

EPA Seeks Public Comments on Three New Class I Injection Well Permits

Michigan Potash Operating, LLC

Osceola & Mecosta Counties, Michigan

June 2024

Public Meeting & Hearing

July 11, 2024

EPA Presentation: 5:00 to 5:10 p.m.

Q&A Session: 5:20 to 6:20 p.m.

Public Hearing: 6:30 to 8:00 p.m.

Osceola Community Building (inside the Osceola County Fair Grounds)

101 Recreation Avenue, Evart, MI

How to comment

You may comment in writing on the new draft permits – refer to Michigan Potash Operating, LLC, Permit Numbers

MI-133-11-0007, MI-107-11-0005, and MI-133-11-0009.

Submit your comments to **Docket ID No. EPA-R05-OW-2024-0236** at

<https://www.regulations.gov/docket/EPA-R05-OW-2024-0236>

If you are unable to submit electronically to the docket, please call William Tong at 312-886-9380 for instructions on how to comment.

Comment period

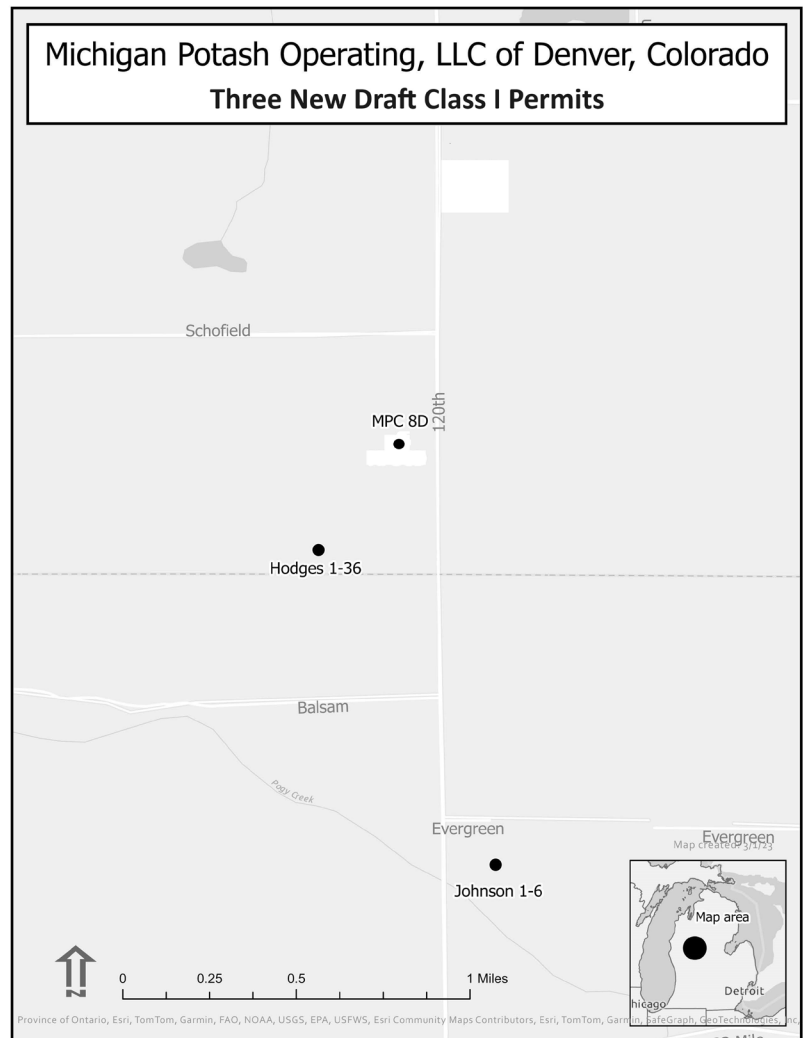
EPA will accept written comments until 11:59 PM on July 15, 2024.

To view the draft permits go to:

<https://www.epa.gov/node/88753#public-notices>

To learn more about EPA's Underground Injection Control program, or to join our mailing list visit:

<https://www.epa.gov/uic/underground-injection-control-epa-region-5-il-mi-mn-oh-and-wi#public-notices>



The above map shows the location of the three proposed injection wells in southern Osceola County and northern Mecosta County, Michigan

The U.S. Environmental Protection Agency (EPA) plans to approve three draft Class I permits for three new proposed Class I injection wells, located in southern Osceola and northern Mecosta Counties, Michigan by Michigan Potash Operating, LLC ("Michigan Potash"), 600 17th Street, Suite 2300, Denver, Colorado. The three proposed permits would allow injection of non-hazardous salt water from a proposed potash mining and processing facility for disposal into deep underground rock formations.

