

## COMMITTEE ON MICHIGAN'S MINING FUTURE

MEDC, Lansing

March 11, 2020 – 10:00 a.m.

### DRAFT MEETING MINUTES

#### ROLL CALL

##### **Commission Members and Affiliation**

Richard Becker (Aggregates)	Absent
Snehamoy Chatterjee (Research Faculty)	Phone
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)	Phone
Deborah Pellow (Municipality Affected by Mining)	Present
Evelyn Ravindran (Native Americans)	Present

##### **State Agency Members**

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

**Others Present:** Ania Ediger – Cleveland Cliffs, Representative Sara Cambensy, Justin Alexander – Aid to Representative Sara Cambensy, Austin Fisher – for Richard Becker.

The meeting began with roll call. Draft minutes from the January 7, 2020, meeting was distributed. No one had additional changes or deletions. No additions or deletions were noted for the agenda.

##### **SharePoint Demonstration by Mike Sweat**

- Several members were not sure how to access the SharePoint site for the Committee on Michigan's mining Future as they do not have the website address.
- Mike provided members with the correct web address and gave a brief overview of how to use it.

- A discussion also took place regarding State of Michigan (SOM) emails accounts. These accounts should be used due to the Freedom of Information Act (FOIA) and help protect members from having personal email accounts under FOIA review.
- Mike will make sure presentations are all put on the SharePoint site for future review.
- Documents can be share through email, but they are subject to FOIA. Any responses received though SOM email are also FOIAable.
- Due to the Open Meetings Act, SOM email accounts were set up for board members.

### **Cliffs Mine, Ferrous Mining – presentation by Jim Kochevar**

Jim gave a presentation on the background of Cliffs, who they are and what they do. Their corporate headquarters are in Cleveland, Ohio. They also own the Empire Mine in the upper peninsula which is currently idle. Cliffs is also a shareholder in Hibbing Taconite. By mid-2020, Cliffs will be the sole producer of hot briquetted iron (HBI).

Tilden Mine is the only one open right now. They drill, blast, and load. Impurities have to be washed out like silica. Last year alone, 19.9 million taconite pellets were made.

How is steel made? They have two main production routes: the blast furnace route, and electronic arc furnace route (scrap is mixed with other products to make a higher iron product).

The Tilden Mine opened in 1974 with 900 plus employees. It is the only mine in the United States that mines and processes hematite ore.

The Empire Mine began production in 1963. It idled in August 2016 after exhausting economic ore reserves, and 60 million tons of rock are moved every year.

When the Republic Mine closed, the Republic Wetlands preserves was created; 700 new acres of wetland have been created; 225,000 trees have been planted, 2300 acres in conservation easements, and habitat for birds, reptiles, and mammals.

In addition, greenhouse gas emissions have been reduced by using cleaner fuels, implementing energy efficient measures and negotiating new power supply agreements.

Steel is made in Michigan and Minnesota only. In 2018, 935 million tons of steel were produced in China. The United States produced 86 million tons

They are in the process of acquiring AK Steel which has 9000 customers.

## **Eagle Mine, Nonferrous Mining – presentation by Matt Johnson**

They run an underground nickel and copper operation which opened in 2014. More dirt has been moved by humans, and the Earth's population has grown. People are living longer, but they have a bigger income. In the 1980's, more countries are living longer and enjoying bigger incomes, because the living standards have improved.

They have the chain of custody – where are resources coming from? Cobalt is an essential metal for electric vehicles. Idaho has a new cobalt project on the shelf. In the future, investors will want to know where metals come from. Sustainability has really changed. Now we have transparency, human rights, child labor, social responsibility, diversity, inequality and community capacity.

Eagle Mine is 18 feet wide by 18 feet long, and it is five miles to the bottom. At the bottom, temperatures are much warmer, 80 degrees plus. The mill is 66 miles from the mine. They want it to be as fine as possible to extract ore from it. Ore is put on rail cars and shipped to Canada; they move 2000 tons each day at Eagle Mine. Eagle Mine is 150 acres in size, and it is a water-controlled facility. Water pumped from the mine is stored in water basins. There is salt in the water, but it is mostly sodium chloride. The water is saltier, because it is below sea level. This water leaves the site every two weeks; the salt in the water could be used to put on roads; however, state laws would need to change in order to do this. Surface water is easier to treat/clean.

