

PolyMet Would Harm Climate, Health and Justice



A Disaster for Climate Change

The PolyMet copper-nickel sulfide mine would destroy approximately 1,000 acres of wetlands and peatlands, and negatively impact thousands more acres as a result of mine drawdown and pollution. According to a Minnesota Department of Natural Resource report, destruction of 1,000 acres of just peatlands would **increase Minnesota's entire annual carbon footprint by 2%.**¹

Over a 20-year mine plan, PolyMet admits that it would produce **15.8 million tons of CO₂ equivalent pollution²** – more than 10 million tons from burning fossil fuels.

Comparing PolyMet's annual impacts to a study done by the city of Duluth (including commercial, industrial, residential, transport, and waste), each year the PolyMet mine project would have about one-fourth the carbon footprint of the entire city of Duluth.³

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Copper and nickel can be recycled over and over and still retain its value. Recycling copper rather than mining and processing copper **would save 90% of the fossil-fuel energy**⁴ used by a project like PolyMet. In fact, it is cheaper to recycle copper than to mine for more.

The U.S. Geological Survey has estimated that the recycling rate of copper is only about one-third of available supply.⁵

Requiring that electronics be recycled would support modern technology without the wasteful and destructive costs of copper-nickel mining.

A Threat to Human Health and Environmental Justice





Sulfide mining leaches toxic metals such as lead, arsenic, and mercury into wetlands and streams. Sulfate pollution increases mercury methylation, bioaccumulation in the food chain, and contamination of fish. **Methylmercury levels in fish can be 1,000,000 times as high as in the water itself.**⁶ Methylmercury damages the developing brains of fetuses, infants and children. In 2011, the Minnesota Department of Health found **1 in 10 infants in the Lake Superior region are already born with unsafe levels of mercury in their blood.** Groups representing more than 30,000 doctors and nurses asked for a health impact assessment for the PolyMet mine, **but the request was denied.**

Sulfate pollution also decimates wild rice. Since 1973, Minnesota has had a federally-approved water quality standard of 10 parts per million (ppm). WaterLegacy defended the wild rice sulfate standard against a lawsuit by mining interests and worked with Tribes to defeat a rule that would have repealed the standard. We organized communities to secure Governor Dayton's veto of bills to repeal the wild rice sulfate standard. WaterLegacy and the Fond du Lac Band of Lake Superior Chippewa are in court to require that permits control mining discharge that violates the wild rice sulfate standard.

The PolyMet mine would be located on 1854 Treaty lands, where Ojibwe (Chippewa) people of the Fund du Lac, Grand Portage, and Bois Forte Bands retain rights to hunt, fish and gather. The PolyMet mine would destroy and contaminate resources which Ojibwe rely on for sustenance and cultural identity. **Sulfate pollution from the PolyMet mine would disproportionately affect low-income and tribal communities, as well as fetuses, babies and children.**

¹ The Potential for Terrestrial Carbon Sequestration in Minnesota, A Report to the Department of Natural Resources, Feb. 2008 https:// www.leg.state.mn.us/docs/2008/mandated/080174.pdf

² PolyMet Mining Inc./NorthMet Project Final Environmental Impact Statement (EIS), Nov. 2015, FEIS, 5-482. https://www.dnr.state.mn.us/ input/environmentalreview/polymet/feis-toc.html

³ City of Duluth Greenhouse Gas Emissions Inventory and Forecast, March 2011, https://waterlegacy.org/wp-content/uploads/ DuluthGreenhouseEmissions2008.pdf

⁴ *Copper Recycling and Sustainability*, Copper Development Association, Copper Alliance, https://copperalliance.org.uk/knowledge-base/education/education-resources/copper-recycling-sustainability-2/

⁵*Recycling–Metals*, 2016 Minerals Yearbook, USGS, https://prd-wret.s3-us-west-2.amazonaws.com/assets/palladium/production/atoms/files/ myb1-2016-recyc.pdf

⁶ Mercury Levels in Blood from Newborns in the Lake Superior Basin Final Report, Minnesota Department of Health, November 2011, p. 11, https://www.health.state.mn.us/communities/environment/fish/docs/glnpo.pdf

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