

**BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.**

)	
)	
)	Appeal No. UIC 25-___
In the Matter of Michigan Potash Operating, LLC)	
)	
)	UIC Permits No. MI-133-1I-0004,
)	MI-133-1I-0005, MI-133-1I-0006
)	(as modified 5.15.2025), and MI-
)	133-1I-0007, MI-133-1I-0009, and
)	MI-107-1I-0005
)	

PETITION FOR REVIEW OF UNDERGROUND INJECTION CONTROL
PERMITS ISSUED AND MODIFIED BY REGION V FOR MICHIGAN POTASH
OPERATING, LLC, OSCEOLA AND MECOSTA COUNTIES, MICHIGAN

REQUEST FOR ORAL ARGUMENT

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I. INTRODUCTION

Pursuant to 40 C.F.R. 124.19(a), Michigan Citizens for Water Conservation (MCWC) petitions for review of the conditions of the Underground Injection Control (UIC) Permits No. MI-133-1I-0004, MI-133-1I-0005, MI-133-1I-0006 (as modified 5.15.2025), and MI-133-1I-0007, MI-133-1I-0009, and MI-107-1I-0005, issued by the United States Environmental Protection Agency, Region V (“Region V”) for underground brine injection of process water from a potash mine.¹ The permittee facility is owned by Michigan Potash Operating, LLC (MPO), a Michigan Potash and Salt Company subsidiary formed exclusively to manage process brine, and would be located in a rural wetland area of Osceola and Mecosta Counties, Michigan. The permit from Region V is dated May 15, 2025, and becomes effective July 7, 2025, unless review is requested pursuant to 40 C.F.R. 124.19. A copy of the permits is attached as MCWC **Attachment 1**. The thirty-day period in which to file this petition for review expires June 16, 2025. 40 C.F.R. 124.19(a)(3). This petition is therefore timely.

II. FACTUAL AND STATUTORY BACKGROUND

A. The Proposed Injection Wells.

According to the January 2015 application submitted by MPO for three underground injection wells, it proposes: “to drill and complete three (3) Class I, Type I injection wells for the purpose of putting non-hazardous salt water into the selected injection horizons. The wells are located in rural western Michigan, Osceola County” at the following locations:

¹ Pursuant to EPA’s authority under 40 C.F.R. Parts 144 and 146, and Section 124.17.

Well Name : MPC 1D
UIC Permit No.: MI-133-1I-0004
Location: Township 17 North, Range 8 West, Evert Township, Michigan Meridian
Surface: Section 31: NW/4
SHL Lat, Long: 43.825947, -85.323008
Vertical Well

Well Name : MPC 2D
UIC Permit No.: MI-133-1I-0005
Location: Township 17 North, Range 8 West, Evert Township, Michigan Meridian
Surface: Section 31: NW/4
SHL Lat, Long: 43.825948, - 85.322932
Bottom: Section 30: SW/4
BHL Lat, Long: 43.832871, -85.322873
Directional Well

Well Name : MPC 3D
UIC Permit No.: MI-133-1I-0006
Location: Township 17 North, Range 9 West, Hersey Township, Michigan Meridian
Surface: Section 36: SE/4
SHL Lat, Long: 43.818448, - 85.326073
Vertical Well

MPO Permit Class I Underground Injection Final Application at Osceola County, Michigan, Form 7520-6, January 2015 (“Final Application”) (attached as **Attachment 2**), at 16. These wells, initially permitted for one year on August 28, 2017, were subject to modification pursuant to an application finalized by MPO on June 5, 2024, extending the top of the “injection zone” by about 1,000 feet into the porous Dundee formation, which is perforated with dozens of bore holes from prior oil and gas exploration.² On April 18, 2024, Region 5 notified the public of the opportunity to comment on draft modifications to existing Class I permits MI-133-1I-0004, MI-133-1I-0005, and MI-133-1I-0006. Region 5 received “many” comments on the draft permit modifications.³

² Permit Modifications, June 5, 2024.

³ MPO Permit Modifications RtC Transmittal Letter to Commenters, May 15, 2025, at 1.

On June 6, 2024, MPO finalized separate applications for three (3) new Class I UIC wells for injection into the Dundee Limestone at depths between 3971 and 4200 feet relative to ground level at the following Mecosta County, Michigan sites.⁴

Well Name : Johnson et al. 1-6
UIC Permit No.: MI-107-11-0005
Location: Township 16 North, Range 8 West, Chippewa Township, Michigan Meridian
Surface: Section 6, NW/4, SW/4
SHL Lat, Long: none provided
Well orientation: none provided

Well Name : Hodges et al 1-36
UIC Permit No.: MI-133-11-0007
Location: Township 17 North, Range 9 West, Hersey Township, Michigan Meridian
Surface: Section 36, SE/4, SW/4, SE/4
SHL Lat, Long: none provided
Well orientation: none provided

Well Name : MPC 8D
UIC Permit No.: MI-133-11-0009
Location: Township 17N, Range 9 West, Hersey Township, Michigan Meridian
Surface: Section 36, SE/4, NE/4, SE/4
SHL Lat, Long: none provided
Well orientation: none provided

On April 18, 2024, Region 5 notified the public of the opportunity to comment on these three draft permits, numbered MI-107-11-0005, MI-133-11-0007, and MI-133-11-0009. Region 5 also received “many” comments on these draft permits and approved them together with the modified permits on May 15, 2025.⁵

⁴ UIC Permit Number MI-107-11-0005 at 1.

