

Mining Action Group

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Written Comments re: Draft Report, Committee on Michigan's Mining Future

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The Committee report is linked from:

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Introduction

The Committee on Michigan's Mining Future recently released its report, outlining strategies to promote minerals mining in Michigan. The legislative originator of this Committee, Representative Sarah Cambensy of Marquette, wanted to champion the growth of a more diversified and sustainable mining minerals industry in the state. The context is a struggle between Michigan and Minnesota for the future of US iron mining, following the indefinite idling of the Empire Mine in 2016 and technical issues with the pellets produced at the Tilden Mine, the only remaining operating iron mine in Michigan. Minnesota in contrast has six operating iron mines, and a culture that seems to accept the dominance of a mining heritage. Michigan needed a booster shot of confidence, it seemed, to strengthen its competitive position, hence the positive emphasis in this report.

Sustainable mining is a misleading label. The concept of “sustainable mining” appeared in the directive to this Committee, given in Appendix A. It is a misnomer, for there is no such thing. Sustainable means thinking generations ahead, seven in fact in Native American thought, in order to preserve a living resource. This can be a fish stock, a precious plant like wild rice, a forest that can be perpetually harvested, or an animal species whose habitat is threatened by changes in the environment and needs a rescue plan to have a future. But it cannot be a non-living mineral resource whose use by humans means its gradual depletion until there is nothing left. Nothing, that is, that can be commercially targeted and mined for widespread human use. That is why there are tipping points for these resources, with exploration going deeper and more remotely into the oceans and earth's crust. The experts know this, including those writing sections of this report on Michigan's mining future; however the modish appeal of the concept “sustainability” seems necessary to give mining a modern face.

The old face of mining was not a pretty one. As with the clearcutting of the U.P. forests that created a desolate landscape by 1920, unregulated mining sacrificed parts of the landscape for industrial purposes. We call former mining locations “brownfields” today but the storage piles, tailing ponds and industrial ruins are closer to abandoned wastelands. Contamination, especially mercury, leached into the surrounding wetlands where it remains a stubborn presence still today. These old problems of unregulated mining led to what the Committee writers call the “trust deficit”, or the gap between past behavior and contemporary expectations. Every mine today needs a social license that demonstrates that they are contributing positively to the communities around them and not harming them. The mining regulations provide the blueprint that details what this means; only a watchful public can bestow this approval that the mining companies need.

Comments by Report Section

“Executive Summary”

The report’s Executive Summary (page 3) contains a number of misleading and inaccurate statements. These include but are not necessarily limited to the following:

The Executive Summary makes the assertion that "*Practices of the past and certain high-profile incidents can give the perception that mining is a polluting industry.*" This is a vast understatement. In fact, hardrock mining releases more heavy metals and other toxic substances to the environment than any other industry in the United States. Consider the following:

- Mining in the western United States has contaminated more than 40 percent of stream reaches in western watersheds with acid mine drainage and heavy metals¹
- Former mine lands continue to cause water quality problems because they are a major source of heavy metal pollutants. Mining often requires deforestation and road construction, both of which reduce water quality due to sediment and nutrient runoff.²
- 50M gallons of polluted water pours daily from US mine sites, according to an Associated Press investigation³
- Metal mining companies dug up and dumped nearly 2 billion pounds of toxic waste into the environment in 2017⁴
- Natural weathering of the [exposed] geologic deposits, which are sought out for metal deposits, can also be a source of contamination even in the absence of mining activities.⁵
- Mining is an inherently invasive process that can cause damage to a landscape in an area much larger than the mining site itself. The effects of this damage can continue long after a mine has shut down, including the addition to greenhouse gasses, death of flora and fauna, and erosion of land and habitat.⁶

The massive amounts of pollution caused by the mining industry aren't just a "perception", they're a well-documented fact.

¹ US EPA. 2000. Liquid Assets 2000:America's Water Resources at a Turning Point.

