

COMMITTEE ON MICHIGAN'S MINING FUTURE

Constitution Hall, Lansing
January 7, 2020 – 10:00 a.m.

DRAFT MEETING MINUTES

ROLL CALL

Commission Members and Affiliation

Richard Becker (Aggregates)	Present
Snehamoy Chatterjee (Research Faculty)	Present
Timothy Eisele (Rep. Cambensy)	Present
Harold Fitch (Sen. McBroom)	Present
Sean Hammond (Environmental Nonprofits)	Present
Matthew Johnson (Metallic Nonferrous)	Present
Stephen Kesler (Research Faculty)	Present
James Kochevar (Ferrous Mining)	Present
Chad Korpi (Ferrous Mining Unions)	Present
Jerome Maynard (Environmental Nonprofit)	Present
Deborah Pellow (Municipality Affected by Mining)	Absent
Evelyn Ravindran (Native Americans)	Present

State Agency Members

Liesl Eichler Clark (EGLE)	Present
Adam Wygant (EGLE)	Present
Dan Eichinger (DNR)	Present
Sharon Schafer (DNR)	Present
Amanda Bright-McClanahan (MEDC)	Present
Susan Bishop (EGLE)	Present

Others Present: Ania Ediger – Cleveland Cliffs, Representative Sara Cambensy, Mary Wardell – Aid to Representative Sara Cambensy

The meeting began with introductions of all members in attendance. All members were provided with a copy of the following: agenda, House Bill 4227, the Open Meetings Act Handbook, Overview of the Open Meetings Act (OMA), MCL 15.26 *et. seq.*, Michigan's Mining Future Committee Act 47 of 2019, Draft Committee on Michigan's Mining Future Governance Procedures, and the Governor's Committee on Minnesota's Mining Future.

The purpose of the committee was reviewed by Liesel Clark. The goals are to make recommendations on supporting research, development, and exploration to maintain economic viability of the mining industry, while also protecting the environment.

Introduction by Representative Cambensy that the bill to create the committee was initiated by the idling of the Empire mine, resulting in hundreds of layoffs and transfer of mining activity and employment in the iron industry to Minnesota. She raised the

question of why Minnesota is more successful than Michigan in maintaining a viable mining industry. Minnesota had formed a committee to produce a long-term plan in 2004; copies of this plan were provided. A similar plan would be of great value to Michigan, but we need to make sure that the plan addresses the particular issues within the state.

Since mining, particularly of iron and nonferrous metals, is labor, capital, and time-intensive, a long-term strategy is needed in order for companies to successfully do business in the state. Some particular issues include:

- Will Direct Reduced Iron (DRI) from Michigan compete with DRI sources?
- Research is needed to keep industry competitive; how will this be supported?
- Concerns about “Not in my backyard” vs. how will we obtain raw materials?

Summary of meeting agenda by Adam Wygant

- Administrative – elect chair, vice-chair, and recording secretary.
- Tim Eisele nominated Adam Wygant as chair; it was seconded by Jim Kochevar and approved unanimously.
- Hal Fitch nominated Matt Johnson as Vice-Chair; it was seconded by Jerry Maynard and approved unanimously.
- Tim Eisele nominated himself as recording secretary; it was approved unanimously.

The decision was made to delay discussion of the Open Meetings Act until the end of the meeting as several attendees needed to leave around 11:00 a.m. and wanted to be present for the initial substantive discussions by the committee.

Basic model for the committee – how much can we learn from Minnesota? Keep in mind that Michigan has no established fund for mining support.

EGLE has no interest in taking sides specifically favoring industry or environment; they want to see all concerns addressed. They will need to take into account protected sites, contaminated sites, zoning, land ownership, and similar concerns.

Beneficial uses of former mine sites are desirable, but there is no structure in place for this at the moment. The mine inspector law is seriously antiquated and can't really deal with converting mines to non-mining applications like pharmaceuticals, energy, or controlled temperature storage. Also, they do not have policies in place for reprocessing tailings and other mining wastes.

MEDC perspective – there is interest in working with industries of all types to develop new technologies, and they want to involve their existing network of members in helping to make mining environmentally sound and economically viable. It is proposed that MEDC make a presentation at a future meeting describing what they have done and can do in the future.

