mining would be safe. It did nothing of the kind. It proved the exact opposite.

Even after the U.S. Environmental Protection Agency (EPA) gave the NorthMet DEIS the lowest rating possible "Environmentally Unsatisfactory — Inadequate, or EU-3" in February of this year, citing water contamination issues, the company and agencies continued the misleading rhetoric. Including in testimony before Minnesota Senate legislators.

**PolyMet testimony questionable at best**

On March 8, at the Senate Environment and Natural Resources Committee hearing, LaTisha Gietzen, PolyMet vice-president of public, environmental and government affairs, testified: "90 percent of the waste rock that we will be generating will not generate acid… and the tailings will not generate acid."

Yet all of the waste rock, according to the DEIS, would be reactive: "In addition further waste rock characterization shows there would be no 'non-reactive' waste rock" *(DEIS 3.2-4)* ... "through the DEIS process, it was determined that all waste rock would be reactive." *(DEIS 3.2.4.1)*

The EPA, when giving its EU-3 rating, stated: "According to the DEIS, all waste rock at the site is acid generating, and acid water moving through the waste rock and tailings will mobilize metals and sulfates, leaching them into groundwater and surface waters."

In complex chemical actions, the higher the sulfide content of the mineral, the more likely contact with water will produce certain toxic metals and acid — and the acid enables even more metals release. The minerals with lower and little sulfide content may not produce much acid, but metals in
the mineral will still be released in toxic form and amount.

Joe Scipioni, president and CEO of PolyMet, testified in front of the Senate committee that tailings are "washed sand." Scientifically, sand strictly refers to particle size; it has nothing to do with toxicity. He claimed that no heavy metals or sulfuric acid would be contained in PolyMet's tailings. Yet DEIS 4.1-87 states: "These underlying tailings [LTVSMC's previous taconite tailings] may attenuate metals or acidity leached from the NorthMet tailings and/or may contribute additional solutes to seepage (Italics added)."

It would have been legitimate to testify concerning the grain size fraction and engineering stability of the waste, to testify concerning the minerals with no material value left in the waste. What is the chemical makeup of the tailings? What dusting characteristics will the tailings have? What is the potential for leaching of any type: non-acid, acid, galvanic, anoxic, extraction, toxic synergy? These are all issues that needed to be addressed. Mr. Scipioni was counting on how "washed sand" would resonate.

**Agency testimony**

Jennifer Engstrom, Minnesota Department of Natural Resources, Land and Minerals (DNR), repeatedly testified that Minnesota does not have a non-ferrous mine. It is true Minnesota does not have a permitted non-ferrous mine, but we have a taconite mine that acts like one.

Just a few miles from the proposed NorthMet site the inactive Dunka mine was an open pit taconite mine in the copper-nickel minerals area; with non-ferrous effects during operation, closure, and post-closure. The DNR and Minnesota Pollution Control Agency (MPCA) studied Dunka for decades in a non-ferrous context. The DNR repeatedly "investigated the impact of the Dunka Mine gabbro stockpiles." "Elevated concentrations of trace metals were first observed in stockpile drainage in 1974. Extensive studies began in 1976 as part of the Regional Copper-Nickel study and monitoring has continued through the present." *(MPCA Dunka files)*

The Minnesota Environmental Quality Board's Regional Copper-Nickel study was briefly referenced in Engstrom's testimony. Marty Vadis (MDNR director) referred to the MEQB Copper-Nickel study in his testimony. Yet neither of them mentioned the Dunka mine, which was such an integral part of the study. Kim Lapakko (MDNR principal engineer) mentioned Dunka once, saying they studied 23 rocks from the mine because they were available.

Omission can be as potent as a lie.
Point of fact
In 1989, a MPCA draft memorandum was written with a "strong recommendation" that Dunka be placed on the EPA's 304 (L) lists (toxic discharges). Today Dunka still cannot meet permit standards. Acid production is only part of the problem — none of the non-acid seeps at Dunka meet all water-quality standards for nickel, hardness, sulfate, and possibly cobalt. An MPCA inspection document dated 1/5/09 listed numerous permit violations. The June 16, 2000, Reissuance of Permit, stated: "Further reduction in flows and metal loads are not practically achievable."

Why would information about unsolved contamination at Dunka, inherent with sulfide mining in a water-rich environment, be left out of testimony by the DNR, the agency in charge of the proposed NorthMet Project?

At NorthMet the stockpiles and waste rock would be handled in much the same way they had been at Dunka, except that NorthMet's would be millions of tons more. Like Dunka, according to the NorthMet DEIS, NorthMet's drainage would not meet water-quality compliance levels for heavy metals either. With the massive amount of rock involved and all of it reactive that is a sobering fact.

Even more sobering is that Duluth Metals/Antofagasta, Franconia, Teck Cominco, and other sulfide mining companies are eagerly waiting for NorthMet to be permitted, knowing that once the door is open and standards set, it would be virtually impossible to close. If recent events are an indicator, Antofagasta evidently thinks it can buy Minnesota's waters. Is that the message Minnesota is sending?

The protection of our waters degraded
Twenty days after the Senate Environment and Natural Resources Committee hearing, the multi-million-dollar citizen lawsuit brought by The Center for Biological Diversity, Save Lake Superior Association, and the Indigenous Environmental Network to clean up contamination at LTV (PolyMet's proposed site) and at Dunka was derailed by an MPCA consent decree with Cliffs Erie for $58,000. The possible maximum penalty for just one of the hundreds of violations listed in the "intent to sue" — had Cliffs been subjected to fines — is $37,500.

During the Senate hearing, Sen. Steve Dille asked Joe Scipioni how he liked the permitting and regulatory system in Minnesota and if he had "any suggestions for making it easier?" Scipioni replied, "I'd like you to work on permitting streamline[ing] more than this," assuming "this" meant the hearing. The flippant attitude from the senator and the PolyMet CEO was disturbing then, and
tragically telling 43 days later when a similar pattern of blasé attitudes and lack of scrutiny culminated in Louisiana's disaster.

**Minnesota does not need to wait for its own headline**

A recent Associated Press article was titled "100 days of oil: Gulf life will never be the same." Minnesota is staring at the possibility of multiple sulfide mines, mines that would impact watersheds of both the Boundary Waters Canoe Area Wilderness and Lake Superior, creating a sulfide-mining district instead of a lake district. Why wait until sulfide mining permanently changes our waters, our economic and recreational way of life in Minnesota? It is easy to act shocked after a disaster happens; it takes courage to act to prevent it.

If we are truly going to protect our waters from proven-to-pollute sulfide mining, we must ensure those waters are given unequivocal protection by enacting "prove it first" legislation in 2011. Prove it first, before a permit is considered for a sulfide mine in Minnesota, that such a mine can be operated and closed for 10 years without water contamination. Wisconsin has such legislation. Are our waters worth less? Ask your legislator.

*C.A. Arneson lives on a lake in the Ely area.*

[www.sosbluewaters.org](http://www.sosbluewaters.org)