<https://nepis.epa.gov/Exe/ZyPDF.cgi/20004GRW.PDF?Dockey=20004GRW.PDF>

² US EPA. 2003(?). Water quality credits at former mine lands: improving America's water resources, reclaiming lost landscapes. Fact sheet. <https://semspub.epa.gov/work/11/176035.pdf>

³ Brown, Matthew. February 20, 2019. 50M gallons of polluted water pours daily from US mine sites. Associated Press.

<https://apnews.com/article/sd-state-wire-nv-state-wire-north-america-mo-state-wire-in-state-wire-8158167fd9ab4cd8966e47a6dd6cbe96>

⁴ Center for Public Integrity. March 18, 2019. Companies polluted Western waters. Taxpayers are picking up the tab.

<https://publicintegrity.org/environment/companies-polluted-western-waters-taxpayers-are-picking-up-the-tab/>

⁵ US Geological Survey. 2018. Watershed contamination from metal and uranium mining.

<https://toxics.usgs.gov/investigations/mining/index.php>

⁶ Massachusetts Institute of Technology. 2016. Environmental Risks of Mining.

<https://web.mit.edu/12.000/www/m2016/finalwebsite/problems/mining.html>

The Executive Summary (page 3) states that:

“4. Responsible mining initiatives should be implemented by the industry” and that “9. Regulations for lakes, wetlands and water discharges should accommodate responsible mining practices”

There is no definition of “Responsible Mining” in the report, even though the Social, Economic and Labor Opportunity section recommends that there be one (page 11). If the state (and therefore the public) is going to be expected to hand over Michigan’s lakes, wetlands, waterways and groundwater resources for use by the mining industry for so-called “responsible mining”, at least we should know exactly what “responsible mining” is. The committee and the industry might begin to move in the direction of truly responsible mining by using the Initiative for Responsible Mining Assurance (IRMA) standards: <https://responsiblemining.net/> .

The Executive Summary also states that: *“Mine planning and permitting should be coordinated among agencies and interest groups to the extent possible. Evaluation of cultural resources, alternatives analysis, and mine waste disposal should be considered for all types of mining operations.”*

Alternatives analysis should include consideration of alternatives suggested by the public during public comment periods, and include a mandatory “no action” alternative where a proposed mine would not be constructed. Also, the economic and environmental costs caused by proposed mining projects should be weighed against the purported benefits, before new mining projects are allowed to go forward.

“Definitions”

The definition for “climate change” includes the following statement (page 4): *“Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use”*

Large volcanic eruptions that eject massive amounts of volcanic dust into the upper atmosphere do cool the atmosphere, but only for a few years. That’s not “climate change”. And the idea that sunspot activity has significantly changed in recent years or that sunspots are having a significant role in altering the climate has been discredited by a large body of scientific research. The science is in. There is no remaining doubt that climate change is caused almost entirely by human activities, primarily the burning of carbon extracted from the ground and the release of the resulting CO₂ into the atmosphere.

The International Panel on Climate Change (IPCC) recently released the first part of its sixth assessment report (designated AR6) on the current state of the world’s climate. In its Summary for Policymakers, the first section (A. The Current State of the Climate) leads off with the following key statement: ***“A.1 It is unequivocal that human influence has warmed the***

atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.⁷ It also states that ***“A.3 Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heat waves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since AR5.”*** Under the key statements are supporting statements and research which include such observed facts as:

A.1.1 Observed increases in well-mixed greenhouse gas (GHG) concentrations since around 1750 are unequivocally caused by human activities.

A.1.2. Each of the last four decades has been successively warmer than any decade that preceded it since 1850.

A.1.5. Human influence is very likely the main driver of the global retreat of glaciers since the 1990s and the decrease in Arctic sea ice area between 1979–1988 and 2010–2019 (about 40% in September and about 10% in March).

A.1.6. It is virtually certain that the global upper ocean (0–700 m) has warmed since the 1970s and extremely likely that human influence is the main driver. It is virtually certain that human-caused CO₂ emissions are the main driver of current global acidification of the surface open ocean.

A.1.7. Global mean sea level increased by 0.20 [0.15 to 0.25] m between 1901 and 2018.....Human influence was very likely the main driver of these increases since at least 1971.