Waste rock is put back into the ground, but there is not enough rock to put back. They buy rock to put back in the ground. All sand and rock have to be of a certain consistency to be put back in the ground. It takes approximately 45-60 minutes to drive to the bottom of the Eagle East Mine.

The Humboldt Mine was purchased and fixed up. What comes from the bottom of mines is tails, and what comes from the tops of mines is heads.

The challenge/legacy at the pit is there is no perpetual care. Treatment has to pass the toxicity test as the lake has different levels. The challenge is to treat the water. Eagle's focus is on social responsibility, local supplier development, and economic diversity. Eagle Mine has a lot of diversity and promotions, and there was a lot of controversy. They did a lot of communication, transparency, and building relationships. They did a perception survey: positive perception was 63%; positive relationships with the community was 89%; people open to future mining was at 81%.

They developed the new Greenfield Mine, but the Copperwood Mine did not meet their standards to purchase. Last year, they purchased a mine in Brazil, and they are still looking to purchase more mines, but they are hard to find.

## **MEDC – Amanda Bright-McClanahan**

MEDC has completed studies through Northern Michigan University; there are long-term economic development for communities. They developed an economic future for Gogebic County. They changed their approach in economic development like Pure Michigan. They are trying to learn what role medical device technology, agribusiness and play. There are opportunities for discussions among tribal communities.

## **Representative Cambensy**

Minnesota took taxes to put towards economic fund as an auto industry incentive.

Break for lunch at 11:50 a.m.; reconvened at 12:19 p.m.

## **Aggregates – Austin Fisher**

Aggregates are sand, limestone, and gravel. Limestone is drilling and blasting; to make it easier, they make big rocks into little rocks. The cheapest way to make rocks smaller is to blow them up. To make sand and gravel, they use dry digging or dredging. Materials are moved by truck from Detroit to Grand Rapids.

Aggregates are used for: Bridges, hospitals, homes, highways, and schools. It takes 40,000 tons to make one lane for a mile of road. There are abundant resources of limestone, sand, and gravel. The main uses of transportation are boat, train, and truck. In Michigan alone, 100 million tons are used per year, and we are the number one asphalt paver in the country.

The challenges with aggregates are zoning and permitting, reclamation, and DOT specifications (freeze, thaw, and specialty non-standard tests). The opportunities are environmental stewardship, and community outreach.

The first paved road in Michigan was Woodward Avenue. Michigan has the most extreme DOT test. Community outreach is a huge factor in the mining industry.

Stoneco has four quarries, and 500,000 to 700,000 tons of materials are stockpiled at one time. Usually, 50 tons are on a truck at one time. Newport is the deepest as the pit is 200 feet from the surface and is near Lake Erie. Reclamation plan is part of the township zoning.

## **Oil, Gas, and Minerals Division – Adam Wygant**

Local communities can zone property for mining.

Senate Bill 431 shifts the burden of proof from the challenger to the challenged.

House Bill 5305 increases locals ability to regulate and to prohibit mining.

Mines are usually productive for 10 years, but they can last 5-30 years.

EGLLE administers Part 625 which is mineral wells as well as hazardous and non-hazardous waste wells, spent brine return wells, brine production wells, geologic tests wells, mineral brine (calcium, magnesium compound, bromine, chlorine, sodium carbonate, and table salt), solution mining brine (table and industrial salt and potash). Mineral tests wells have dated back to the mid 1800's.

Mine taxation is placed on mineral brine and solution mining. Sometimes royalties may have to be paid depending on mineral ownerships and lease language. The rule of capture applies for brines.

With ferrous mining, income/corporate taxes have to be paid. With metallic mines, there are ownership and royalty issues. Not all property owners pay property taxes with nonferrous mining.

Mine taxation is applied to sand dune mining, aggregate limestone, sale, sandstone, stone, and gypsum.

### **Challenges and Opportunities – Matt Johnson**

Challenges and Opportunities were put into four categories. They need to be prioritized so requirements can be met that were set by the Legislature. Members will be put into subcommittees to work on these at the next meeting

### **New Business**

None

### **Public Comments**

None

### **Next meeting**

The next meeting will be held at Northern Michigan University 1401 Presque Isle Avenue, Marquette, Michigan; 9:00 a.m. to 3:00 p.m. on July 14, 2020.

### **Future meeting dates**

- 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 meeting was adjourned at 3:07 p.m.