



POLYMET FINAL ENVIRONMENTAL IMPACT STATEMENT WAS NOT FINISHED

The PolyMet copper nickel mine project Final Environmental Impact Statement (FEIS) was not “completed” as claimed before it was deemed “adequate” by the MNDNR. It was actually politically “terminated” in a state of disarray! It is in effect a mining plan for the PolyMet mine and processing project being masqueraded as an environmental study. These projects are designed to fail environmentally since they cannot succeed financially without being permitted to pollute water, air and destroy natural habitat such as wetlands. And a heads up to Duluth and other “downstream” communities; wetlands in the Lake Superior and other watersheds significantly reduce historic flooding such as that seen in the 2012 flood. The “Downstream” business people in Duluth have it right! Hundreds of well-informed comments on the FEIS were not addressed by PolyMet or the agencies. The quantity of toxins, the direction and volume of waste water flow, the quantity of mercury in the ore are among many other technical issues that were either not or not fully addressed. The MNDNR admits that after all the modeling analysis involving thousands of variables affecting pollution, the confidence that the project would not pollute, even beyond our weakened environmental standards, is only 90% at best. From an historical perspective the confidence is much closer to 0%! They ran out of time, threw in the towel and are depending on their “Social License to Mine” process to convince the public and the state and federal agencies to approve permits to mine and pollute Lake Superior and its watershed basically forever. A major source of these pollutants is called “acid mine drainage and a good example of this process occurred when the Animas River in Colorado was poisoned by a deluge from a nearly “sealed” mine. The seal was broken and the river turned orange with pollutants that were carried down the Colorado River. In most cases the pollutants are invisible and leak out gradually to be consumed by unwary and vulnerable children. The perpetrators are usually long gone when this occurs. PolyMet, Twin Metals and the like are not ready for mining and pollution permits in any watershed surrounding Lake Superior.

LeRoger Lind

GREENFIELDS ARE BECOMING BROWNFIELDS IN THE LAKE SUPERIOR WATERSHED

We all love “Greenfields”, those areas undisturbed by destructive development. Areas that have been ravaged by intense development are now referred to as “Brownfields”. The distinction has become important from an environmental perspective. Greenfields are protected by many state and federal laws that don’t apply to brownfields. The Clean Water Act with the NPDES water discharge rules and the state environmental rules such as those covering wetlands and non-degradation of unspoiled water are applied less rigorously to brownfields. However, current practice tends to regard an entire area such as the Lake Superior watershed as a “brownfield” if it has been heavily developed in certain areas such as the Iron Range.

In NE MN, Northern WI and Upper Michigan mining companies gain permits to mine and pollute in some cases such as copper mines by mining in a greenfield and processing the ore in a brownfield. Examples are the Flambeau mine, the Eagle Mine and the proposed PolyMet mine. A massive application of this strategy currently involves the Rainy River and the Lake Superior watersheds in NE MN. The twist here is that the state and federal governments would allow massive copper mining development in the Lake Superior watershed for little or only greenfield development in the Rainy River watershed. We argue that Lake Superior is every bit as important and iconic as the Boundary Waters and should not be used as a dumping ground for mining waste from so called greenfields in the Rainy River watershed. There is intense political pressure to allow this strategy to be used for permitting copper nickel mines in all three states. So we “downstreamers” would get the “trash” while those upstream would get the “cash”.