A.1.8. Changes in the land biosphere since 1970 are consistent with global warming: climate zones have shifted poleward in both hemispheres, and the growing season has on average lengthened by up to two days per decade since the 1950s in the Northern Hemisphere extratropics (high confidence).

Each of these statements is backed up by numerous charts, supporting information and references to peer-reviewed scientific literature.

There is no significant remaining doubt that the climate change we are seeing today is caused by human activities, mainly the extraction and burning of fossil fuels. The definition for “climate change” should clearly state this fact. This would also make the definition consistent with the generally reasonably accurate statements relating to climate change in the rest of the report.

⁷ IPCC. 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J. B. R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. In Press.

“Social, Economic and Labor Opportunities”

The report repeatedly mentions the need to “educate” the public on the benefits of mining and minerals. Unfortunately corporations have often purposely kept the costs and damages caused by the production and use of various products hidden from the public, especially when they are produced using unethical practices⁸ This keeps the public in the dark, and prevents consumers who would like to be environmentally and socially conscious to make informed choices. It also prevents voters from choosing candidates and supporting regulatory policies that will improve corporate behavior. To be fair and unbiased the state must provide accurate and complete information on both the short-term and the long-term the risks and costs of mining, not just the (generally short-term) benefits.

The report (page 10) admits there are economic drawbacks to mining, where it states that “*The Committee recommends State of Michigan review opportunities to improve the unemployment benefit amount and duration for laid-off miners due to the cyclical nature of mining. Historic and long-life mining operations throughout the Midwest and Michigan experience production interruptions caused by fluctuations in global supply and demand of mineral resources.*” The report goes on to refer to the mining industry as a “boom and bust” industry, and states that periodic downturns in the industry “....creates job loss, increased unemployment filings and has a negative impact on the economy within the surrounding communities.”

This is followed by suggestion “to have employers within the mining industry, and other industries with a similar cyclical nature, pay their unemployment insurance taxes into an independent account, which could result in an increased benefit amount that has a higher rate than the current state benefit amount and for a longer duration.” It goes on to state that “The current Michigan maximum unemployment benefit amount of \$362/week and length of 20 weeks is often not enough to allow miners to bridge the downturn periods.” This brings up some obvious questions, like why would an independent account be expected to provide increased benefits over the current state benefit amount? This statement is pure assumption. And if the current maximum unemployment benefit is not enough for miners to bridge downturns, wouldn't it also be inadequate for non-miners who find themselves unemployed as well? After all, there are state standards to qualify for unemployment benefits that apply to everyone. Why should unemployed miners be treated any differently than unemployed non-miners?

Ironically at the top of the very next page the question is asked, “How does the mining industry move away from being treated differently than other industries?” Predictably this question refers to mining regulations which the companies often oppose, not subsidies the state would give the industry and that the industry would be happy to accept.

On page 12 the report discusses royalty and severance tax payments. Unfortunately the fact that the state relies on the companies doing the mining to report the amount of ore removed from a mine each year isn't addressed. Section 5 of Michigan's Act 410 of 2012 specifies that

⁸ Massachusetts Institute of Technology. 2016. Public awareness. Mission 2016: The future of strategic natural resources. <https://web.mit.edu/12.000/www/m2016/finalwebsite/problems/awareness.html>

*“Each year, a taxpayer shall prepare and submit to the department and to the local tax collecting unit a report in the time, form, and manner required by the department, showing the total amount of minerals sold, transferred, or benefited during the preceding year, the taxable mineral value of the minerals sold, transferred, or benefited, and any other information required by the department for valuation purposes.”*⁹ Thus the mining companies end up self-reporting the amount of tax they owe, with no real way for the state to verify if the information is accurate.

It seems like there must be a better way for the state to keep track of the value of minerals removed from a mine and sold in a given year, and the amount of tax owed to the state. Perhaps the companies should be required to provide verification of each mine’s mineral sales in the form of receipts from buyers, so that the amounts can be independently verified. This should of course include any proceeds from rare earth elements and minerals that may be removed incidental to the extraction of the mine’s target materials.

