

Cooperative Mineral Resources Friday, July 8, Community Meeting

About 50 Emily area residents attended a Community Meeting hosted by Cooperative Mineral Resources at 6:30 p.m. Friday, July 8, in the Emily Community Center. The company had a short program that included a PowerPoint and video (available on this site) and also answered questions from the audience.

Many of the questions that were asked and answers to them are listed below. In order to provide the best information possible, some of the answers may include additional information that was not provided at the meeting.

1. When will CMR decide to do the real mine?

The demonstration project likely will discontinue toward the end of summer. The project permits allow us to extract up to 12,000 cubic yards of material, maximum. The University of Minnesota's Coleraine Minerals Research Lab will determine whether its scientists have enough material to analyze, which will help us determine a specific end date for the demonstration project. After the demonstration project shuts down, additional, extensive analysis will be conducted to help determine the economic and environmental feasibility of moving forward with a commercial project.

2. How long would it be for the next study (EIS) before mining could start full-time?

Moving forward with a commercial project would require several steps. First, CMR and its consultants would work with regulatory agencies to develop a Scoping Environmental Assessment Worksheet, a document that identifies environmental and other issues associated with a commercial mine that require additional study. The public would have the opportunity to comment on this document.

Once the Scoping Environmental Assessment Worksheet is finalized, work would begin on how best to address the issues that it identified. These answers would be contained in an extensive Environmental Impact Statement (EIS), which would be drafted by an independent, third-party contractor and which would include the opportunity for additional public comment.

Once an EIS has been approved, regulatory agencies can issue permits for a commercial project and construction can begin. Permits also have the opportunity for public comment.

Because the environmental review and regulatory process has so many steps, involves significant public comment and involves several regulatory agencies, it's difficult to predict how long the entire process might take. However, two to three years is a reasonable estimate.

3. Does CMR own 12 acres and the mineral rights?

CMR purchased 80 acres and the mineral rights to the land. The current demonstration project is focused on just 12 acres north of downtown Emily. The deposit is contained on about five of the 12 acres.

4. One well, but how many test holes have been drilled?

CMR is operating the borehole demonstration project using one, 14-inch diameter well. There are six other test wells that are being monitored around the borehole site as part of the permit from the U.S. Environmental Protection Agency.

5. What percentage of tax benefits would come to the City of Emily?

Tax benefits would be calculated according to state taxation formulas for the amount of manganese/ore extracted. Early forecasts estimated \$20 to \$25 million in tax benefits shared among the City of Emily,

the school district, the county and the state. New projections would have to be calculated based on what we learn from the demonstration project.

6. If you go forward with this project, are you willing to subsidize tax credits for the residents? Do tax benefits or profits get shared with Cooperative members and everyone else?

As a cooperative, Crow Wing Power, CMR's parent company, would share profits with cooperative members in the form of capital credit checks.

Audience comment: The City of Emily has a separate agreement to receive money on the sale of manganese from the demonstration project, based on pounds sold for the demonstration project.

7. Where are the trucks being washed?

Only one truck is being used to haul material. The seams of this truck have been welded to prevent any material from escaping, and, after loading, it is covered with a tight-fitting tarp on the way to Coleraine and Nashwauk. The truck also is covered for the return trip. Tires are washed at the demonstration project site. The interior of the truck bed is not washed off-site.

8. How do you keep the manganese wet over the weekend, since there has been a transport truck leaving the site at 7:30 a.m. Monday morning?

Generally all material is transported prior to the weekend, and moisture content of the material has always remained at an average 20 to 25%. There were a few instances where material could not be shipped prior to the weekend, when loads could not be delivered due to research lab's closing hours. In those cases, trucks were loaded and covered on Friday night awaiting Monday a.m. delivery.

9. Who monitors the wetness of the Manganese over the weekend?

Typically the material is shipped out prior to the weekend. Any small amount of product that may be left in the bunker has always been very wet, with a 20 to 25% moisture content.

10. Does the City have experts? (comment on the City hiring mining and legal consultants)

The City Council discussed hiring mining and legal consultants. The City decided not to hire consultants for the demonstration project. CMR was not involved in that discussion.