EPA will hold a public meeting and hearing on **July 11, 2024**. The Michigan Department of Environment, Great Lakes, and Energy will participate. During the hearing, you will have an opportunity to make oral comments or submit written comments about EPA's draft permits. EPA is accepting comments from the public on these proposed permit approvals (see box, top left). EPA will consider all comments it receives, and then issue a final decision along with a response to the significant comments. The public comment period ends **July 15, 2024**.

Note: EPA is simultaneously extending the public notice and comment period for proposed modifications to three existing permits (issued 2017) for Class I injection wells MPC 1D, MPC 2D and MPC 3D. See EPA's separate fact sheet for more information about that permitting action and how to comment.

Protection of Underground Sources of Drinking Water: The Safe Drinking Water Act (“SDWA”) requires EPA to regulate injection of fluids through wells to protect the quality of underground sources of drinking water (“USDWs”). A USDW is an aquifer or part of an aquifer that contains water with less than 10,000 milligrams per liter of total dissolved solids. Issuing permits is one way EPA does this. Federal regulations require Class I wells to inject waste into an area below the deepest USDW. All Class I wells must be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. You may find the regulations governing underground injection wells at Title 40 of the Code of Federal Regulations, Parts 124, 144, 146, and 147.

Facility Background: The Class I non-hazardous waste injection wells are to be used for the disposal of non-hazardous salt water from a proposed potash mining and processing facility. The construction design of the injection wells meet the regulatory criteria of 40 C.F.R. § 146.22.

Site geology: The injection zone for the three new wells is the Dundee Limestone. The immediate overlying confining zone is the Bell Shale. There are adequate confining layers between the injection zone and the deepest source of drinking water, the Glacial Drift, to prevent the movement of injected fluids into underground sources of drinking water. In the Area of Review (2-mile radius around each well site), the base of the deepest USDW is the Glacial Drift, at a depth of 712 feet below the surface.

Area of Review (AOR): The AOR is a circle of 2-mile radius from each injection well borehole. Well MPC 3D, a permitted Class I well covered by EPA permit MI-133-11-0006 issued in 2017, is located within the AOR of Well MPC 8D covered by proposed new Permit No. MI-133-11-0009. Both wells were subject to independent technical review regarding their well construction design and geologic siting conditions under the UIC regulations. When constructed, Well MPC 8D will inject into the Dundee Limestone and if the presently pending modification is issued for Well MPC 3D, it will also be authorized to inject into the Dundee Limestone. EPA has reviewed the geophysical and geochemical characteristics of the Dundee Limestone as well as the proposed injection rates for both wells and has concluded that the Dundee Limestone’s capacity to accept fluid is much greater than the proposed total volume to be injected by both wells. Due to adequate well designs and characteristics of the site geology, EPA has concluded that neither well will negatively affect the other during injection operations and that neither well will pose a risk of endangerment to USDWs. There are no other wells that penetrate the confining zone within the composite AOR of the three proposed Class I injection wells.

Maximum Injection Pressure: EPA has set a limit on injection pressure to prevent fracturing of the injection zone rock formation. The maximum allowable injection pressure for each well was calculated by EPA by factoring the depth of the injection zone, the highest specific gravity of the injected fluid, and the fracture gradient of the rock formation. The formula appears on Page A-1 of each draft permit.

Financial Assurance: Michigan Potash has demonstrated adequate financial resources to plug and abandon these wells, by way of a cash blanket bond in the amount of \$440,000 established with the State of Michigan.

Intent to Issue Permits: Part C of the SDWA specifically mandates regulation of the underground injection of fluids through wells to assure that the quality of the underground sources of drinking water is protected. Review of the permit applications and other information in the administrative record indicates that the wells will not pose a risk of endangerment to USDWs. Section 1421 of the SDWA requires the EPA to administer underground injection control (UIC) programs in the states which do not have approved UIC programs. Michigan has not acquired primacy over the UIC program for Class I injection wells, therefore EPA is administering the permit program pursuant to regulations at 40 C.F.R. Part 147. In accordance with the SDWA and attendant regulations published by EPA under Title 40 of the Code of Federal Regulations at parts 124, 144, 146, and 147, EPA intends to issue a permit for each of the three wells. EPA will review all public comments before making a final decision on the proposed new permits.

Administrative Record

The administrative record, including copies of the draft permit, statement of basis or fact sheet, and the permit application documents, is available upon request to William Tong, 312-886-9380 or R5UIC@epa.gov. In addition, a copy of the administrative record is open for public inspection at 77 West Jackson Blvd. Chicago, IL at a time by appointment or request. All data submitted by the applicant is available as part of the administrative record. EPA will finalize the complete administrative record at the time of any final permit decision is issued, consistent with 40 C.F.R. § 124.18.

Notice

In accordance with 40 C.F.R. § 124.19, any person who filed comments on the draft permits or participated in the public hearing may petition EPA’s Environmental Appeals Board (EAB) to review any condition of the final permit decision upon issuance of any such decision.