The Michigan DNR has a built-in conflict of interest in the property leasing business, as the Department receives significant revenues from leasing and royalties. In order to be able to adequately and effectively oversee and regulate these often well-financed and potentially destructive extractive industries (and carry out the other duties as well) the DNR should receive adequate and stable funding that is independent of the amount of royalties the state receives from these industries.

“Research and Mineral Mapping”

According to their website, the Michigan Geological Survey “...*facilitates basic and applied geological research to promote the best use of Michigan’s geological resources for their social and economic benefits while protecting associated resource values and the environment.*”¹⁰ (Emphasis added.)

Regardless of where economically valuable minerals are found, the first priority should be to protect the environment. Mapping of mineral resources needs to be accompanied by regulations that adequately protect the environment from mineral exploration and mining. Areas that are inappropriate for mining (including lakes, rivers, streams, national and state parks and lakeshores, forests, and natural areas, and other sensitive natural habitats) should be off-limits, whether valuable mineral deposits underlie them or not. (Maybe one should also include cities and towns here, as it’s not at all clear that these areas are exempt from mining under Michigan law either.) The economic value of mineral deposits must not continue to be the dominant criteria that decides whether an area is leased for mineral exploration or approved for mining.

⁹ Michigan Legislature. 2021. Nonferrous Metallic Minerals Extraction Severance Tax Act. Act 410 of 2012. [http://www.legislature.mi.gov/\(S\(kuumtpprowyzwyicdau441j\)\)/documents/mcl/pdf/mcl-act-410-of-2012.pdf](http://www.legislature.mi.gov/(S(kuumtpprowyzwyicdau441j))/documents/mcl/pdf/mcl-act-410-of-2012.pdf)

¹⁰Michigan Geological Survey. 2021. Website. <https://wmich.edu/geologysurvey/about>

“Mining Methods, Environment and Reclamation”

The front end of mining - stripping overburden, digging an open pit, laying out an industrial site - is messy and destructive. How about the back end, which some refer to as a “philosophy of reclamation”? What happens to the land during and after mining? The Committee report touts the Republic Mine’s wetlands preserve and tree planting at the Empire Mine, as well as attempts to find beneficial uses for tailings material and ponds. It does not mention the destruction of natural lakes, forests, waterways, and surface landforms that took thousands of years to evolve. In mining you never get back what you started with, but rather a repurposing that is a mitigation for the loss of the original landscape. In the Mineland Vision Partnership in Minnesota, the task since the 1990s has been to shape evolving landscapes for a future of mining; you can beautify stockpiles, build mine overlooks, create recreational trails, but not suggest that you want a future with less mining.

Alternatives analysis is a useful tool to apply not just to mining but to societal planning for the U.P.’s future. Lay out three or four options, from Status Quo (No Action), to A, B, and C. This is common practice in state permitting decisions, as well as federal agencies. It was applied to the transportation haul road for Eagle Mine, for example, and helped lead to the decision not to build the most direct route from mine to mill due to unnecessary environmental burdens. Non-ferrous mines like Eagle Mine are bound by more recent permitting laws to use alternatives analysis, but this practice is not common in iron mining. Why not? It would illuminate the consequences of actions and introduce more flexible planning. Are these not desirable outcomes?

Another useful tool is cumulative impact, which the Report cites but does not utilize, claiming that detailed analysis was outside the scope of the Report (p. 19). Yet it is noted as one of three overarching issues that figured in all subcommittee discussions, the other two being climate change and tribal treaties and rights. Addressing cumulative impact creates a deep record of changes, not just the latest act in a long series of actions. This puts the mining discussion right where it should be: amidst the pressing historical issues of our time. How do these issues - the Sixth Extinction, the international 30 by 30 plan (30 percent of land protected by 2030), the 2500 acres lost to development every day in the USA - figure into our thinking on whether we need a new mine, or a reworking of a brownfield, or the repurposing of reclaimed land, or no mine at all?

The report states that “*The Mining Methods Subcommittee also explored alternative land uses that merit further exploration. These included new energy development (renewable or otherwise), pumped storage hydropower within mine workings, or use of mine water discharge for turbines and brownfield development*” (page 21). The climate crisis that we are currently experiencing can only be addressed by switching to a zero-carbon energy system as rapidly as possible. This precludes new non-renewable energy development. Only truly renewable energy sources such as solar and wind should be considered for these degraded lands.

