

# PolyMet "Prove-It-First"



**In northern Minnesota, near Lake Superior and the Boundary Waters**, an international corporation, PolyMet, is seeking a permit to open a copper-nickel sulfide strip mine, a toxic type of mining never before done in our state. When rock containing sulfide ores is brought to the surface and crushed, the mineralization is exposed to air and water. Sulfur in the ore combines with oxygen and hydrogen to form sulfuric acid ( $H_2SO_4$ ). Acid and toxic heavy metals can pollute rivers and groundwater for hundreds, to thousands of years, long after the profits are spent and the products buried in landfills.

Many other permit requests are poised to move forward, and a decision on PolyMet will open a floodgate for more sulfide mining in a large area surrounding the Boundary Waters Canoe Area Wilderness and the Lake Superior watershed.

Below are some of the issues brought forth during the Draft Environmental Impact Statement (DEIS) analysis. A Supplementary DEIS is projected to be ready for public comment this fall.

**Land Exchange** - The PolyMet project proposes a land exchange of 6,700 acres of federal land within the Superior National Forest. This "connected action" is required to be part of the DEIS under federal law. In fact, the USFS is under no obligation to do an exchange. According to current federal law, it is illegal to strip mine land purchased under the Weeks Act for watershed protection and held as national forests. The USFS is circumventing this law and is preparing a land exchange as part of the SDEIS. The USFS is also preparing a belated Hardrock Minerals Prospecting Permits EIS to evaluate cumulative effects of mineral exploration on federal lands, while continuing to allow advanced exploration. Compounding too little with too late, the USFS is narrowly focusing the Hardrock EIS strictly on noise impacts to human visitors.

**Cumulative Impacts** - The total expanse of mineral leasing and potential sulfide mining needs to be considered under environmental review. The DNR continues to sell exploratory leases to companies exploring the Duluth Complex of mineralization. Twin Metals is advertising its Nokomis deposit of copper-nickel-platinum-palladium-gold minerals on its website. The Nokomis deposit is located alongside the Boundary Waters Canoe Area. Franconia Minerals is advertising its Birch Lake, Maturi and Spruce Roads deposits, all within the Boundary Waters Canoe Area watershed. The PolyMet DEIS is inadequate in addressing PolyMet as an isolated copper-nickel mining project.

All proposed taconite mining expansions and new steel and energy production facilities must also be included in the total cumulative impacts to the region.

**Excess Capacity** - PolyMet is proposing to use approximately 1/3 of its purchased plant capacity for the proposed NorthMet project. Excess capacity may be utilized by neighboring Teck Cominco, Franconia, Kennecott and Twin Metals. The excess capacity of PolyMet's processing plant is not addressed under environmental review. This limits public knowledge and participation in the discussion of the creation of a sulfide mining district in the Arrowhead Region of Minnesota.

**Water Quality At Risk** - According to the PolyMet DEIS, water leaching from waste rock piles at the proposed PolyMet site is expected to exceed water quality standards for up to 2,000 years. The mining of less than 1% ores results in 99% waste rock.

The St. Louis River watershed is already contaminated with sulfates, which becomes part of a biochemical process converting mercury into methylmercury. This form of mercury accumulates in fish, resulting in fish consumption advisories. PolyMet has proposed storing its tailings on top of taconite tailings that are already leaching pollutants from the former LTV tailings basin into the watershed, in violation of federal law.

Wild rice is adapted to our low sulfate watershed. It is believed that the present higher levels of sulfate in our waters, from taconite mining activity, are severely depleting historic stands. The proposed sulfate releasing metallic sulfide mines in Northeastern Minnesota are anticipated to further negatively impact existing wild rice stands.

Plant closure plans extend to year 50 (30 years after closure) but do not account for Acid Mine Drainage (AMD) that can last for hundreds, to thousands of years, requiring perpetual or near perpetual treatment.

PolyMet's DEIS does not provide adequate plans for monitoring or mitigation. There is no adequate plan for enforcement of clean-up, and adequate financial assurance is not guaranteed under current Minnesota laws.

Arsenic, cobalt, selenium, copper, nickel, aluminum, beryllium, iron, manganese, and thallium, from the project may all exceed water quality standards, with potential synergistic impacts upon fish, wildlife or humans as we ingest water containing all of these pollutants.

**Harmful To Wildlife** - The PolyMet NorthMet project would result in a loss of over 1,400 acres of federally designated critical habitat for the Canada lynx, yet no biological opinion has been prepared as required by federal law. The project will also impact two of the thirteen wildlife travel corridors in the Mesabi Range believed to be needed for species survival. Cumulative impacts of reasonably foreseeable mining and processing projects will impact 31,000 acres of habitat and 10 out of the 13 wildlife corridors. Despite these substantial cumulative impacts on species, protected under the Endangered Species Act, the DEIS contains no biological assessment or consultation with the United States Fish and Wildlife Service and does not evaluate the cumulative impacts of projects on the survival and recovery of endangered species, as required under applicable laws. PolyMet's plans do not address effects upon bird species and cumulative impacts on habitats of migratory species. Mining exploration and development, will exacerbate an already declining moose population.

**Asbestos-Like Minerals** - Hardrock mining carries the potential for asbestos-like minerals to be released in water effluent or air emissions. This issue is not addressed in the PolyMet environmental review process although asbestos-like minerals and their health effects are emerging concerns on the Iron Range.

**Loss Of Wetlands** - The PolyMet project will eliminate over 1,000 acres of wetlands in the St. Louis River portion of the Lake Superior watershed, with an inadequate mitigation plan. The loss of these high functioning wetlands will result in a net loss of carbon sequestration provided by these high quality peat wetlands. The Federal agencies believe that the coniferous and open bogs within the Partridge River watershed are an ARNI (Aquatic Resources of National Importance).

**Financial Assurance** - Sulfide mining places huge burdens on taxpayers. These mines often create perpetual pollution and require long-term or near-perpetual treatment. PolyMet has few assets and a limited financial history. Where will the funding come from to pay for post-closure treatment, monitoring and maintenance? Minnesota tax payers may have to pay millions of dollars to clean up after PolyMet has gone.

#### **Conclusion:**

PolyMet's draft EIS does not indicate that metallic sulfide mining can be done in the water rich environment of Northern Minnesota without polluting our waterways for centuries to come. So far, the process has not adequately addressed cumulative impacts to water, land, or air and the degradation of these natural resources for future generations. The EPA has rated the PolyMet NorthMet DEIS as Environmentally Unsatisfactory - Inadequate, or EU-3 and gives this adverse rating rarely. Less than 1% of EIS's receive such a rating from the EPA.

#### **Position:**

Minnesota should enact a "Prove-It-First" law similar to Wisconsin's, prohibiting metallic sulfide mines until they have been proven safe through analysis of long-term operation and closure of similar mines elsewhere. This policy makes sure Minnesotans are not the recipients of untested mining practices, insurmountable clean-up costs, and human health issues, including the loss of clean drinking water. Minnesota should prohibit mines that would require long-term treatment of water after the mine's closure; it is not possible to accurately predict long term clean up and closure costs. Lastly, metallic sulfide mines should be prohibited in watersheds of special concern, such as those of the BWCAW and Lake Superior. Pristine or sensitive waters and lands should not be subjected to Acid Mine Drainage or toxic leaching. *The Minnesota Regional Copper-Nickel Study*, conducted by the Minnesota Environmental Quality Board, reached a similar conclusion in 1979, but adequate protections have never been adopted.

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