11. Where do reports go during the government shutdown?

CMR provides all reports to the appropriate state and federal agencies as required in its permits. The City of Emily also receives copies of the reports submitted to regulatory agencies and CMR posts them on this website. These reports document the prior month's performance. If there were an emergency, CMR would notify the state duty officer, as required in its permits. This function was not affected by the state shut down.

12. The mine operated about 47 days from November to April. How do you explain the four spills and three other pollution permit violations during construction?

As discussed in the PowerPoint presentation, the demonstration project went through a long commissioning process, testing individual pieces of equipment as well as the overall process. In some cases, the testing indicated that some equipment needed to be changed. For example, a new drill bit was installed to improve performance and different size grates were installed on the borehole mining tool.

In addition, during commissioning, there were two releases of water. CMR improved its equipment and received permission from the Minnesota Pollution Control Agency to construct a lined collection basin near the borehole to collect any subsequent discharges. Two releases of water occurred after commissioning of the demonstration project and, again, equipment was improved to prevent future occurrences.

Appropriate regulatory agencies were notified in each case and samples taken of the water that spilled indicated it was of better quality than the water found in the sand and gravel aquifer.

We are not aware of three other pollution permit violations during construction. According to our records there were no pollution permit violations during construction.

13. Why don't the operators at the mine use breathing protection?

Breathing masks are available in the operating building. However, the wet slurry process CMR is using in the demonstration project assures there is no dust.

14. Will commercial production include horizontal drilling? How much area will be involved?

That could be possible; however, that would be addressed in an EIS and if so, all drilling would be on site.

14. Can Crow Wing Power sell this off to another entity and who determines the sale price?

Sale of the project is not likely, but it could be sold.

15. What chemicals are being used now? What is a flocculent? CMR is using Benofloc, a flocculent, to promote clumping of fine particles (or flocculation) to make it easier to screen them out. Most of the flocculent adheres to the particle clumps and is removed from the water through the filtration process. That type of flocculent is a natural component like clay. The use of flocculents and others must be reported to regulatory agencies. That is the only chemical used.

16. The prior Flocculent increased the chloride levels, so is that getting in to the water and having an effect?

A small amount of the flocculent stays with the water through the filtration process and is returned back into the borehole with the injection water. This water is, in turn, pumped back out with the ore. Over time, we observed a slight increase in the concentration of chloride (well below any limits) as the water recycling process commenced. The vendor of the flocculent was brought to the site to find out how much flocculent was needed for the process and adjustments were made. The chloride concentration has since stabilized.

17. How are normal lake levels determined?

Seven area lakes are monitored continuously and level readings are taken every two weeks. The project has had no effect on lake levels. Rain has increased area lake levels, however.

18. How often will you test the private wells?

CMR tested about 90 wells within one mile of the project site, prior to the demonstration project commencing, and will re-test those wells after the demonstration project ends. Other wells were tested voluntarily prior to the demonstration.

20. What color is manganese dust? How will we know if any has spilled along Highway #6?

Manganese is black. Dust will not spill out of the trucks because all seams are tightly welded and they have tight fitting, sliding covers. The shipments contain 20% water and there is no dust.

Trucks and tires are washed before leaving the site.

21. Does manganese wash through a body or accumulate?

According to the U.S. EPA, manganese ingestion in food is typically much greater than ingestion in drinking water and nearly all manganese that is ingested is excreted in feces.

22. I heard manganese in the water and fish you catch in our lakes and eat might cause Parkinson's Disease. I know someone that just got diagnosed with it. Could the mining add more manganese to the groundwater or lakes?

There are high levels of manganese in some area wells; however, most people have filtering systems that remove it. The filtered water that is recycled in the manganese demonstration process is actually lower in manganese when it is returned. If people have a concern about manganese in their wells and the health factors, they should contact the Minnesota Department of Health. The demonstration project is not causing lake and groundwater issues.

23. Are there royalties to the previous owner?

That is proprietary.

24. What benefit is this mining for the Emily community?

The current demonstration project has hired mostly local employees, and, if a commercial operation were to occur, CMR would make an effort to hire as many local people as possible, as well. The Emily manganese deposit has the potential to create jobs and provide a real economic benefit for the City of Emily and Emily-area residents. During the Demonstration project, CMR hired 10 full time and 112 good paying jobs, as well as heavily supporting all of the local businesses and motels in the Emily area.