The Mining Methods section relates the following rather startling information (page 21):

“Michigan Technological University is studying opportunities to generate electricity by using old mine shafts. Water is gravity fed into the mine shaft that is dropped through a series of turbines. The water is returned to the top of the shaft by using a low voltage pump, creating a loop of continuous electrical generation.” There must be more to this project. This description sounds like yet another version of a long-wished for perpetual motion machine, a concept that violates the first and second laws of thermodynamics.¹¹

Page 21 also reports that: *“In Marquette County, Mich., Savion LLC is pursuing development of the Superior Solar Project. Cleveland-Cliffs (CCI) is helping facilitate this project by entering into an agreement for an option to lease acreage for the proposed solar farm.”*

This statement is highly misleading. It suggests that this solar farm would be built on degraded land that has already been heavily altered by mining activity. In reality this project would result in the destruction of 1500 acres (2.3 square miles) of natural forest. This land was once part of the “Escanaba River State Forest”, owned and managed by the State of Michigan. During the public comment period for this project it became clear that this land is frequently used by local residents for hunting, hiking and other recreational activities, and that there was a significant amount of local concern with and opposition to this project.

UPEC submitted public comments on this proposed solar farm. The following is excerpted from UPEC’s “Public Comments to the Sands Township Planning Commission”, submitted during the Sands Township Planning Commission public hearing, held on December 15, 2020:

In 1974, CCI proposed an enormous land exchange with the State of Michigan, offering lands north of the City of Marquette in exchange for lands in the interior of Marquette County, adjacent to their iron mining and milling facilities. CCI planned to explore these lands for additional mineral resources and tailings storage. The acquisition of these lands was followed by the construction of Gribben Tailings Basin (formerly Gribben Lake), an industrial “waste treatment facility” so large it can be seen by astronauts on the Space Station.

*As the land exchange was under consideration, the public voiced serious concerns about the environmental impacts of Cleveland Cliff’s expanding footprint, and the potential loss of recreational access to public forest lands. In response, the State of Michigan held several public meetings, and in response to public comments developed “safeguard provisions” including one ensuring public recreational access. The binding land exchange agreement between CCI and the State of Michigan includes a list of conditions agreed to by both parties: reimbursement for the state’s costs for a hydrological study, setback zones from main river courses, provisions for a water management supply plan, an archaeological study, and other requirements - **and a key agreement was that the land was to remain open to the public:***

¹¹ Szalay, Jessie. August 30, 2016. Perpetual Motion Machines: Working Against Physical Laws. Live Science. <https://www.livescience.com/55944-perpetual-motion-machines.html>

Lane Exchange Agreement:

A binding agreement in recordable form will supplement this exchange transaction, under which both parties stipulate and agree (see tabbed pages of Commissioner's notebook) to certain conditions briefly outlined as follow:

1. Water Management Supply Plan: To be submitted to and approved by Director prior to new mining development requiring additional water.
2. Agreement on a Hydrological Study: Applicant to reimburse DNR for state costs of a study by U. S. Geological Survey on Sand Plains area of Marquette County. Details of methodology and reporting, etc.
3. Agreement on Setback Zones from Principle River Courses: Minimum setback of at least 300 feet between the toe of any tailings basin dike and the edges of the Middle Branch of the Escanaba River, East Branch of the Escanaba River, Goose Lake outlet below Section 36, T 47 N, R 26 W and Green Creek east of Highway M-35.
4. Agreement on Recreational Use: It is agreed that the Company, its successors or assigns, shall permit free recreational use of land received from the State in this exchange unless such lands are required to support active mining operations or are restricted for safety reasons.

Ultimately Cleveland Cliffs received 8,931 acres in the land exchange; the State of Michigan received 2,810 acres. But the "Agreement on Recreational Use" meant that the public was guaranteed "free recreational use of the land (CCI) received from the State in this exchange" – unless the land was used for mining operations. The value of the "Public Use Reservation" was figured into the summary appraisal of lands included in the final land exchange agreement, estimated at \$216,000 in 1979.