Jim Kochevar noted that Minnesota does have policies in place for beneficial re-use of mine sites and mining wastes. He noted that pumped-storage hydroelectricity in old mine workings could have potential. We need to not only maintain the existing mining operations (which will eventually be depleted in any case), but also encourage expansions and moving into new mining areas.

Richard Becker notes that it is much easier to expand an existing aggregates operation than to start a new greenfield site. This is complicated by the decreasing size of land parcels, and by the short-term permits and leases being provided by many townships.

From an environmental point of view, it is critical that throughout the process we maintain public trust. It was noted the Eagle mine is a good example of a company that puts maintaining trust and protecting the environment as a high priority. In any new or expansion projects, the public must be brought in early and a relationship built with them so that there are no surprises.

Recycling is closely related to mining. Jim Kochevar raised the point that iron and steel has a high recycling rate. If the iron mines are to have a market, there needs to be a healthy economy so that the absolute amount of steel in use is increasing. Even when economy has been good, the utilization of blast furnaces in the United States has been in the 80 percent range due to imported steel volumes.

The structure of the steel industry is changing. Only 32 percent of US steel was made from blast furnace production last year, down from 60 percent several years ago. This is mainly due to the minimills greatly improving their product quality through better scrap sorting, and the use of clean iron from direct-reduction iron (DRI) plants and other sources. Since blast furnaces are the main user of iron pellets from Michigan, Cliffs has devoted effort towards making feedstocks for direct reduction so that they can feed the minimill market. With the availability of good quality iron, and existing infrastructure, Michigan has potential for DRI expansion, and needs to keep up with changes in the industry.

Liesel Clark has visited electric-arc furnaces (EAF) and DRI furnace facilities and wants to know if blast furnaces can melt a significant amount of scrap steel. These facilities do use approximately 15 percent recycled scrap, but the bulk of the feed for blast furnaces is still pellets. Cliffs had considered converting Empire to make DRI feed, but ultimately switched to using Northshore for this, with Tilden pellets being used to fill the conventional pellet markets formerly served by Northshore.

Dan Eichinger stated that the Michigan Department of Natural Resources is interested in developing extraction industries across the state, and that he is interested in learning more about what can be done and where the needs lie.

Stephen Kesler noted that we need to consider both short-term and long-term goals. While existing companies need to stay viable day to day, we also need to remember that even 500 years from now we will still be needing raw materials. It is also important

that we keep track of where resources are now, so that current development does not preclude the extraction of those resources later when we need them. Some aggregate plants are already in a position where they need to remove houses in order to reach the deposits underneath them.

Sean Hammond and Evelyn Ravindran noted that long-term planning needs to include the recognition that resources are finite, will be depleted eventually, and how to deal with it. There needs to be a recognition of that and industries planning to wean off mining. Recycling is a necessary part of any long-term plan. Evelyn also noted that natural resources are cultural resources, and we need to make sure that non-renewable resources are preserved to some extent and that renewable resources continue to provide a clean environment, more environmental protections, cleanups, and beneficial reuse of wastes such as stamp sands.

A large issue is the lack of information in general. Much of the state has been insufficiently mapped and drilled to determine the presence of useful deposits. Tailing piles are generally not well characterized, and so it is not often clear what they might be useful for.

Producers of dimension stone, gypsum, sand, limestone, dolomite, and salt are not well represented on the committee, although these are all clearly mining activities. There is also considerable solution mining for various salts in the state, and they have many of the same concerns.

The United States Geological Survey is starting to show more interest in prospecting and mining with the recent concerns over rare earth metals. The Federal government does not otherwise show much interest in promoting mining since the elimination of the Bureau of Mines in 1996. What support does exist, focuses on energy sources like oil, gas, and coal and not on metals or industrial minerals.

Representative Cambensy noted that Minnesota provides state funds for university research as an investment in future mining activities, and she personally favors Michigan doing something to support research as well.

Snehamoy Chatterjee notes that, in the current environment, funding for university research requires de-emphasizing mining aspects to get support from non-mining funding sources like NASA or NSF. If the state does not directly fund mining-related research, then there is no support available other than corporate funding. Corporate-funded research has its own issues, including intellectual property and competitive concerns, and long-term versus short-term results. Stephen Kesler concurs, and says that the amount of funding need not be large, it just needs to be consistent and targeted.

