

## PROPOSED PROJECT SUMMARY

### MICHIGAN POTASH OPERATING, LLC – EVART TOWNSHIP, OSCEOLA COUNTY, MICHIGAN

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), is asking for comments from the public on a proposed Permit to Install (PTI) for Michigan Potash Operating, LLC (Michigan Potash). The AQD will accept comments on the proposed PTI until the close of the comment period on January 27, 2025. We will review all comments before we make a final decision on the proposal.

#### WHY IS THE PROPOSED PERMIT OPEN FOR PUBLIC COMMENT?

There has been historical public interest in the proposed facility. The law requires that proposed projects with known public interest allow the public an opportunity to comment on the proposed permit conditions.

Note: The AQD held a virtual public hearing for the proposed facility in 2021. The current application is the same, except for minor updates to a device that reduces some pollutants and adjustments to particulate matter emission limits. We encourage you to [view the recording](#) of the 2021 hearing to learn more about the proposed project and the permit application review.

#### WHAT IS MICHIGAN POTASH PROPOSING TO DO?

Michigan Potash is proposing to build and operate a new facility near Schofield Road and 120<sup>th</sup> Avenue in Evart Township, Osceola County (Figure 1). They are requesting to produce sodium chloride (salt) and potassium chloride (potash). Salt would be used as road salt, water softening salt, and food grade salt. The potash would be used as an agricultural fertilizer.

Michigan Potash would use a process known as solution mining, which would pump heated water and brine (concentrated salt water) into a deep geologic formation known as the A1 Evaporite. These fluids would dissolve salt and potash which would be pumped back to the surface.

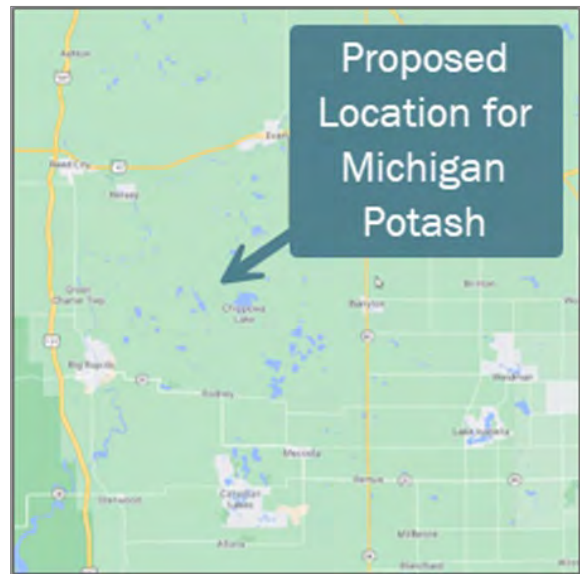


Figure 1: Proposed location of Michigan Potash

Salt and potash brought to the surface may contain hydrogen sulfide ( $H_2S$ ). The  $H_2S$  would be removed using an air stripper. Emissions from the air stripper would be controlled or reduced using an air scrubber and, when the  $H_2S$  concentration is 60 parts per million or more, a thermal oxidizer would be used.

The salt and potash would be separated using a crystallization process. The crystallized salt and potash would be dried in natural gas-fired dryers with wet scrubbers to control or reduce particulate emissions.

The dried salt and potash would be cooled and compacted inside enclosed buildings with baghouse dust collectors to control or reduce particulate emissions.

Michigan Potash would install some ancillary equipment including: two natural gas-fired boilers, a diesel emergency generator engine, a diesel emergency fire pump engine, a cooling tower, space heaters, and storage tanks.

The proposed process would emit particulate matter (PM), particulate matter less than or equal to 10 microns in diameter (PM10), particulate matter less than or equal to 2.5 microns in diameter (PM2.5), oxides of nitrogen, carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), H<sub>2</sub>S, volatile organic compounds, hydrogen sulfate, and lead.

### 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 release, or may release, air contaminants, such as the facility Michigan Potash is proposing to construct.