All of this information is summarized in the Michigan DNR Natural Resources Commission's final agreement re: Land Exchange 33328-X between Cleveland Cliffs Iron Co. and Michigan DNR. See:

Michigan DNR NRC Meeting, March 1979

https://michiganology.org/uncategorized/IO_c21dbd32-f1f5-4b5b-85e1-2104362c81e5/

Michigan DNR NRC Meeting, November 1979 - Land Exchange Final Agreement

https://michiganology.org/uncategorized/IO_53aeb3fc-9ee4-4281-88fc-dde54f7d2349/

Plans by Savion LLC to destroy 2.3 square miles of biologically diverse, carbon- sequestering forest for a solar farm are not appropriate or acceptable, especially when there is so much open,

degraded former mining land nearby. CCI is not doing the state's residents a favor by leasing the company these forested lands.

“Regulatory Policy”

The “Regulatory Policy” part of the report relies heavily on a survey by the Fraser Institute of Vancouver, Canada. On page 28 the report describes the Fraser Institute as “... a Canadian think tank that conducts research on a variety of issues.” This glosses over the fact that the Fraser Institute is heavily funded and influenced by extractive industry. Major funders in recent years have included Charles Koch and his late brother David, along with Exxon Mobil, the Bradley Foundation, and the Scaife Foundation.¹² The institute has close ties to the right-wing American Legislative Exchange Council (ALEC) and the State Policy Network (a network of right-wing “think tanks”), with members in all 50 states. Their policy positions lean heavily towards climate change denial, denial of established science, privatization of public lands and assets, and other far-right policy positions.

The Fraser institute’s “mining climate” survey cited by the report ranks various regions' favorability towards mining based on a combination of 1. “geologic attractiveness” and 2. “government policy on attitudes toward exploration investment.” They base the second criteria (their Policy Perception Index) on factors such as “onerous regulations, taxation levels, the quality of infrastructure, and the other policy-related questions.”¹³ Therefore a high PPI ranking results from weak or nonexistent health, safety and environmental regulations, low or no taxes and royalties, good publicly-financed and maintained infrastructure, and a hands-off regulatory approach that basically lets these companies do what they wish regardless of the adverse consequences. These policies are undoubtedly beneficial to the bottom lines of the mining companies and their investors, but are generally not at all beneficial to the public or the state.

The Regulatory Policy section of the report should include areas, habitats and landscapes within the state where mining is NOT allowed (if there are any). Currently the DNR does not follow its own rules on what lands should be withdrawn from mineral leasing. For example, in 2019 the Michigan DNR leased mineral rights under Haystack Mountain in Duncan Township, Houghton County (T47N, R36W, NW NE Section 16) to Eagle Mine LLC, despite the parcel having a recommended lease classification of “nondevelopment”.

The Regulatory Policy section makes the recommendation (page 30) that “*Michigan should review its regulations under Parts 301 and 303 and determine whether an exception should be made to allow for subsequent development of lakes and wetlands created by mining operations without prohibitive additional permitting requirements.*”

¹² Sourcewatch. 2021. Fraser Institute. Published by the Center for Media and Democracy. https://www.sourcewatch.org/index.php/Fraser_Institute .

¹³ Stedman, A., J. Unis, and E. Aliakbari. 2019. Fraser Institute annual survey of mining companies 2019. <https://www.fraserinstitute.org/sites/default/files/annual-survey-of-mining-companies-2019.pdf>

Any consideration of subsequent development of lakes and wetlands resulting solely from mining activities must take into account pollution (waste oil, PCBs, etc.) from mining operations, as well as acid mine drainage and heavy metals contamination caused by leachate from exposed rock. Otherwise these pollutants will invariably continue to leach into the surrounding environment.

The report states that, “*Michigan regulations in general are balanced, reasonable and effective.*” (page 32). This is false. Clear evidence that Michigan regulations are not “balanced, reasonable and effective” comes from the simple fact that Michigan’s current mining regulations do not specifically prohibit mining anywhere in the state. That includes lake bottoms, public lands, ecologically sensitive lands, lands set aside for recreation, lands close to homes, schools, etc. and virtually any other lands in the state.

