FACT SHEET

PolyMet Sulfide Mining Project

Goal

To ensure that PolyMet's sulfide mining proposal for the NorthMet deposit meets environmental standards and regulations and minimizes the impact on the Superior National Forest and the Boundary Waters Canoe Area Wilderness (BWCAW).

Background

PolyMet is a junior Canadian mining company whose principal asset is the NorthMet polymetallic deposit, a 4,162 acres non-ferrous deposit located six miles south of Babbitt, Minnesota and 20 miles south of the BWCAW. If allowed to operate, this mining project will be the first case of sulfide mining in Minnesota.

PolyMet's recent decision to move forward with open-pit mining in the NorthMet deposit stems from rising world metal prices, making this fairly low-grade deposit a potentially profitable site for metal extraction. NorthMet is a polymetallic sulfide deposit containing primarily copper along with smaller traces of nickel, palladium, platinum, cobalt, gold and silver. It is estimated that the deposit contains 2.9 million tons of copper, 780,000 tons of nickel, 9.3 million ounces of palladium and 2.6 million ounces of platinum. PolyMet currently projects that mining operations will occur for 20 years at an excavation rate of roughly 25,000 tons of ore per day.

Upon excavation, the polymetallic ore will be loaded into rail cars and transported about 8 miles to the Cliffs Erie crusher/concentrator facility near Hoyt Lakes for processing. The facility, once owned by the LTV Steel Mining Co for taconite processing, has been mothballed since 2000 and will be modified to allow for polymetallic ore processing. Adjacent to the Cliffs Erie facility is an existing tailings basin. The bulk of the unused ore from the Cliffs Erie facility will be deposited in the tailings basin as flotation tailings and should be non-reactive (containing low traces of sulfide). The reactive unused ore (containing high concentrations of sulfide) will be treated and stored in a separate lined tailings basin.

A joint Environmental Impact Statement (EIS) for the PolyMet proposal currently is being written by the Minnesota Department of Natural Resources and the Army Corps of Engineers. During the EIS public scoping period, the Friends submitted comments on a number of issues that we felt needed to be addressed in the EIS.

Issues

1. *Acid Mine Drainage*
   - Acid Mine Drainage (AMD) is one of the worst mining related environmental problems and perhaps the mining industry's greatest liability. AMD typically occurs in sulfide mining operations where sulfide-bearing ore comes into contact with air and water. Sulfuric acid is produced and can then leach into neighboring bodies of water and impact the local and regional watersheds.
   - The Friends is asking that waste characterization be conducted to determine the level of waste reactivity and that reactive waste treatment measures be discussed extensively in the EIS.

2. *Wetlands Destruction*
   - The proposed mining area sits on nearly 1,300 acres of recognized wetlands, making this project one of the single largest incidents of wetlands destruction in Minnesota. This will not only affect the local ecosystem but could potentially drain nearby wetlands.
   - The Friends is requesting that a full discussion of wetlands impacts be included in the EIS and not in a separate requisite wetlands permit.

3. *Particulate Matter*
   - The particulate matter (PM_{10}) generated from the crushing and grinding machinery, autoclave (furnace), and tailings basin could possibly drift into the BWCAW.
   - The Friends is asking that the project meet air quality standards set by the National Ambient Air Quality Standards (NAAQS) and that impacts on public health be discussed in the EIS.

4. *Wildlife*
   - PolyMet's mining operation will have both direct and indirect effects on wildlife and wildlife habitats in the area including some threatened species such as the lynx. Furthermore, this project can result in habitat fragmentation as well as potential spread of non-native invasive species.
   - The Friends is requesting that all these wildlife-related issues be addressed in the EIS and that a full consultation be conducted with the U.S. Fish and Wildlife Service as required by the Endangered Species Act.

5. *Asbestiform Fibers*
   - The NorthMet deposit is located close to the Peter Mitchell Mine which has been found to contain harmful asbestiform fibers. The Friends is therefore concerned that asbestiform fibers could be found in the NorthMet deposit.
   - The Friends asks that this issue be made a priority and that any asbestiform studies completed be included in the EIS.

6. *Financial Assurance*
   - Financial assurance from PolyMet must be in place to facilitate any future clean up, closure and reclamation of the mining site.
   - The Friends is asking that long-term provisions be set in place to ensure that PolyMet be held financially responsible for both closing the mining site and for monitoring any long-term environmental impacts.

Conclusion

The Friends of the Boundary Waters Wilderness along with the Sierra Club, Minnesota Center for Environmental Advocacy, National Wildlife Federation, Save Lake Superior Association and other environmental groups are currently monitoring the EIS process for the PolyMet mining proposal to ensure that all environmental impacts are addressed.