

Sulfide Mining Issues Briefing



FACTS: Copper-nickel (Sulfide) Mining Poses a New and Unique Threat to Minnesota Waters.

Copper-nickel mining in Minnesota has never been done before. This new sulfide mining would destroy wildlife habitat and cause sulfate and toxic metals pollution (mercury, arsenic, lead,) harmful to fish, wildlife and humans for centuries, if not forever.



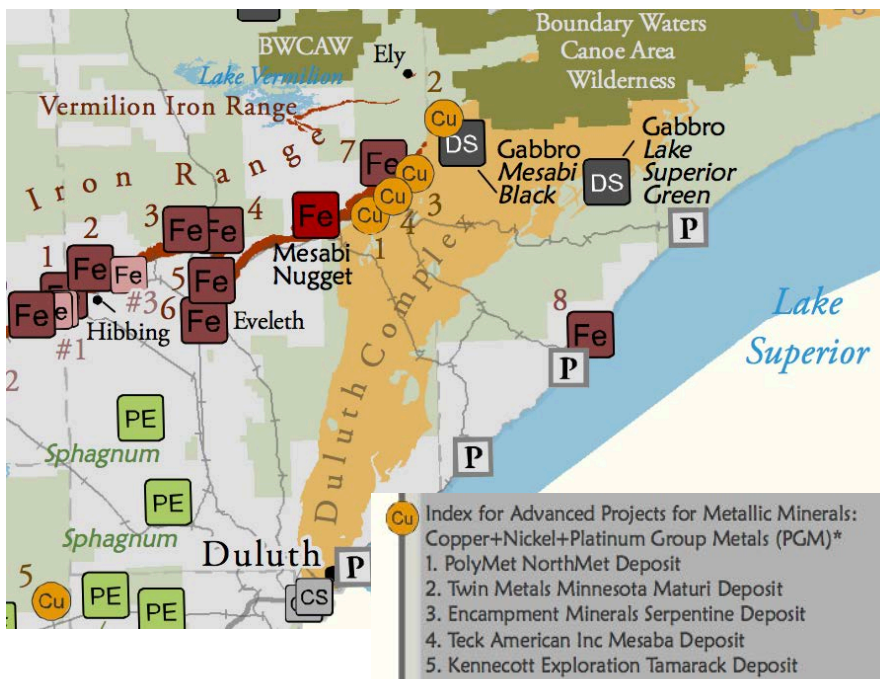
Every sulfide mine (100%) in a water-rich environment - like that in Minnesota - has polluted surface water and/or groundwater with acid mine drainage, toxic metals or both.

Sulfide mining is the largest source of Superfund Taxpayer Liability across the United States, with predicted costs of more than \$54 billion to clean up the *existing* mines.

As a result of hydrologic changes to wetlands, along with sulfur and mercury air emissions and discharge, sulfide mining in Minnesota would increase mercury contamination of fish.



Fetuses, infants and children are 4-5 times more sensitive to toxic mercury than are adults.



Sulfide mining threatens tourism and Minnesota's economy. Tourism in northeastern Minnesota supports 17,000 jobs and generates \$930 million in sales each year.

Mining regions are dominated by booms and busts, layoffs and shutdowns. Studies show that mining reduces property values.

Sulfide mining has been proposed in Minnesota's three most iconic watersheds:

- **Boundary Waters (Twin Metals)**
- **Lake Superior (PolyMet)**
- **Mississippi River (Kennecott - Tamarack)**

PolyMet Sulfide Mining Massive Climate Impact



Over 20 years, PolyMet would produce 15.8 million tons of CO₂ equivalent pollution more than 10 million tons from burning fossil fuels.

On an annual basis, total PolyMet CO₂ equivalent pollution would be 707,342 tons = more than 1/4th the carbon footprint of all Duluth – including commercial, industrial, residential, transport, and waste.

- **PolyMet largest wetlands destruction in Army Corps St. Paul (Midwest) region since Clean Water Act.**
- **900-1,000 acres direct destruction wetlands & peatlands.** Scientists estimate thousands more acres of indirect impacts.
- Minnesota DNR report: a loss of 1,000 acres peatlands is equivalent to **adding 2% to State CO₂ footprint.**
- Carbon storage value for wooded wetlands St. Louis River watershed **\$39,000 - \$83,000 per acre.**



Wetlands on proposed PolyMet land exchange site.

- **Copper recycling saves 85-90% of energy.**
- U.S. copper scrap now 50% recycled. Vast potential if cheap mining not made available.
- 534,000 U.S. metals recycling jobs direct & indirect (ISRI); 41,000 metals mining jobs (NIOSH).



For more information, see www.WaterLegacy.org or contact paula@waterlegacy.org