Page 32 states that, “*Some interest groups believe that EGLE (the Department of Environmental Quality at the time) has not interpreted Part 632 correctly; however, Michigan courts have repeatedly upheld the agency’s decisions.*” There haven’t been that many legal cases brought to court, in large part because of the procedural difficulties in bringing these cases in Michigan. Nonetheless a disputed Wetlands Permit for Aquila Resources’ Back Forty sulfide mine was recently denied by a Michigan Administrative Law Judge, concluding a two year review of the contested case. The Michigan Department of Environmental Quality (now the Department of Environment, Great Lakes, and Energy) sparked controversy when it approved Aquila’s Wetlands Permit in 2018, over the objections of regulatory staff who were prepared to deny the permit.

The permit was contested by multiple petitioners, including an adjacent landowner, the Menominee Indian Tribe of Wisconsin, represented by Earthjustice attorneys, and the grassroots Coalition to SAVE the Menominee River. According to Earthjustice attorney Janette Brimmer, Aquila “refused to provide all of the information the state needed to determine the full environmental impacts the mine will have on the Menominee River and the surrounding area.”

Section 324.63202(c) of Act 451 of 1994 requires that while recognizing the potential economic significance of sulfide mining to Michigan’s economy, the statute states that sulfide mining “shall occur only under conditions that assure that the environment, natural resources, and public health and welfare are adequately protected.”¹⁴ This provision seems to be consistently ignored when it comes to the states’ granting of mining, wastewater discharge and other permits.

Page 32 of the Regulatory Policy section recommends that “*Michigan state agencies should continue to adhere to the provisions of the 2002 Government-to-Government Accord and Executive Directive 2019-17 and should consider the concerns of potentially affected Indian tribes in regulation of mining operations.*”

¹⁴ [http://www.legislature.mi.gov/\(S\(xoargrwy1d2qblbddah1c3tv\)\)/mileg.aspx?page=getobject&objectName=mcl-324-63202](http://www.legislature.mi.gov/(S(xoargrwy1d2qblbddah1c3tv))/mileg.aspx?page=getobject&objectName=mcl-324-63202)

Concerns of Native American Tribes should not just be considered but taken seriously. Too often these projects are rammed through with minimal and inadequate tribal consultation, and the concerns expressed by the tribes are too often ignored.

This section also recommends that *“Identification of known or potential impacts on cultural resources should be a part of planning mining projects and must be incorporated in the mining permit application review process where it is provided for in regulations. This is an issue that encompasses much more than mining operations. Michigan should evaluate ways to incorporate evaluation of impacts on cultural resources for mining as well as other major projects that alter the landscape.”*

This recommendation is inadequate as written. We fully agree that cultural resource impacts should be evaluated and that major impacts on cultural resources and other landscape-level alterations should be evaluated. In order to protect these resources there must be protections written into the law though. Michigan’s laws are inadequate to protect these cultural resources. Perhaps the most obvious example of this is that because the State of Michigan has delegated wetland destruction authority under the federal Clean Water Act, the National Historic Preservation Act (NHPA) is somehow deemed to not apply to tribal cultural resources in Michigan. At a minimum the state should pass legislation that upholds the provisions of the NHPA within the state.

Another recommendation is that *“Michigan should review its mining regulations to assure they incorporate appropriate standards and protections for above ground tailings disposal facilities”*

This makes sense. As anyone following this issue is aware, upstream tailings dams have failed spectacularly in recent years, leading to major disasters at the Mount Polley mine in British Columbia, Canada in 2014, the Samarco mine in Brazil in 2015, and the Vale mine in Brazil in 2019, and elsewhere. These are just the latest in a series of tailings dam failures over the last 100+ years.¹⁵ These types of dams are inherently prone to failure and should be banned in Michigan, as they have been in Brazil and several other countries.

Wisconsin Resources Protection Council Director Al Gedicks has submitted detailed comments to the Committee on the risks posed by tailings dams. UPEC fully endorses his comments.

