



March 29, 2017

Michigan House Natural Resources Committee
Lansing, MI

Re: SB 129 – Small Native Copper Mines

Dear Committee members,

The Michigan Environmental Council (MEC), a coalition of more than 65 member organizations across the state, has long been involved in the discussion surrounding the new wave of non-ferrous metallic mineral mining in the state. In 2004, MEC was involved in a stakeholder process that developed the current Part 632 nonferrous mining legislation that unanimously passed the legislature. That bill included significant protections to the environment, ensuring that a full environmental assessment was completed, addressing the issue of acid rock drainage, setting bonds at a sufficient level to cover the state's cost to fix any problems that may arise, and attempting to address perpetual care issues that face mining.

While we understand the desire to exempt some small native copper mines from the strenuous requirements of Part 632, and we thank Sen. Casperson and Rep. Kivela for their hard work on the bill, we believe that SB 129 exemptions to Part 632 still expose the state and natural resources to undue risk.

Our overarching concern, as it was in the drafting of Part 632, is the high risk of "acid mine drainage," or the generation of acid created with sulfide-based materials are exposed to air and water. We feel that SB 129 as drafted does not adequately address the risk of ARD, but this could be resolved with more careful rewording to better define the types of operations covered under the bill's proposed exemptions.

As drafted, SB 129 relies entirely on the definition of the target mineral – "native copper" defined as copper in its elemental form – to address the risk of ARD. While native copper is typically found in non-reactive (not ARD risk) basalt formations, the statute does not address the overburden materials ("OVERBURDEN LYING ABOVE NATURAL DEPOSITS OF NATIVE COPPER") that would be necessarily moved and exposed to air and water during such an operation, or the fact that some native copper can also be found in conglomerate materials which may contain ARD-generating sulfides.

According to Dr. Randall J. Schaetzl geology course text as Michigan State University, the “Deposits of native copper occur in the tops of basaltic lava flows and in conglomerates interbedded with the basalts in the Portage Lake Lava series of rocks.” These are typically the “Copper Harbor Conglomerate” which can also lie above the Nonesuch Shale, both of which can contain copper sulfides (mainly chalcocite), “with smaller amounts of native copper occur[ing] in the lower 6 meters of the Nonesuch Shale.”

Thus, while it might be the case that the majority of native copper could be mined without impacting or exposing sulfide materials in the host rock or overburden, some native copper operations may potentially do so. For this reason, we believe the language of the bill should be tightened to ensure that it only and specifically applies to specific operations that would exclusively impact non-reactive basalt formations, either in target host rock and overburden.

In this way, SB 129 severely short-cuts the required "mining, reclamation and environmental protection plan" that was central to Part 632, specifically due to the concern about ARD. Under Part 632 the mining plan required addressing the geochemistry of the ore, how the waste rock and peripheral rock was to be handled, including "characterization of leachability and reactivity." Part 632 also required provisions in the plan "for the prevention, control and monitoring of acid-forming waste products. . .so as to prevent leaching into groundwater or runoff into surface water." There was also a "contingency plan" requirement. The proposed part 634 appears to ignore the acid rock drainage risk entirely. Without this added to the bill, the last section that states that this part does not cover mining rock that has “significant leachable characteristics” will be very difficult, if not impossible to enforce.

In addition, though SB 129 leaves in place the requirement to leave the mine with no perpetual care post closure, this is insufficient when compared to other aspects of the bill. Of particular concern is the removal of requirement to do an environmental impact assessment (EIA) prior to submitting a permit application. Though the bill requires that an applicant submit a plan that looks at soil erosion and perpetual care, this is not a sufficient substitute for an EIA. An EIA looks at effects on water, habitat, endangered species, and most importantly looks at alternatives to the plan proposed. This helps lead to the most environmentally sound path forward for mines.

Additionally, the removal of a public comment period and the stripping back of local ordinances that can regulate mining activities are detrimental to the communities that these mines will be located near. Opening a permit up to public comment allows the local communities to voice their concerns and have a dialogue about the potential mine permit. The stripping back of local control of mining activities only compounds this issue. Part 632 allows locals to regulate mining hours, mining roads and institute water quality monitoring. These are all of

great importance to a local community that simply is looking to protect its citizens. Without a public comment period, we believe it is necessary for a local control provision to be added, as it will be the only way the local public has a voice in the mining operations.

Also, SB 129 changes some of the procedural requirements of mining activities in a way that does not address the risks that are associated with mining. SB 129 simply wraps too many activities into the mining permit, and does not appear to give the DEQ or locals the ability to permit or control many ancillary activities, including adding utilities roads and potentially other activities. It also limits the DEQ's right to revoke a permit if mining has not commenced. Instead of two years as required under Part 632, it adds on an additional year before revocation could occur. SB 129 also takes the burden off the mine to show that its plan "will result in a mining operation that reasonably minimizes actual or potential adverse impacts on air, water, and other natural resources and meets the requirements of this act." This is a simple measure that ensures the mine knows the plan forward and gives local residents peace of mind that their local community will not be impacted.

Finally, the bonding requirements in SB 129 are likely still insufficient to sufficiently offset the cost of reclamation if something occurs. Part 632 requires a full analysis of the full cost of reclamation, remediation and closure and then requires 75% of that in a bond. This ensures that the state will not be on the hook for massive sums for clean-up if something were to go wrong.

We urge you to oppose this bill, as it is unnecessary at this point in time. We would be open to looking at the mining issue again as part of a comprehensive stakeholder process if Part 632 is not working as intended, but at this point we cannot support SB 129.

Thank you,

A handwritten signature in cursive script that reads "Sean Hammond". The signature is written in black ink and is positioned to the left of a vertical line that extends downwards from the end of the signature.

Sean Hammond
Deputy Policy Director