FISH MANAGEMENT TECHNIQUES DO NOT WORK ON IRREVERSIBLE POLLUTION

Minnesota is positioned to approve the PolyMet NorthMet Mine project by using short term mitigation of pollution to gain permits for long term pollution of Lake Superior and its watershed. The Minnesota Department of Natural Resources and the Minnesota Pollution Control Agency are proposing the use of “trial and error management of natural resources” to control irreversible pollution from copper and nickel mines. That’s how they manage the regulation of fish populations and the control of invasive species in our lakes. The problem with applying fish management techniques to copper-nickel mining pollution is that the toxic pollutants do not go away once they are released by the oxidation process called “acid mine drainage”. The volume of pollutants would be so great that to provide the financial assurance that would be needed to stop and clean up the pollution and cure the children affected by the mercury and toxic metals in the water would not be affordable without serious manipulation. The public health problems would involve developmental disabilities such as underdevelopment of children’s brains or causing long term dementia or cancers in adults. This is a process similar to mesothelioma cancer developing in the lungs over a long period of time. Emission of these same asbestos-like particles in the mining and processing of similar bulk ores from this mining area was ignored in the FEIS. This is just one example of things not changing in an environment with “Social License to Mine” being the methodology applied to copper mining projects. You cannot “have it both ways” mining copper and protecting the environment without changing the business plan! The current copper mining business plan in Minnesota, Wisconsin and Michigan is to do mining in an undeveloped “greenfield” and processing in a previously damaged “brownfield”. The Flambeau mine in WI, the Eagle Mine in MI and now the proposed PolyMet Mine in Minnesota are classic examples of how mining permits are obtained in the Social License to Mine era.

DEBUNKING THE UNBRIDLED SUPPORT FOR COPPER NICKLE MINING IN MINNESOTA

At the recent mining conference in Duluth, MN the federal representative from northeastern Minnesota gave a stump speech focused on forcing unsafe and unsustainable mining upon unwilling and uninformed citizens of Minnesota’s Lake Superior watershed. This includes Duluth, the St. Louis River and the Cloquet River watersheds. Over 100,000 citizens would be affected. Instead of focusing on improving the questionable sustainability of the industry and its boom and bust business model, he took aim at PolyMet NorthMet mine project “opponents”. They are apparently “dismissing” the short term pollution mitigation schemes being proposed by PolyMet to obtain permits for long term pollution of water, air and natural habitat in the Lake Superior watershed.

TACONITE MINING NOT GOOD EXAMPLE FOR CONTROLLING POLLUTION FROM COPPER MINING

Volumes of well-informed comments challenging the information in the PolyMet Final Environmental Impact Statement have been submitted and summarily ignored by the state on very questionable bases. In a glaring example of “false equivalence” he compares the huge challenges of safely mining copper and nickel in Minnesota with past opportunities for safely mining and processing iron ore that have not been realized. They are currently permitted due to political pressure and lack of interest from most citizens. These companies cannot make a profit without polluting and destroying the environment. That is the foundation of their business plans past and present.

POLLUTION FROM RESERVE MINING PERSISTS TO THE PRESENT FROM 50 YEARS AGO

Even with much more effort sulfide mining could not be made compatible with northern Minnesota’s Lake Superior watershed based upon the history of the industry and the tremendous expense that would be involved. At this point it is clearly incompatible with the protection of this environment. Businesses such as Reserve mining have historically fought tooth and nail to maintain their right to pollute Lake Superior and its watershed. Materials equally toxic to the proposed mercury, sulfates and toxic minerals in acid mine drainage from copper mines still line the bottom of entire western end of Lake Superior. Roughly 500,000,000 tons of mining tailings and other waste were pumped out into the lake before Reserve was legally required to redirect the waste into the Mile Post 7 tailings basin, a future federal superfund site. Duluth is still filtering the cancer-causing asbestos-like fibers from its water supply. Others just ignore the threat. Quadrillions of these fibers continue to be pumped into the Beaver River from the MP7 basin every day under a permit from the Minnesota Pollution Control Agency. The only equivalence to pollution of the lake with mercury and other toxic minerals from PolyMet is the inevitability of a similar situation evolving from the permitting of copper-nickel mining in Lake Superior watershed. 500,000,000 tons of waste material from the first phase of the PolyMet project would be either dumped on top of the millions of tons of taconite waste in the old LTV tailings pond, hidden under water in spent mining pits, stacked on the ground in the mine or otherwise deposited to eventually be oxidized into sulfuric acid and sulfates. Our oblivious legislature has

revised the hazardous waste rules to allow the dumping of toxic waste into unlined and otherwise unprotected landfills in the vicinity of the proposed PolyMet mine.

