

PROTECTING AMERICA'S WATERS FROM IRRESPONSIBLE MINING: Close the Clean Water Act's Mining Waste Loopholes



POLYMET MINE, MINNESOTA

A foreign corporation, PolyMet Mining, Inc., is proposing to develop the first sulfide mine in Minnesota. The PolyMet mine would be an open pit copper and nickel mine north of Hoyt Lakes in an area that is now part of the Superior National Forest. It is likely to be the first of many sulfide mining proposals in northern Minnesota. Other companies are exploring mineral deposits in a region stretching north of Lake Mille Lacs to the edge of the Boundary Waters Canoe Area Wilderness near Ely.

MINING LOOPHOLES IN THE CLEAN WATER ACT

One of the most important goals of the federal Clean Water Act (CWA) is to prohibit the use of our nation's waters as dump sites for pollution. Unfortunately, public officials have undercut that goal by adopting **two regulatory loopholes that allow sulfide and other hard rock mines to treat the nearest lake or wetland as a waste dump** for massive quantities of toxic, acid-producing tailings.

The mining industry is the single largest source of toxic waste and one of the most environmentally destructive industries in the country. Today's massive mining operations involve blasting, excavating, and crushing many thousands of acres of land and treating the ore with huge quantities of toxic chemicals such as cyanide and sulfuric acid.

The mines that produce our gold, silver, copper, and uranium are notorious for polluting adjacent streams, lakes, and groundwater with toxic by-products. In fact, the Environmental Protection Agency (EPA) estimates that **40% of the watersheds in the western United States are contaminated by pollution from hard rock mines**. Toxic spills and acid mine drainage kill wildlife, poison community drinking water, and pose serious health risks.



*River otters are at risk from the proposed PolyMet mine.
Photo: Flickr / Dmitry Azovtsev.*

IMPACTS TO COMMUNITIES AND WILDLIFE



Near the proposed PolyMet mine in northeastern Minnesota. Photo: Lori Andresen

Unlike the iron mines typically found in Minnesota, sulfide mines release sulfuric acid when water comes into contact with tailings and other mine wastes. In places where this type of mining is common, acid mine drainage has a long and tragic history of contaminating rivers, lakes, and groundwater. The way in which the PolyMet mine is regulated will set a precedent that could govern sulfide mines in Minnesota for years to come.

Although PolyMet Mining has been forced by EPA to supplement its environmental analysis, current plans call for the following:

- Three open pits of approximately 800 acres producing an estimated **394 million tons of waste rock and ore**, all of which would be acid generating.
- Transport of the ore to a mill located at the former LTV Steel Mining Company taconite processing plant. After chemical processing, the millions of tons of mine tailings that remain would be **discharged in the form of a toxic, semi-solid slurry** into the existing LTV tailings reservoir. The reservoir is unlined and contains wetlands and extensive ponds created when several streams were impounded.
- **Destruction of approximately 1,000 acres of wetlands** with indirect impacts upon an additional 500 acres of wetlands.

MINE TAILINGS AND CLEAN WATER DON'T MIX

The PolyMet mine provides a graphic example of why mine waste should not be discharged into water bodies. The existing taconite tailings, which were dumped onto the wetlands and streams within the tailings impoundment, are already leaking through numerous surface seeps and possibly groundwater flow. These point sources have contributed to **elevated levels of pollutants in the Lake Superior watershed.**

There is no single solution to the problems posed by sulfide mining, but one obvious step is to stop mines from dumping their toxic wastes into lakes, rivers, and wetlands. Aquatic ecosystems are among our most valuable community and wildlife resources. They are also natural conduits that can transport pollution for miles if a mining waste impoundment is improperly built, fails, or deteriorates with age.



*Designated tailings disposal sites for PolyMet mine.
Photo: Lori Andresen*

WE CAN CLOSE THE MINING LOOPHOLES



Minnesota's Arrowhead Region. Photo: Lori Andresen

Discharging wastes into waters may be cheaper for mining companies, but it is not a necessary way of doing business. In 1975, EPA began adopting “effluent limitations” that require mines to treat their wastes and meet strict water quality standards, in some cases prohibiting discharges into waters altogether. As part of this process, EPA studied the industry and determined that the effluent limitations were not only feasible but already being met by most mines. These limits, if applied consistently today, would prevent sulfide mines from “storing” their wastes in our waters. Unfortunately, the two CWA loopholes have made the effluent limitations largely ineffectual.

The good news for people who care about pure water, community health, and abundant wildlife is that **EPA and the Army Corps of Engineers can close the mining loopholes with two simple changes to the Clean Water Act regulations.** Closing the loopholes would not prohibit sulfide mining but it would greatly reduce the negative environmental impacts from large mines.

As a nation, we decided that industries should not be able to profit from polluting the waters that sustain America's communities, fish, and wildlife. Help us close the two loopholes in the Clean Water Act that encourage irresponsible mining practices and irresponsible mines such as the PolyMet mine in Minnesota.

TAKE ACTION: Go to www.nwf.org/miningloopholes

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