⁵ MPO New Permits RtC Transmittal Letter to Commenters, May 15, 2025, at 1.

B. Business Purpose of the Project

According to the Final Application for the first three wells, the “sole business purpose” of MPO’s operation is “to intelligibly and carefully handle salt water that is created from the making of natural agricultural fertilizer that American farmers must have to grow our food.” Final Application at 15. MPO, it appears, is a subsidiary of Michigan Potash and Salt Company, an entity created with the intent of mining potash profitably at a location where this business model has failed in the past.

C. Osceola and Mecosta County Demographics and Economics⁶

These central Michigan counties have median annual incomes of roughly \$57,000. Median home value is \$139,000 to \$169,000 and the poverty rate varies from 16.8 to 19.2%, with a density of around 40 people per square mile. The largest sources of income are health care and social assistance. While residents are understandably eager for economic growth, they would struggle to absorb the economic blow of groundwater contamination. Testing, filtration, bottled water, and possible tax assessment for a rural water district to replace contaminated well water would be a crushing financial burden for many local households.

III. THRESHOLD PROCEDURAL REQUIREMENTS

The Safe Drinking Water Act (“SDWA”) requires EPA to regulate underground injection of fluids through wells to protect the quality of underground sources of drinking water (“USDW”). 42 U.S.C. 300(f), *et seq.* SDWA Part C, enacted to protect groundwater, requires EPA to establish a regulatory program to prevent underground injections that endanger drinking water sources. 42

⁶ U.S. Census Bureau data. <https://www.census.gov/quickfacts/fact/table/mecostacountymichigan/PST045223>
<https://www.census.gov/quickfacts/fact/table/osceolacountymichigan/PST045224>

U.S.C. §300(h)(b). EPA has promulgated requirements for UIC programs under SDWA, and in states where the EPA has not approved a state UIC program, such as Michigan, EPA implements its own regulations for that state’s UIC program. The UIC well permitting process must conform to detailed requirements at each step. 40 C.F.R. §§ 124.3-19. A person who contests any condition of the draft permit must raise all “reasonably ascertainable” issues during the comment period. 40 C.F.R. § 124.13. To obtain review by the Board, a petitioner must show the permit is based on “a finding of fact or conclusion of law which is clearly erroneous” or rests on “an exercise of discretion or an important policy consideration which the Environmental Appeals Board should, in its discretion, review.” 40 C.F.R. § 124.19(a)(1)-(2). *See, Leblanc v EPA*, 310 F App’x 770, 771-72 (CA 6, 2009).

MCWC satisfies the threshold requirements for filing a petition for review under Part 124. MCWC has standing to petition for review of the permit decision because MCWC and its members participated in the public comment periods on the draft permits. 40 CFR § 124.19(a). *See* Comments on behalf of the MCWC (July 11, 2024) (attached as **Attachment 3**). The issues raised by MCWC below were raised by its members with the Region during the public comment periods or are directly related to the Region’s response to other comments (and therefore not reasonably ascertainable during the comment period). Consequently, the Board has jurisdiction to hear MCWC’s timely request for review.

IV. ISSUES PRESENTED FOR REVIEW

MCWC respectfully requests Board review pursuant to 40 C.F.R. 124.19 of the following issues:

1. Whether Region V clearly erred by finding comments regarding the “Combined” Area of Review out of scope and by relying on flawed assumptions regarding the AOR outer

perimeter and the interaction of incompressible fluids. And, even if not clear error, whether the Board should review this issue because it has important policy implications for analyzing expanded injection at close proximity in fields previously used for other types of injection or exploration.

2. Whether Region V clearly erred by relying on dated information about the status of plugged and abandoned well-bores in the Dundee and Lucas formations and failing to perform its own research or conduct new testing to verify the physical integrity of existing borings and the sufficiency and suitability of aging plugs for preventing upward migration of injected brine. And, even if not clear error, whether the Board should review this issue because it has important policy implications for analyzing expanded injection in fields previously used for other types of injection or exploration.

V. ARGUMENT

A. Region V Erred in Finding MCWC Combined Area of Review Comments ‘Out-of-Scope’

Over the past ten years, as the six well permits at issue here have been in various stages of consideration, MCWC members have done their best, as volunteers with some relevant professional qualifications, to evaluate technical documents and provide input to state and federal agencies. Many of their legitimate concerns about underground injection wells, based on generational local knowledge, have been dismissed as outside the scope of review, yet remain highly relevant and largely unaddressed.