The AQD has reviewed the application and written proposed permit conditions that include requirements to make sure the project complies with all applicable air rules and regulations to protect public health.

### WHAT IS THE CURRENT AIR QUALITY IN THE AREA?

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

There are NAAQS for [some pollutants](#), including SO<sub>2</sub>, nitrogen dioxide (NO<sub>2</sub>), CO, PM10, PM2.5, ozone and lead.

Poor air quality from high levels of pollution can cause health problems. The NAAQS are developed from research studies and set at levels to protect public health. This includes health protection for sensitive groups, like those with heart and lung problems.

The facility is proposed to be located in Osceola County, Michigan which is currently meeting all of the NAAQS. The AQD does not operate air monitoring stations in Osceola County, however, we have a nearby monitoring station near Houghton Lake in Missaukee County. The Missaukee County station measures ozone, PM2.5, and NO<sub>2</sub>. Note, the purpose of the air monitoring stations is to assess the regional or area-wide air quality, not to determine if a specific source complies with their air permit.

### WILL AIR QUALITY STANDARDS BE MET?

A computer model was used to look at the expected impacts of the emissions from the proposed project on the air quality in the area surrounding the proposed Michigan Potash facility. This type of computer model is called an air dispersion model and considers many factors, such as amount and type of emissions, wind directions, weather conditions, local geography, and other factors.

The model showed that the expected impacts of the emissions, plus the existing monitored levels, are less than the applicable NAAQS.

Michigan has developed health-based screening levels for additional pollutants called toxic air contaminants (TAC) under its Air Toxics rules. The proposed TAC emissions from the project would also comply with these health-based screening levels.

### WHAT DO I NEED TO KNOW ABOUT THE PROPOSED PERMIT?

The proposed permit has specific requirements Michigan Potash would have to follow if the permit is approved. Key areas you may be interested in, or that you may want more details on, include:

- **Emission limits** – the amount of specific air pollutants allowed to be released.
- **Material limits** - the amounts and types of fuels allowed to be used, and the amount of hydrogen sulfide allowed in the brine.

- **Process restrictions** – requirements to ensure all equipment is operating properly to minimize air pollutants, which includes having a Malfunction Abatement Plan.
- **Testing Requirements** – testing to show they are meeting the emission limits.
- **Monitoring and Recordkeeping** – monitoring of equipment and records that would be kept showing the process is meeting the permit requirements.

### WHAT ABOUT ODORS?

The AQD has received odor complaints in the past about similar facilities. The caustic scrubber and thermal oxidizer would control H<sub>2</sub>S emissions, minimizing the potential odors around the facility.

### WHAT ABOUT THOSE WITH PRE-EXISTING LUNG DISEASE WHO SPEND TIME NEAR THE PROPOSED FACILITY?

The AQD used the computer air model to look specifically at the expected impacts of particulate emissions to see if existing breathing problems may worsen. The modeled information was reviewed by AQD toxicologists who determined the proposed particulate emissions are not expected to make existing breathing problems worse. The facility emissions plus the existing background levels are less than the NAAQS, which are designed to protect sensitive groups, even those with pre-existing breathing problems.

### WHAT ABOUT WATER OR LAND CONCERNS?

The AQD does not regulate water or land use; however, Michigan Potash must have all applicable permits before construction of the facility, including state and federal Non-Hazardous Disposal Well Permits and Artificial Brine Production/Solution Mining Permits. These other permits are required to ensure the proposed project complies with environmental regulations protecting the land and water in the area. For more information about the Production/Solution Mining Permits, contact Mark

Snow, Geologic Resources Management Division, at: [SnowM@Michigan.gov](mailto:SnowM@Michigan.gov) or 517-230-8233.

### WHAT ABOUT NOISE, TRAFFIC, AND ZONING?

The AQD evaluates the potential air emissions from the proposed facility to determine if they comply with the air quality rules and regulations. The AQD does not have the authority to regulate noise or traffic outside the facility and does not have the authority to evaluate compliance with local zoning requirements.

