

Acid Mine Drainage Coming Soon to a Stream, River or Lake Near You...

Fishing and outdoor recreation enthusiasts flocking to the northland



will be greeted, Monday, by a billboard on I-35 with a message many are unfamiliar with.

May 21st, 2012

The Arrowhead Region is facing unprecedented threats from proposed multinational sulfide mining projects, a toxic type of mining never before allowed in our state. The Duluth Complex of highly disseminated mineralization extends from south of Duluth, under Superior National Forest, along the North Shore, and into the Boundary Waters Canoe Area Wilderness (BWCAW).

Due to the low grade character of the rock formation, mining would produce less than 1% copper, nickel and trace metals, and 99% waste rock.

What is sulfide mining? Sulfide ores contain heavy metals such as copper or nickel that are bonded to sulfur, forming sulfide minerals. When sulfide ores are exposed to air and moisture, a chemical reaction generates sulfuric acid that can leach into the surrounding environment and cause the release of the metals into streams and lakes at levels that are toxic to fish and other aquatic life. This phenomenon is known as Acid Mine Drainage (AMD).

In a surface mine like the one proposed by PolyMet, mining leaves huge piles of waste rock and a huge pit exposed to the elements. Like the ore that has been removed, the waste rock and the pit walls contain sulfide minerals. The potential for Acid Mine Drainage and for contamination of surface and ground water by heavy metals remains for centuries, and even millennia, into the future.

Since the amount of sulfur containing waste rock would be so enormous, the impact to the environment would be significant and long-term. Although mining companies claim they can “mitigate” such problems, there is currently no sulfide mine in existence that is not polluting the ground water. In addition, treated surface water will never be of the same quality as it was in its natural state.

AMD and toxic heavy metal release adversely affect fish and other aquatic life, wildlife depending on them and the quality of watersheds and drinking water. Sulfates will also leach into the environment and become part of a bio-chemical process that converts mercury into methylmercury, which bio-accumulates in the food chain, resulting in fish consumption advisories. Sulfates are harmful to the growth of wild rice. Thus, pollutants from sulfide mining operations affect food sources and ultimately, human health.

Along with pollution of watersheds, mining of the Duluth Complex would result in the destruction of its forests, wetlands, and wildlife habitat. Mineral exploration and mineral leasing currently taking place is already negatively impacting wildlife, tourism, recreation, and home, business, and cabin property values in areas being explored.

Minnesota needs long-term economic solutions, not short-term get-rich-quick fixes. As such, the state needs to enact a Wisconsin type "Prove-It-First" moratorium. The history of pollution from sulfide mining and the industry's systematic failure to accurately predict water quality impacts reveal the wisdom of Wisconsin's 1997 "mining moratorium" law. This statute prohibits the granting of a mining permit unless the permittee can show:

- 1) that an existing mine has operated in a sulfide ore body for 10 years without polluting the ground or surface water; and***
- 2) that a mine that operated in a sulfide ore body and has been closed for 10 years has not polluted the ground or surface water.***

To date, no mine has been permitted under this law.

A moratorium would also allow the citizens of Minnesota time to evaluate what kind of environment we want to leave behind for future generations. How much do we value the heritage of the Arrowhead that was left to us? How much do we value clean water

and air? How much do we value a healthy environment?

Northern Minnesota is one of the world's most water-rich environments. Studies indicate that sulfide mining ***always*** impacts nearby waters in such an environment. The headwaters of two internationally important water resources (Lake Superior and the Boundary Waters Canoe Area) is the worst possible place to locate sulfide mines.

Most local residents, property owners, established businesses, visitors, recreational users, and the tens of thousands of Northeastern Minnesota employees working in tourism-related jobs oppose the positions taken by some elected officials and the Department of Natural Resources (Land and Minerals Division), who wish to turn the Arrowhead into a sulfide mining district.

Proposed Federal Legislation by 8th District Congressman Chip Cravaack ([H.R. 5544](#)) would remove public input for critical land exchanges concerning the Superior National Forest. State legislators are attempting to ease the already "mining friendly" state laws to expedite mine permitting. These proposed changes are nothing but special favors to the mining industry and would set a dangerous precedent for managing "PUBLIC LAND". In addition to the known environmental dangers, sulfide mining and exploration destabilize entire communities and local economies.

* MN State Representative Alice Hausman has introduced "Prove-It-First" legislation [H.F.2800](#)

Save Our Sky Blue Waters is a non-profit organization dedicated to protecting the environment and is part of a coalition of grassroots northeast Minnesota citizens and groups in support of a Wisconsin-type "Prove-It-First" moratorium on sulfide mining. Visit www.sosbluewater.org for more information.

Contact:

Elanne Palcich elanne@sosbluewater.org 218-969-9557

Lori Andresen lori@sosbluewater.org 218-340-2451