

## MINUTES

### MINING METHODS, ENVIRONMENT, AND RECLAMATION SUBCOMMITTEE FOR THE COMMITTEE ON MICHIGAN'S MINING FUTURE

Virtual Teams Meeting

October 9, 2020 – 09:00 am to 11:00 am

The meeting began at 9:02 a.m.

#### Roll Call

Jim Kochevar – present  
Hal Fitch – present  
Evelyn Ravindran – present  
Adam Wygant – present  
Steve Kesler – present  
Peter Rose – present  
Others – Horst Schmidt

#### Reviewed Duties of the Committee – excerpt from Act 47

##### **319.163 Duties of the committee.**

Sec. 3. The committee shall do all of the following:

(a) Recommend actions to strengthen and develop a sustainable, more diversified mining and minerals industry in this state while protecting the environment and natural resources of this state.

(b) Evaluate government policies that affect the mining and minerals industry.

(c) Recommend public policy strategies to enhance the growth of the mining and minerals industry, especially for research and development in mining and mineral processing technology, including pellet production, for the next generation of mining.

(d) Advise on the development of partnerships between industries, institutions, environmental groups, funding groups, and state and federal resources and other entities.

**History:** 2019, Act 47, Eff. Oct. 6, 2019.

**Review of Subcommittee Report Topics** – Refer to “Mining Methods, Environment, and Reclamation Subcommittee Topics”, attached Revise/combine/clarify topics? Topics for this subcommittee are:

1. Environmental Stewardship.
2. Providing for post-mining beneficial land use.
3. Deal with mining wastes by methods other than dumping them and bring together waste producers with waste users so that we can avoid producing

pollution.

4. Backfilling: reducing waste through best management practices. Sustainable Mining Practices.
5. The Tilden Mine in Michigan is the only hematite mine across all domestic US iron ore operations in Minnesota and Michigan; all others mine magnetite. Production of hematite iron ore pellets presents additional mining and processing challenges when compared to other producers/competitors.
6. Reclamation – Strengthening requirements would help the industry.
7. Finding better ways to remediate legacy mining sites.
8. Climate change: how do we consider climate change (changing weather patterns) impacts in permitting, baseline collection, water protection, wetlands protection, etc.
9. Cumulative impact.

There is no representation from two major industries: non-precious metals and aggregates and mineral mining. There is a lot of overlap with topics from this subcommittee and the Regulatory Policy Subcommittee.

The cumulative impact was a result of gradual increases over time, and significant change or impact. Backfilling is the easiest technology to be used in the tribes.

Is there a need to mine in areas where people are settled? There are reserves all across the upper peninsula, and they could get into settled areas. There is more impact in an aggregate setting. Reserves are usually avoided in populated areas.

Regulations tie in with climate change. The Governor's initiative is for us to be carbon neutral by 2050. There is a task force to work on this. WE need regulations for new materials and rethink the eight of iron. We are dealing with more extreme climate events and need to be thinking about this when we issue permits. There is some concern with monitoring stations; we need better data to get closer to home. We need to look at the evaluation of design outside of mining and will be looking at climate change.

There are problems with people buying land; they are not sure if they're getting minerals when they buy the land. Is there a zoning system in the upper peninsula to classify land? None that the DNR is aware of. There are several bills in the legislature.

Oil and gas mining do not have to be zoned a certain way for a miner to extract minerals. Research and mapping recommendation is to do an inventory of mineral mining and waste management. People can't mine with regulations. The only way it would diverge would be a new way of mining or doing things.

Is the reuse of tailings likely to be an issue in the foreseeable future? The Regulatory Policy Subcommittee discussed this. We can also evaluate this with our subcommittee. There may not be a lot of sites. We should be encouraged if you can do brownfield instead of greenfield sites.

A discussion took place if the two subcommittees, Regulatory Policy , and the Mining Methods, Environment, and Reclamation should be combined since a lot of these topics overlap. We can evaluate the topics here. Is pellet production included? A lot of areas are multifaceted and overlap with other committees. This committee is looked at with beneficial use/reuse of productions and reclamation.

Mining methods need to be set up so that at the end of the use for mining and reclamation a process is in place. We need to do all we can to prepare ourselves to leave something behind. Aggregates gave a presentation of housing developments that left beneficial things behind. We don't want to leave land unusable when mining is done.

Laurentian Vision Partnership has a concept to partner with mining entities and plan for mining at a later development.

There are no mine specifics for industrial minerals, and we should look into this. This report may have things not everyone agrees on.

With greenhouse gas production, Cliffs owns a lot of land and work with a lot of potential developers for solar farms. The Energy Task Force is working towards renewables. A lot of people don't want solar farms in their backyards. Evelyn's tribe did not want solar farms. Without subsidiaries, how well would these farms do?

Part 632 requires alternative analysis. Iron Mining isn't specific; regulators could request it. There are no regulatory framework for iron metals.

Where and how can we mine? In a sense, this is the start of the reclamation issue. We have no obligation to check off each item on our list. Some of them can be combined as they are related.

Time Eisele is working on how to get manganese. With some mining practices, backfilling should be recognized. We should focus on items 2, 3, 4, 6, and 7 and focus on the Elden Mine reclamation. Regulations don't dictate how to sue land. What are potential other beneficial uses? Industry minerals don't talk about sequential use or reclamation. We want to make sure everyone is aware of the issues. Recommendations can be made to make people aware of this.

Some limestone quarries were not left in a good way. There is no standard on these or aggregate bills right now. Industrial minerals have drawn a lot of attention right now. Iron and nonferrous metallics are what we are trying to focus on in the UP for reclamation.

Sand dunes are limited in vegetation you can use, but with inland, you have more flexibility.

Brownfield sites have a lot of industrial minerals. It is very common for mined ground to be re-evaluated. Mining operations are inactive at times. In the Back 40 plans, only part of it is mineral deposits. Brownfields are assets. They are short sided and tend to be locked up and not allow reentry. The public uses brownfield sites. Copperwood is an example of a greenfield site, and Humboldt is a reuse mill repurposed. There are more reserves in White Pine. Some things don't work that worked in the 1980's. Sometimes, society might isolate the ground, because they don't want to invest too much into reclamation if there is potential to reuse it. Their utility will outlive us.

We need to encourage new mining companies to encourage more exploration. It is difficult to find property with sufficient minerals to mine. Should we be able to include other environmental factors with mapping? There are lots of factors for mining companies. To put everything in one place would be extremely helpful. It can be as expansive as you want.

How can we fix what is left by a mining company? We need to look at mines to keep areas from being toxic. We also need to look at mines to see the beneficial way to preserve the land.

Brownfield land is valuable if there is demand for it. Methods and reclamation could be looked at by this committee and figure out how to fund it. Minnesota figures out how to make land safe or reusable. We need to focus on structure and funding. Land has value as it has residual minerals. There are problems with the site if it has residual value. If EGLE permits this, what recommendations would they make?

Jim will combine bullet items from the list of topics with the focus on reclamation. Once completed, he will distribute to the subcommittee. It might be beneficial to foster someone from Laurentian Vision Partnership to give us a presentation. They have an October 28 meeting. Perhaps we can ask if we can attend.

The next meeting for this subcommittee will be November 6, 2020, from 10:00 am to 12:00 pm.

Meeting was adjourned at 10:41 am.