There was mention of some previous efforts to support mining during the Snyder administration, which ultimately did not lead to much.

The Michigan Geological Survey does exist at Western Michigan University. It is mostly working with aggregate and sedimentary deposits, and trying to map more of the geology of the state. They are also struggling with funding.

Assets for mining and exploration include

- Michigan Geological Repository for Research and Education – Library of core samples at WMU.
- Oil, Gas, and Mineral's Northern Michigan Core Repository – Library of Upper Peninsula core samples at KI Sawyer.
- Mining and mineral processing research facilities at Michigan Technological University.

Representative Cambensy says that Michigan has a particular issue with our tax structure. Minnesota has specific mining taxes that are earmarked for mining research and development. Matt Johnson said that a lot of where taxes and royalties go in Michigan is constitutionally mandated. While a considerable amount of tax and royalties are collected, to the extent that even 1 percent of the funds would be extremely useful, they are currently all dedicated by the state constitution to the state park endowment funds. The second endowment fund is expected to be filled by 2050, but even then, there is a current proposal to create a third endowment fund to continue collecting all of the mining taxes and royalties.

It would be beneficial to improve public awareness of where state park trust fund money comes from and goes to, and how some of it might be used for other things that would in the long run benefit the state and the endowment funds.

There was a discussion of where a website promoting mining in Michigan would be hosted. One possibility is for MEDC to host it, since they have experience with similar things. They could also sponsor booths at industry meetings or partner with development organizations in the upper peninsula.

MEDC and EGLE are already working with the Materials Marketplace, which is attempting to match sources of materials with potential users. Materials include waste minerals, slags, sludges, metals, recycled sand, and other mining-relevant materials, as well as a host of other recyclable materials. Their big issue is making the connection between people who have material to be recycled, and people who want to sell recycled material, but there is a shortage of anyone in between to actually turn recovered material into something useful. The current contribution of MEDC is mainly just hosting the website.

A “wholistic solid waste management” law was mentioned as being in the works.

Chad Korpi noted a big concern is maintaining employment in rural areas. When Empire closed, 350 workers were laid off. Many went to Minnesota, Wisconsin, or further, and are no longer participating in the Michigan economy. Unemployment

benefits are small enough that workers will not wait around for a local mining-related job, which makes it difficult to later find skilled workers for new projects.

Eagle Mine and Cliffs both need enough engineers, many of which they hire from Michigan Tech. Eagle did hire some of the people laid off from Empire and has continuous transfer back and forth with Cliffs. Cliffs has been re-hiring almost exclusively from their lay-off pool, but eventually there will be none remaining.

Eagle Mine is particularly aware that they are a short-term mine with a small, well-demarcated ore body. They have been continually offering supplemental education and retraining so that their employees will be able to quickly move to other jobs once the mine is exhausted. If Michigan mining companies are not ready to hire them when that time comes, they will simply leave the state.

Eagle Mine also consistently monitors how much money they spend and where and are issuing a report on exactly how much money from them goes into the local community in the form of purchases, wages, and taxes/fees. This report will be available to the committee later this year. It is mainly intended to alert the community of the size of the economic gap that will exist when Eagle Mine closes down.

The Michigan Department of Agriculture and Rural Development (MDARD) receives some funds from mine taxes. There is some question whether this money is spent appropriately. This could potentially be a source of funds for supporting mining research and exploration.

The question of funding is a big one. Any committee recommendations that require expenditure of state funds will run into the issue that current taxes/royalties are mostly tied up, and adding new taxes will be extremely unpopular with the legislature.

Possibly a non-governmental, non-industry approach could be used, like the "Range Board." There may be problems with implementing such an organization without statutory authority. The committee needs to provide a range of possibilities to present to the legislature.

The committee needs to have a good understanding of what is and isn't possible in the way of revenue sources. Can a summary of tax and revenue be provided explaining where things currently stand?

It may be possible to have a system where, instead of being tax supported, companies would make direct contributions through community foundations, which would then be able to take an active role in supporting research and development.

