Doctors and Nurses Expressing Concern About the Health Impacts of PolyMet’s Mine Plan

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RE: PolyMet NorthMet Sulfide Mining SDEIS

Dear Ms. Fay, Mr. Westlake:

This comment letter is submitted on behalf of the 46 undersigned doctors and nurses. We are concerned that the proposed PolyMet NorthMet copper-nickel mine project could have significant adverse impacts on human health as a result of pollutants released to air, surface water and drinking water. We also believe that the PolyMet NorthMet Supplemental Draft Environmental Impact Statement (“PolyMet SDEIS”) fails to adequately assess important risks to human health from the pollutants that would be released from this project. The absence of any professionals from the Minnesota Department of Health from the List of Preparers of the PolyMet SDEIS is particularly troubling.
We respectfully request that the PolyMet SDEIS be deemed inadequate due to unresolved concerns and insufficient assessment of health risks of the proposal. We would further request that, in revising the PolyMet SDEIS, a comprehensive Health Risk Assessment be prepared under the guidance of the Minnesota Department of Health. In this letter, we summarize some issues and concerns leading to these requests.

Mercury contamination of fish and impacts on neurotoxicity in the developing fetus as well as in infants, children and adults is a significant public health concern in Minnesota. The Minnesota Health Department found 1 out of 10 infants in Minnesota’s Lake Superior Region are born with unsafe levels of mercury in their blood. The percentage of infants thus at risk for neurologic impairment was higher than in the Lake Superior Region of Wisconsin or Michigan. We are aware that many of the bodies of water downstream of the proposed PolyMet mine and plant are legally impaired due to mercury in fish tissue. Other mine facilities that release mercury and/or sulfates increase the cumulative risk of methylmercury bioaccumulation. The lower reaches of the St. Louis River, including the St. Louis River estuary, are known to contain particularly high levels of mercury.

After reviewing the PolyMet SDEIS, we believe that the information on mercury releases and the potential for mercury bioaccumulation is insufficient. The SDEIS does not disclose releases of mercury from seepage and does not analyze the effects of local deposition of mercury and other air pollutants or of hydrologic changes on mercury bioaccumulation. The SDEIS does not provide evidence to justify its claims about collection and containment of mercury and sulfates.

The PolyMet SDEIS also provides an insufficient analysis of the human health risks of other pollutants, such as neurologic morbidity resulting from manganese and lead release; and carcinogenic effects of air emissions of diesel, asbestos-like fibers, nickel and other particulates, and of arsenic releases to water. The PolyMet SDEIS fails to analyze health risks to workers who would work on-site at the PolyMet mine or plant and fails to assess impacts of tailings groundwater seepage on nearby residential populations. The PolyMet SDEIS does not discuss impacts of exposures to vulnerable populations, such as infants, children, the elderly and persons who rely for subsistence on fish, wild rice or game species, where pollutants may bioaccumulate.

For these reasons, we first request that the PolyMet SDEIS be revised to provide more complete information on mercury and sulfate air pollution emission and deposition, water pollution seepage from various sources, and the potential conversion to and bioaccumulation of methylmercury resulting from releases to the environment and hydrological changes from the proposed PolyMet project.
We further request that the PolyMet SDEIS be determined inadequate pending supplementation to include a Health Impacts Assessment, under the direction of the Minnesota Health Department. This Health Impacts Assessment should include at least the following:

1. Description of the known human health impacts of all pollutants in PolyMet’s air emissions and water discharges based on reliable toxicity and epidemiology data.
2. Assessment of health risks resulting from fossil fuel combustion, including impacts of burning coal to meet mine energy demands.
3. Assessment of potential health impacts on residential wells from tailings seepage and cumulative health risks from contaminants to other drinking water sources.
4. Health risk assessment for on-site workers at both the PolyMet mine and plant, reflecting both cancer and non-cancer risks.
5. Assessment of cumulative mercury risks, including hazard levels in bodies of water that are already impaired for mercury in fish and risks posed by mercury concentration downstream in the St. Louis River.
6. Assessment of cumulative cancer and non-cancer risks from existing and additional sources of toxic chemicals, such as manganese, arsenic, lead and nickel, applying the most protective health risk analysis and an appropriate “lifetime” exposure.
7. Assessment of cumulative risks of multiple chemicals and exposure routes on vulnerable populations, including infants, children, the elderly and populations who have higher rates of consumption of affected foods, such as fish and wild rice.

Thank you for considering the concerns of Minnesota’s doctors and nurses as you evaluate the PolyMet mine project and SDEIS. We are committed to using careful assessment and rigorous science to protect the health of the next generation and generations to come throughout Minnesota.

Sincerely yours,

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