Page 39 recommends that *“Michigan should amend Act 163 of 1911, Copper and Iron Mine Inspectors, to:(1) Make it apply to counties where any metallic mineral mine is located (2) Allow a mine inspector to serve in multiple counties when necessary (3) Reduce the experience needed for mine inspector in a county with no active mines. Michigan should consider additional amendments to clarify applicability of the Act, particularly with respect to closed mines that may be used for other purposes and to address potential liability issues.”*

¹⁵ Azam, Shahid and Qiren Li. December 2010. Tailings dam failures: A review of the last one hundred years. Geotechnical News 28(4): 50-53.
<https://ksmproject.com/wp-content/uploads/2017/08/Tailings-Dam-Failures-Last-100-years-Azam2010.pdf>

We believe that safety should be the primary job of mining inspectors. If the recommendations in this section would be implemented, workloads of mining inspectors need to be commensurate with the time needed to perform inspections and enforce violations. The state should require certification of inspectors with periodic education requirements. Given the shortage of qualified people to fill these positions, it seems likely that the state may need to step in and provide some sort of training program to train new inspectors. If so funding for these programs should be financed by mandatory fees levied on the mining industry.

Page 39 of the report states that *“Michigan should engage all stakeholders in considering actions to address challenges of identifying mineral rights for property owners and mining interests. Actions could include strengthening of property transaction recording requirements, stipulating that severed mineral rights revert to the surface owner after a specific period and improving access to county property records.”*

These would all be improvements over the current haphazard, inaccurate and incomplete system. One of us has observed that realtors often downplay the lack of attached mineral rights to potential buyers of surface land, and fail to mention that state statutes allow seizure of subsurface mineral rights under their properties. Restoration of severed mineral rights to surface owners provides certainty against future statutory seizure. State needs to fund an accurate property records system and provide free or nominally-priced access to records.

Page 45 recommends that *“10. Long-term land use decisions should consider what level of reclamation activity is appropriate”* Of course reclamation plans must also meet federal and state standards. This includes adherence to the Clean Water Act, the National Environmental Policy Act, the Safe Drinking Water Act, the Endangered Species Act, and other federal, state, and local laws.

General Comments

As stated in the excerpt from Act 47 of 2019 in Appendix A of the report, the Committee was appointed to promote the expansion and growth of the mining industry in Michigan. It's unfortunate that the Committee wasn't charged with evaluating whether and to what degree expansion and indefinite growth of the mining industry in Michigan is desirable or beneficial. Such a committee could have worked to objectively evaluate and compare the costs of various mining proposals as compared to the benefits, and develop methods to evaluate whether the benefits of mining proposals outweigh the costs.

In order for society to use minerals efficiently and responsibly, recycling of metals must be a part of the discussion. However, the word “recycling” appears only once in the report, in reference to water recycling. Under Appendix B the report mentions the continued increase in *“...production of steel in electric arc furnaces (which do not utilize taconite pellet feedstock)”*, but only in the context of these furnaces competing with taconite pellets produced in Michigan. Though the Committee must surely be aware of this, the report doesn't mention that these furnaces generally use scrap steel as their primary feedstock.

The report goes on to state that, *“The research needed to improve pellet grades will largely be supported by industry, but industry should be able to contract and use available university laboratories and subject matter experts.”*

Recycling of steel and other metals is far less energy-intensive and environmentally destructive than mining raw materials and processing them to extract these metals. Instead of trying to find ways to help the iron mining industry compete with steel scrap feedstock, the state should encourage and promote scrap steel collection, recycling and reprocessing in Michigan. The same is true for copper, nickel, tin and other metals. The report repeatedly mentions how various minerals are required for a “sustainable” energy future, but the fact that recycling rates for metals and other mined materials are relatively low in Michigan is ignored. Collecting the rusting old cars, abandoned sheet metal, abandoned farm equipment, steel culverts left in the woods, and various other discarded scrap metal left on the landscape or hauled to the landfill could qualify as a form of mining too, and could provide a significant amount of ferrous and other metals.

Thank you for your consideration of our comments, questions and requests.

Signed,

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