### WAS ENVIRONMENTAL JUSTICE CONSIDERED FOR THIS PROJECT?

Part of opening a proposed permit for public comment involves evaluating the community around the proposed project, including environmental justice, translation, and other community specific concerns. Full details of how we consider this in permitting can be found in “[Including Environmental Justice: Air Permitting in Michigan.](#)”

The language evaluation looks at the number of people who speak English “less than very well” within a 1-mile radius of the proposed project’s location. In this instance, we looked at a 10-mile radius due to the low population in the area. The language evaluation is required by EGLE’s [Limited English Proficiency Plan](#) using an environmental justice screening tool like the USEPA’s [EJSCREEN](#). The evaluation found that translation was not needed.

### WHERE CAN I FIND MORE INFORMATION?

Other information, like the [Technical Fact Sheet](#) and the [proposed permit conditions](#) can be found at [Michigan.gov/EGLEAirPublicNotice](https://Michigan.gov/EGLEAirPublicNotice), choose “Applications Open for Comment.”

The Technical Fact Sheet has additional details about the project and how it will meet the rules and regulations, such as:

- A summary of the reviews completed by AQD staff.

- How the project will affect air quality and public health.
- A summary of what the proposed permit would require Michigan Potash to do.
- A summary of the allowed emissions included in the proposed permit.
- The rules and regulations that apply to the proposed project.

AQD staff can provide additional information upon request.

### SUMMARY:

The AQD has reviewed the PTI application submitted by Michigan Potash and prepared a proposed permit. If the proposed permit is approved, it will ensure the facility meets the applicable air quality requirements. Therefore, we recommend approving the proposed permit.

However, before the AQD makes a decision on the PTI application, we are requesting comments from the public. All comments received during the public comment period and public hearing, if held, will be considered. Then we will decide whether to approve, approve with modifications, or deny the proposed PTI application. If approved, the AQD may decide to add or change permit conditions based on the comments received.

### WHO CAN I CONTACT?

For more information about the proposed permit, contact Andy Drury, AQD, at: [DruryA@Michigan.gov](mailto:DruryA@Michigan.gov) or 517-648-6663.

### WHAT PUBLIC COMMENTS CAN EGLE CONSIDER?

Comments from the public are very important. But it is also important to know the law is clear about what we can and cannot consider when we make our decision. Some examples are below.

What we can consider	What we can't consider
✓ Technical mistakes in the review	• Air, land, or water issues not part of the project
✓ Grammar and spelling mistakes	• Indoor air pollution
✓ Other rules the action should consider and why	• Traffic
✓ Why the action will not follow the rules	• Noise and lights
	• Zoning issues
	• Anything unrelated to the project

### HOW CAN I MAKE A COMMENT?

The AQD welcomes comments from the public during the comment period. Before commenting, 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.

Documents about Michigan Potash can be found at: [Michigan.gov/EGLEAirPublicNotice](https://Michigan.gov/EGLEAirPublicNotice)

Comments must be received by January 27, 2025.



#### Via email

[EGLE-AQD-PTIPublicComments@Michigan.gov](mailto:EGLE-AQD-PTIPublicComments@Michigan.gov)



#### Via US mail

Permit Section Manager, EGLE, AQD,  
P.O. Box 30260  
Lansing, MI 48909-7760



#### Via voicemail

by calling 517-284-0900



**At the Virtual Public Hearing, if requested** in writing by **January 9, 2025**, to the address above, it will be held on **January 16, 2025**.

EGLE promotes the equitable treatment and meaningful involvement of Michigan’s residents regarding the development, implementation, and enforcement of laws, regulations, and policies. Equitable treatment means that no group of people bears a disproportionate share of the negative consequences resulting from governmental, industrial, or commercial operations and policies. Meaningful involvement means all people have an opportunity to participate in decisions that affect their environment and/or health.

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