THREAT FROM COPPER MINING MUCH WORSE THAN THAT FROM TACONITE MINING

The threat to public health and the environment from acid mine drainage from copper-nickel waste ponds is as bad or worse now than the threat from taconite waste 50 years ago. The PolyMet NorthMet mine would produce 500,000,000 tons of ore but only recover about 5,000,000 tons of useful metals. The rest contains toxic waste made reactive by being either crushed into rough tailings or ground into a fine powder. All reactive surfaces would be exposed to air and water eventually acidifying the water and releasing toxic metals. These elements are extremely harmful to all life downstream. Infant's brain development is impeded, fish are laden with mercury and wild rice is destroyed. It also affects those on the other end of the age scale accelerating dementia and cancers.

WE CAN'T HAVE BOTH CLEAN WATER AND COPPER MINING IN THE LAKE SUPERIOR WATERSHED

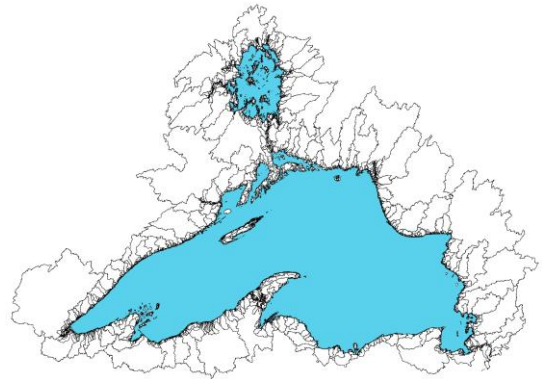
So we can't "have our cake and eat it too" as our elected officials and corporate executives would have us believe. This type of mining "pollutes" the environment and "harms" children. Hundreds of Minnesota's health care professionals have demanded a study of the health effects of pollution from potential acid mine drainage and sulfate release into the Lake Superior watershed. Our State officials and agencies said it isn't necessary!

CREATION OF THE BWCAW DOES NOT JUSTIFY DESTRUCTION OF THE LAKE SUPERIOR WATERSHED

Shameless polluters are now using the historic creation of the Boundary Waters Canoe Area Wilderness as an excuse for permitting unfettered and destructive mining in the Lake Superior watershed. That historic agreement did not give unbridled permission to expose billions of tons of reactive sulfide ore waste in the Lake Superior watershed for the next 500 years as implied by Representative Nolan in his stump speech to "mining executives". Nor did it enable the pollution of the Lake Superior watershed by weakening of environmental standards to the point where they do not protect public health and welfare. Mining in the Rainy River watershed is also in their sights. Billions more tons of sulfide ore reside there. But according to Nolan "A deal is a deal" no matter what the long term consequences may be. He should be aware that the Mississippi River watershed is also a prime candidate for sulfide mining starting with the Tamarack Project. The Twin Cities and other urban areas would then become exposed to these toxic elements basically forever.

MINERALS OBTAINED FROM POLYMET NOT WORTH DESTROYING LAKE SUPERIOR WATERSHED

The "red herring" that "essential minerals" obtained specifically from the Lake Superior and Rainy River watersheds would be required in all aspects of our lives is being perpetuated through corporate propaganda which infiltrates all aspects of our lives. Paying lip service to the protection of the environment without being able to legitimately show how this would be done is a trademark of the industry. Pollution standards are either eliminated or reduced to meaningless levels. The sulfate standard of 10 milligrams is currently suspended from iron mining operations on the Iron Range. It has not been effectively enforced as shown by the withering wild rice stands and mercury laden fish in the St. Louis River watershed and estuary. The Moyle 10 milligram standard is soon to be replaced by an unenforceable standard featuring an "equation" for the allowable level of sulfates in each of 1000 lakes, estuaries and rivers in the St. Louis, Cloquet and Lake Superior watersheds. Each "equation" has only two variables each with an exponent defining the permissible sulfate level for each affected body of water. The four components are actually all variables requiring constant adjustment for accuracy as conditions change seasonally and otherwise. That is a minimum of 4000 variables being managed by a staff of a few people having been reduced to a level of nearly being ineffective by our legislature, a feature of "Social License to Mine" being practiced by the copper mining industry worldwide. Obviously, this effort would eventually be shelved due to high cost once all permits were approved. Variances from permit conditions take care of these issues but do not prevent water pollution.



