Proposed Project Summary

Eagle Mine, a subsidiary of Lundin Mining (Eagle Mine)

The Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), is asking for comments from the public on a proposed Permit to Install (PTI) for the Eagle Mine in Michigamme Township and a proposed PTI for the Humboldt Mill in Champion. The AQD will accept comments on the proposed PTIs until the close of the comment period and public hearing on March 18, 2020. We will review all comments before we make final decisions on the proposals.

What is Eagle Mine proposing to do under the PTI applications?

Eagle Mine is proposing to add an outdoor stone and sand storage area and to operate a portable screening plant to separate development rock by size for use as backfill at the Eagle Mine. Emissions from the storage area and screening plant would be managed through the fugitive dust control plan. The screening plant would have water sprays to control emissions. The approved permit would require Eagle Mine to control dust.

Eagle Mine is also proposing to change the timeframe of the ore truck throughput limits at the Eagle Mine and the Humboldt Mill. This change would not increase the amount of ore allowed to be trucked per year.

What is a PTI and why is one needed?

A PTI, commonly known as an air use permit, is required for projects that involve installing, constructing, reconstructing, relocating, or modifying most processes or process equipment that emit, or may emit, air contaminants, such as the outdoor storage area and screening plant Eagle Mine is proposing, or that require changing conditions of an existing PTI, such as the change to the timeframe of the ore truck limits.

Why did Eagle Mine submit two applications?

While the Eagle Mine and the Humboldt Mill are separate sources because they are several miles apart, the operations are related because the ore from the Eagle Mine is trucked to the Humboldt Mill for processing.

The permits for the Eagle Mine and the Humboldt Mill have the same ore truck limit. Since Eagle Mine wants to change this limit at the Eagle Mine and at the Humboldt Mill, two separate PTI applications are required.

Since Eagle Mine submitted the applications at the same time, the AQD chose to hold a combined public comment period and public hearing for the applications to make the public comment process more convenient for everyone involved, instead of holding two separate public hearings.

What about "Eagle East?"

Access to the "Eagle East" ore deposit is through the original mine portal and air emissions from mining the ore deposit exhaust through the existing Main Ventilation Air Raise (MVAR).

Eagle Mine has demonstrated that potential emissions from mining the "Eagle East" ore deposit comply with the current Eagle Mine permit conditions. Therefore, mining "Eagle East" does not require a permit modification.

In the PTI application under review, Eagle Mine did not request any changes to the underground operations. Therefore, the emissions from the underground operations are not subject to review in the current PTI application. No permit conditions related to the underground operations have been changed in the proposed PTI, except for the timing of the stack test because the test has been completed.

Note, the particulate matter equal to or less than 10 microns in diameter (PM10), particulate matter equal to or less than 2.5 microns in diameter (PM2.5), and toxic air contaminant emission from the underground operations were included in the AQD review of the Eagle Mine emissions.

What is the current air quality in the area?

The United States Environmental Protection Agency has developed health-protective standards for specific air pollutants. These standards are called the National Ambient Air Quality Standards (NAAQS).

There are NAAQS for sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), PM10, PM2.5, ozone, and lead.

The NAAQS set the maximum concentration of each pollutant in the ambient air that protects the health of the most sensitive individuals. This includes those with heart, respiratory, neurological and asthma problems.

While the AQD does not have an air monitor in Marquette County, the county is meeting all the NAAQS based on air dispersion modeling and emissions data.

Will the facilities meet air quality standards?

A computer model was used to look at the expected impacts of the proposed changes at the Eagle Mine on the air quality in the area around the mine. This type of computer model is called an air dispersion model and considers many factors, such as quantity and type of emissions, prevailing wind direction and other factors. The model showed that the expected impacts of the proposed emissions would be less than the NAAQS for PM10 and PM2.5.

Michigan has developed health-based levels for additional pollutants referred to as toxic air containments (TACs) under its Air Toxics rules. The proposed TAC emissions from the proposed changes at the Eagle Mine are below the AQD's health-based screening levels.

The change to the ore truck limit would not result in any changes to emissions at either facility.

Where can I find more information?

There are two ways to find more information about the PTI applications: The Technical Fact Sheet has additional details about the projects and how they would meet the rules and regulations; and AQD staff can provide additional information upon request. Here are some examples of information you may find useful:

- A summary of the reviews completed by the AQD staff
- How the projects will affect air quality and public health.
- A summary of what the proposed permits would require Eagle Mine to do.
- A summary of the allowed emissions that are included in the proposed permits.
- The rules and regulations that apply to the projects.
- Example emission calculations.

Summary:

The AQD has reviewed the PTI applications and prepared proposed permits. If the proposed permits are approved, they will ensure each facility meets the applicable air quality requirements. Therefore, we are recommending approval of the proposed permits.

However, before the AQD acts on the proposed permits, we are requesting comments from the public. The AQD will review all comments received during the public comment period and public hearing and then decide whether to approve or deny the proposed permits. If approved, the AQD may decide to add or change permit conditions based on the comments received.

What if I would like to make a comment?

The AQD welcomes comments from the public during the comment period. Prior to making a comment, it is a good idea to "View an Example" of how to do it. You may also want to read the "Public Hearings - What you should know" card. These documents can be found at https://www.deq.state.mi.us/aps/downloads/permits/PubNotice/NSR_PTIs_Open_for_Comment.pdf.

Who can I contact?

For more information about the proposed permits, please contact Andrew Drury, AQD, at: DruryA@Michigan.gov or 517-284-6792.

Michigan's Environmental Justice Policy promotes the fair, non-discriminatory treatment and meaningful involvement of Michigan's residents regarding the development, implementation, and enforcement of environmental laws, regulations, and policies by this state. Fair, non-discriminatory treatment intends that no group of people, including racial, ethnic, or low-income populations, will bear a disproportionately greater burden resulting from environmental laws, regulations, policies, and decision-making. Meaningful involvement of residents ensures an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.