Eagle Mine has taken the position that current mining application fees are much too low to cover the possible legal obligations that the state may incur from providing mining licenses. Currently, the permit fee is \$5,000, but they think that more like \$100,000 to \$200,000 would be more appropriate.

The committee needs to actively review what is done in other states where mining is important, particularly tax/fee structures to see what can realistically be done. At this point, nothing should be considered “off limits”. One note when looking at what other states have done, is that we should also note whether what they did lead to extensive litigation

EGLE notes that Part 632 is providing comprehensive regulation for non-ferrous metallic mining and that we don’t necessarily have to start everything from scratch. Some discussion of whether Part 632 is a good example, since on the one hand it did lead to a lot of legal action, but on the other hand it was finally resolved. Only Eagle Mine and Humboldt Mill are currently operating under Part 632, although there are two other active permits that have not yet lead to actual mining.

Matt Johnson recommends that we do the following to wrap up:

- See how the things discussed today fit into the thematic areas specified in the 4227 legislation.
- Arrange items into agendas for specific meetings.
- Arrange for specific presentations at meetings to bring everyone up to speed.
- Consider the interest of the tribes in the state, ensuring that water protection and climate change considerations are addressed.

Action items

- Industry Presentations to arrange at future meetings (each about 15 minutes, may be expanded on). These will address what they do, effects of mining statutes, their needs, and their future.
 - Cliffs and Ferrous Mining – Jim Kochevar
 - Nonferrous Mining – Matt Johnson
 - Aggregates and Industrial Minerals – Richard Becker
 - Salts and Brines – Adam Wygant (will invite an appropriate person)
- Other possible informational presentations
 - Historic mining, existing mining legacy, and future potential – Stephen Kesler
 - Part 632 mining permits – how the process works and what it accomplishes – EGLE
 - How MEDC can contribute to the mining industry – Amanda Bright-McClanahan
 - Michigan Tech mining/minerals research and capabilities – Tim Eisele
 - Eagle Mine has also put together a good presentation on mineral rights

Next meeting

In view of the amount of effort needed to get everyone to a meeting, it was proposed a longer meeting (five hours) be held to provide more time to get things done. Teleconferencing is also possible, although members present by teleconference will not be able to vote (law requires physical presence for voting, also no proxies).

Future meeting dates

- March 11, 2020, MEDC, 300 N. Washington Square, Lansing; 9:00 a.m. to 3:00 p.m.
- July 14, 2020, Northern Michigan University, 1401 Presque Isle Avenue, Marquette; 9:00 a.m. to 3:00 p.m. (room to be determined).
- October 13, 2020, Michigan Tech University, 1400 Townsend Drive, Houghton; 9:00 a.m. to 3:00 p.m.
- January 12, 2021, Michigan Environmental Council, 602 W. Ionia Street, Lansing; 9:00 a.m. to 3:00 p.m.

The final report of the Committee is due October 2021. It will be presented both to the state governor and legislature and Michigan's federal representatives and senators. If the committee has recommendations for actions to take at the federal level, we should include those in the report.

Near the end of the report preparation, an editor and report preparation expert would be very good, but no actual funding is provided for that. EGLE and MEDC may be able to do this with in-house resources.

Adam Wygant requests that everyone email to him a list of two challenges and two opportunities that relate to each of our particular areas of interest. He would like to have these within a week. These should be in line with the areas outlined in the House Bill 4227 legislation.

Open Meetings Act Summary

All members were provided a copy of the Open Meetings Act Handbook, and a two-page summary. Particular issues to keep in mind:

- Information to be provided to the committee at meetings needs to be available to the public ten days before the meeting.
- All communications of committee business need to be done through the State of Michigan email accounts that we have all been provided with.
- We will be sent a link to SharePoint, and all final drafts of documents relating to the committee should be stored there. To the extent possible, documents should also be prepared there, using track changes functions to make edits.
- If work is done off-line, keep in a dedicated directory and label all documents with CMMF in the filename.
- Always keep in mind that meetings are open to the public, and are subject to Freedom of Information Act requests.

Adam Wygant provided a draft Policies and Procedures document and would like us all to review and provide any comments before the end of January so that it can be formalized at the March meeting.

For financial reimbursements, contact Susan Bishop.

The meeting was adjourned at 1:20 p.m.