COPPER MINING IS UNSUSTAINABLE AND UNNECESSARY IN THE LAKE SUPERIOR WATERSHED

No mining plan is "too big to fail". PolyMet, Twin Metals, et al are claiming this status by assuming control or influence over all those that would presumably be positively affected. The "mine builders" associated with PolyMet's "Social License to Mine" effort rail at the denial of permits to massive project such as the Pebble Mine in Alaska. PolyMet is not too big to fail and based upon the terminated FEIS has not demonstrated that it should be permitted. The fish supply in the St. Louis River and Lake Superior is every bit as important as that in the Bristol Bay in Alaska on a regional basis. The mining industry blames state and federal agencies, especially the EPA, as having an "agenda". And to counteract this agenda they state that people must be "educated to improve their perception of mining". "The NGOs (environmentalists) are trying to shut us down" is another false mantra. Influencing public opinion is the corporate answer to solving pollution problems. Their business models will fail unless they are permitted to pollute water, air and destroy natural habitat.

MICHIGAN EAGLE MINE IN FULL OPERATION FOR ONLY ONE YEAR UNLIKE CLAIMS ON MEDIA

PolyMet management apparently fooled MN Governor Dayton into thinking that the mining operation at Eagle River in the Upper Peninsula of MI was the entire project when in fact their processing plant and waste storage pits similar to those which would be permitted at Hoyt Lakes are located at the old Humboldt processing site 60 miles away in a "brownfield". Few environmental standards which would effectively protect water quality for decades would exist there. This would also be

the case at PolyMet in Hoyt Lakes, MN. The Eagle mine and processing plant have only been in full operation for about one year! Long term solutions for problems with pollution from tailings and slime have not been fully addressed. They are currently treating effluent from the tailings pond with a "clarification" plant and a series of "filters". Reverse Osmosis which has been a bedrock of PolyMet propaganda is not currently being used. Nor would it be used at PolyMet until the mining and processing were completed. A dam would be built around the old LTV tailings pond to prevent toxic effluent from escaping beyond their property lines until they were long gone. The Eagle Mine presentation at the mining conference in Duluth was done very professional but equally superficially in discussing their plan to prevent pollution of Wisconsin's Lake Superior and Lake Michigan watersheds. Large scale acid mine drainage will begin in about a decade according the MNDNR testing done on similar materials on the Iron Range. Remember the Dunka Pit? It is still discharging pollutants into the Boundary Waters Canoe Area Wilderness. I guess "A deal really isn't a deal" folks!

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PUBLIC RELATIONS BEING SUBSTITUTED FOR POLLUTION PREVENTION IN GLOBAL COPPER MINING

The current state of the PolyMet permitting effort involves applying resources toward public relations rather than continuing to improve their pollution control processes. The "Social License to Mine" is just that! It involves a

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thorough penetration of all levels of government and social activity in the region to be exploited. Current population would gain the benefits of construction and operating the mine. Future citizens of the area would pay the price in terms of cleanup and health care when the mine closes. It's called "Boom and Bust" but in this case on a terminal basis. Neither PolyMet nor any other corporation has mined copper without polluting and damaging the surrounding environment on a permanent basis. PolyMet has never mined anything. This is an "existential" conflict, not a personal conflict. *LeRoger Lind*