

# Commenting on the PolyMet Draft Environmental Impact Statement (DEIS)

*The PolyMet DEIS describes significant environmental issues associated with this proposed mine. These issues should be resolved before this mine is permitted by the responsible state and federal agencies. The below is not intended as a definitive list of the DEIS's deficiencies.*

## Water Quality

### **Problem: Contaminated Discharge from Waste Rock Piles**

- Water from waste rock piles will be polluted for up to 2,000 years (DEIS, Table 4.1-45).

#### Comments:

- Mines that require treatment of waters for thousands of years are a bad idea.
- We can't expect mining companies to be responsible for these operations for that long.
- Our state doesn't have the resources to maintain water treatment facilities for this amount of time and shouldn't pass such a debt on to future generations.

### **Problem: Contaminated Overflow from the West Pit**

- The DEIS predicts that at year 65, the West Pit will begin discharging polluted water.
- One analysis in the DEIS predicts that **arsenic, cobalt, and selenium** will exceed water quality standards. Another analysis predicts **cobalt, copper and nickel** will exceed water quality standards. Both analyses predict **high sulfate concentrations** (4.1-113).

#### Comments:

- Minnesota waters should not be polluted with heavy metals and sulfates.
- Sulfate turns mercury into forms that make fish dangerous to consume.
- A different design is needed to prevent contaminated overflow into nearby water bodies.

### **Problem: Tailing's Basin Water Discharges Will Be High in Sulfate**

- DEIS: "Relatively **high sulfate concentrations** in seepage from the Tailings Basin would be released to wetlands north of the Tailings Basin and lakes downstream on the Embarrass River that represent '**high risk situations**' for mercury methylation" (S-9).
- When mercury is "methylated" it can bioaccumulate in fish, making them **unsafe to eat**.

#### Comments:

- Too many of our lakes and rivers are already under mercury advisories, including some waterways into which the PolyMet mine would discharge.
- High sulfate discharges should not be permitted.

### **Problem: Unreliable Wetland Water-Treatment Plan**

- PolyMet proposes to **construct a wetland** to treat contaminated waters.
- DEIS: effectiveness of constructed wetlands to remove metals has "**strong seasonal variability**." Also: "A limited literature review also reveals a **wide range of variability in the pollutant removal effectiveness** of constructed wetlands..." (4.1-112).

#### Comments:

- Effectiveness of constructed wetland treatment systems has not been proven.
- This method should not be relied upon as a water treatment method.
- Reliance on this method will likely result in pollution in rivers and lakes downstream.
- The company should design another method for cleaning polluted waters.

## Wildlife

### **Problem: Loss of Critical Habitat for Wolves and Lynx**

- Project is in designated critical habitat for the protected species Canada lynx and gray wolf.
- DEIS acknowledges the potential for project to result in a loss of critical habitat for both. There would also be an increased risk of vehicle strikes for both species.

Comments:

- Critical habitat identifies geographic areas that contain features essential for the conservation of a threatened or endangered species.
- Habitat was designated for the lynx and wolf to prevent further population declines.
- Minnesota should not permit the diminishment of habitats for these species.

## Wetlands and Global Warming

### **Problem: Significant Loss of Wetlands – Increasing CO<sub>2</sub> Emissions**

- Project would cause direct and indirect **impacts to over 1,500 acres of wetlands**.
- Most of the wetlands that will be impacted at the mine site are **peatlands**.
- Peatlands have been **identified as one of the best terrestrial environments for sequestering carbon**, a contributor to global warming.
- The destruction of 1,000 acres of peatlands would **result in a two percent increase** in Minnesota's overall carbon dioxide emissions.
- The DEIS acknowledges that "project facilities and operations would **result in additional greenhouse gas (GHG) emissions** in the Arrowhead region" (S-10).

Comments:

- Peatlands at mine site have been identified as high quality wetlands in federal and state inventories.
- The peatlands represent habitats that are increasingly rare on the landscape, and should be protected from destruction.
- Reports commissioned by the MN State Legislature and by Governor Pawlenty call for the protection of peatlands for their ability to capture and secure carbon.
- Minnesota needs to heed these recommendations and halt any further destruction of these valuable habitats.

## Other Issues:

### **Problem: Unstable Tailings Basin Could Discharge Toxic Materials**

- PolyMet proposes to use an existing mine tailings basin for the disposal of its tailings and toxic materials, but the **stability of the tailings basin has been a serious concern since the project was first proposed**, and has resulted in multiple designs.
- The DEIS acknowledges the potential for basin structural failure: "The NorthMet Tailings Basin and hydrometallurgical residue facility embankments would have a **low margin of safety** due to fines and underlying soils in the existing LTVSMC Tailings Basin" (S-10).
- PolyMet has failed to address the safety issues, indicating instead that "further design and analysis would occur during permitting..." (4.13-2).
- Failure of the basin **would result in serious and long-lasting contamination**.

Comments:

- A complete stability analysis and acceptable basin design should be a part of the DEIS.
- Before any of PolyMet's tailings are deposited on top of existing tailings, existing structural deficiencies must be addressed.
- The tailings basin will contain extremely hazardous waste materials. An appropriate design is critical, and should be identified in the DEIS.

## Learn more and speak up

**Read the DEIS:**

<http://bit.ly/PolyMet> (redirects to DNR website)

**Deadline for submission of comments:**

February 3, 2010.

**Submit comments by telephone to:**

651-259-5089

**Submit comments by e-mail to:**

[Environmentalrev.Dnr@state.mn.us](mailto:Environmentalrev.Dnr@state.mn.us)

(include "NorthMet" in the subject line)

**Submit comments in writing to:**

Stuart Arkley, EIS Project Manager

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