

# Online Comment

**Permit Portal:** Air

3/15/2018

**Comment:**

RE: COMMENT ON DRAFT AIR PERMIT submitted through the MPCA portal at 6:33 pm link [survey.mn.gov/siam/surveylanding/interviewer.asp](http://survey.mn.gov/siam/surveylanding/interviewer.asp) To Whom It May Concern: The NorthMet Project has been in process of application for many years now, because the project will cause unusual problems, and because it will imperil wilderness lands, waters, air, wildlife and the economies that depend upon clean air, water and healthy ecosystems. Permitting a copper mine will set precedent and change the land use forever. Since the copper deposits in Minnesota are of low grade, the process will naturally require removal of more rock than copper. By Polymet's own estimate the NorthMet ore body comprises 275 million tons of Proven and Probable reserves grading 0.28 percent copper with Measured and Indicated Mineral Resources of 694 million tons grading 0.27 percent copper and 0.08 percent nickel. Since Polymet intends to mine and process 32,000 tons of ore per day (11,680,000 tons of ore per year) what does this mean for the air quality surrounding the Project? According to the reports put forth for this permit, the NorthMet project will require ammonium nitrate and fuel oil for blasting every two to three days. Large excavator shovels with up to 30-cubic-yard-capacity and large front-end loaders will then load the ore into diesel-powered haul trucks, each having the capacity to carry 240 tons of material in a single load, all loaded onto 100-ton side dumping railcars. Sixteen-car trains pulled by locomotives will then transport the ore approximately six miles to the processing facility 20 times each day. In all, PolyMet plans to mine approximately 225 million tons of ore over a 20-year mine life. This plan can be revised at any time as long as notice is given and approved by our regulators. No mine has ever been shut down by regulators once begun in Minnesota. According to the relevant reports, processing starts once the ore is transported to the LTV site where it will be offloaded into the Coarse Crusher Building. A series of crushers then reduce the ore to approximately 2.5 inches diameter feeding these particles by conveyor to the coarse ore bin located in the Fine Crusher Building. From the Fine Crusher Building, the ore will be conveyed to the Concentrator Building used since the 1950s to process taconite. There, the ore will be reduced into particles about the diameter of a human hair before being transported by chute to other buildings where impurities will be removed using chemicals and large quantities of water. Imagine this fine dust in transport. As documented in this permit, this facility, then, will require a number of filtrations systems including HEPA, cartridge and fiber, all of which will be expected to comply with standards within each building and require their own handling. Outside of these buildings where there are no filters, fugitive emissions are even more difficult to control. Fugitive source emissions from mining operations stem from the blasting of rock and the debris that these operations create, loading and unloading of rock, truck traffic, preparation, crushing and screening activities and excavating. Traffic, road building and repair will contribute naturally and this will exceed the boundaries of the NorthMet Project site where no truly effective organic and sustainable control is possible in most situations, physics the determining factor. Fugitive sources of emissions at the processing plant can be found during construction activities, crushing and screening, along with wind erosion during flotation tailings basin operation, miscellaneous truck traffic, and SAG and ball mill

grinding of the ore. The list of unusual problems and effects goes on in the permit reports, unintentionally illustrating why copper sulfide mining would be a major contributor to air pollution in this wilderness, and all the while presuming to make a case for protection. How much of the regulation in place on spot filtration systems and their filters will be effective? How much of the fugitive emissions and noise will cause untenable situations for wilderness tourism, which is the backbone of this country? Only time will tell after all. If experience has taught us anything, these systems will fail or be neglected in time while the mining effects will continue into perpetuity. Just a list of the vehicles required in this operation will tell us enough about the effects: 2300HP mine haul trucks run on 25.4 gallons of fuel/hour. 1550HP diesel drills, 19.8 gallons/hour, and 646HP truck dozer graders, 31.2 gallons/hr. And then there will be excavators, rubber tire dozers, transfer loaders, backhoes with hammers, water/sand trucks, and integrated handlers with their own fuel usage and emissions not to mention the noise that will be a daily experience for all within earshot. Besides vehicles, there will be a great need for space heaters, too many to count for this comment, feed chutes, conveyors, mills, grinders, crushers, rail cars and locomotives, mix tanks and dewatering stations, a lube house, direct and indirect heating equipment using electric, natural gas and propane, degasifiers, a (huge) gasoline tank, bentonite (fine clay dust) handling, and miscellaneous buildings. There will be a fence patrolled to keep the public out. Polymet will monitor itself. There is no restriction on hours of operation for portable crushing spread operations May to October and other operations are given the time needed to process almost 12,000,000 tons of ore each year. Much of the monitoring is not enforceable in this permit or on a practical level. So where are the real safeguards? The winds will blow, the climate will do its thing and Polymet will be forgiven in a force majeure situation. We are told that this ore will be processed in an environmentally sound manner. We are told that if limits are exceeded, they will be remedied by the miner except in the case of unforeseeable circumstances that prevent them from fulfilling their contract. Will they monitor and police themselves without regard to profits? If fugitive emissions are found to degrade the environment outside of the parameters of their fence line, will this too be remedied? What will the meaning of going up North hold for citizens once this mine starts construction? Wetlands abound along this copper deposit, with thousands of flora and fauna, many rare and uncommon all depending on clean air and water, in a wilderness of outstanding quality. There are orchard orioles, killdeer, snow geese, loons, woodcocks, purple finch, mink, great blue heron, broad-winged hawks, eagles, partridge, beaver, wolves, moose, bear, Canadian lynx, coyotes, blue bills, mallards, night hawks, snowy owls, white-throated sparrows, deer, blueberries, bearberry, rock ferns, caribou moss, and so many other species of plants and animals. What is the potential harm to these populations if the fragile balance of this ecosystem is destroyed, an ecosystem so interconnected with the health of its waters and its air? Do we sell or do we protect? This is what this decision concerning the NorthMet Project comes down to, essentially. There are no guarantees that Polymet or theirs will be around to pay for the damage that acid rain and other hazards of mining for decades in this area will cause. They are a corporation, after all, developed to limit liability. Ongoing treatment, passive or aggressive, will never return this region to its original state. Observe ongoing pollution witnessed from mining in the area already. What financial or political assurances would suffice in a tragedy of the scale that sulfide mining would unleash? We have waste on this earth that could be recycled without destroying our environment, our home. Have we come to a crossroads in our handling of this planet, an ecosystem that we so dearly need for our survival? Isn't this priceless wilderness more important than any profit we can make from mining? Once understood that we cannot mine in this area without devastating results, perhaps we will favor sane and ecologically sound solutions to those challenges that engage us? We

could speak of the beauty, the wild, the spirit of something greater than ourselves, the sustenance we all gain from these masterpieces. Such is the Arrowhead of Minnesota. What profit is there if not life itself? It is undeniable that people in the area need jobs ... although, who of these long term residents came with the intent to mine this jewel? If given the opportunity to work in a sustainable activity, who would not choose to do so? What kind of opportunities could be created with a mindset that encourages positive long term results over short term gains and financial profiteering? Don't we owe it to ourselves and life itself to make the effort? For the reasons outlined in this comment, I request that the Draft Air Permit for the NorthMet Project be denied.

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**Attachments:**