In October 3, 2023 comments regarding modification to UIC permits MI-133-1I-0004, MI-133-1I-0005, MI-133-1I-0006, MCWC member Marco Menezes expressed the following concerns about the combined Area of Review for the three modified wells:

(O)verall “combined” project AOR consists of three overlapping four mile diameter AOR circles, one around each of the three proposed disposal wells. [See Figures 1, 2 below]. Those circles represent the maximum distance injected brines are presumed to migrate under pressure, during the operational life of each well. The underlying modeling used in setting the combined AOR appears to assume that incompressible fluid (i.e. salt brine) injected into each well will not interact dynamically with brines injected at high pressure from other wells. [See Figure 2, below]. But, at the 1,006-psi maximum pressure proposed, physics and common sense suggest that these incompressible fluids will push against each other, distorting and expanding outward the perimeter of each well’s area of influence. The two outer wells would push outward to

each side (being pushed by pressure from the center well). Similarly, the area influenced by the center well would bulge out from in between those two areas. The overall effect would be to expand the area of the injection zone, well beyond the limits of the area studied by the EPA.⁷

In 2024, MCWC member Doug Miller also raised comments and questions on the AOR directly addressing the threat to drinking water posed by injecting brine closer to the drinking water aquifer, a concern that was far less urgent at the originally permitted injection depth, more than 1,000 feet deeper, below the Dundee formation. Mr. Miller said:

If (the wells) are intended to be used simultaneously, then I believe there is a serious flaw in your delineation of a combined AOR. Given that the fluids being injected are incompressible, I cannot fathom how those coming from one of these closely spaced wells will have zero effect on the flow characteristics of fluids injected by its neighbors. Yet that appears to be the underlying assumption for the model you're using here where, for three wells spaced half a mile apart, three circular AOR's were simply piled on top of each other (see drawings below). In those drawings, I've included what I believe to be a more realistic approximation of what your combined AOR should look like. It's also considerably larger than the one which you are using. This error does not make much difference as long as MPSC's wells remain situated below their 900-foot thick confining formation (Detroit River Group) as currently permitted. This is due to the fact that nearly all of the well-bores existing at that depth are contained within your currently defined AOR. But that is almost assuredly not the case with the more heavily drilled Dundee formation which the company now wants to utilize for its waste-disposal. For this reason, I urge you to modify the size and shape of your combined AOR accordingly.⁸

Region 5 rejected these comments regarding the combined Area of Review (AOR) as “out-of-scope” on the grounds that the AOR was fixed at the time of 2017 permitting and only conditions subject to modification are reopened to public comment.⁹ In its response to comments, Region 5 said:

The concern that the incompressibility of brine would change the shape or expand the Area of Review (AoR) reflects a misunderstanding of subsurface pressure dynamics. Primary fluid migration requires a pressure gradient and sufficient

⁷ Menezes comments, **Attachment 4** at 1.

⁸ Miller comments (2024) **Attachment 5** at 1-2.

⁹ See EPA response at 3.

permeability to allow flow (1,2). In this case, the pressure and injected fluid movement are reduced by the high-permeability geologic formation injection zone (3). As a result, pressure may propagate to some limited extent, but actual fluid movement remains near the point of injection, thus the 2-mile AoR is appropriate.¹⁰

In support, Region 5 cited a 1972 textbook¹¹ and a 2019 *Solid Earth* journal article titled “Geomechanical effects on faulted caprock integrity during CO₂ storage: In situ field-scale numerical simulations.” With due respect for the technical expertise of Region 5 scientists, literature about migration of CO₂ does not appear to be the best evidence with which to make a point about the anticipated behavior of brine. The third article cited, from a journal called *Frontiers in Environmental Science*, does not appear in the journal’s online records of its 2022 articles or in databases of scientific literature.¹² Finally, although Region 5 accuses Mr. Miller of misunderstanding the fluid dynamics at work, the response appears only to address the 2-mile AOR decision, not Mr. Miller’s more nuanced point about malformation of the anticipated migration pattern due to close proximity of the three proposed wells.

Given the potential impact of changes in the well scope on the AOR, these comments should be considered within the scope of the modification. Region 5 improperly excluded such issues from its response. MCWC seeks an opportunity to introduce expanded technical evidence on this important and relevant point. Per 40 C.F.R. § 124.17 (a)(2), Region 5’s response to comments must “describe and respond to all significant comments on the draft permit raised during the public comment period.” Region 5’s failure to respond to the substance of MCWC members’ comments is therefore a procedural violation. The commentary in footnote 2 only draws attention to Region 5’s inadequate analysis.

¹⁰ EPA response (**Attachment 6**) at 3.

¹¹ Bear, J. (1972). *Dynamics of Fluids in Porous Media*. Dover Publications.

¹² <https://www.frontiersin.org>

B. Region V Erred by Relying Only on Dated Records Regarding Abandoned Wells and Failing to Perform Physical Integrity Testing and an Unrecorded Abandoned Well Investigation

MCWC members were among the many commenters who raised concerns summarized by Region 5 as “Comment 5”:

Numerous commenters expressed concerns about “extending the injection zone upwards by 1,000 feet” and underground injection of wastewater into the “Dundee Formation aquifer.” The commenters are concerned that the pressure from drilling and injection would “unplug” some abandoned wells, which they believe would lead to contamination of drinking water. Commenters claim that thorough study and research has not been done on this process, including what will happen to their wells and environment.

Region 5’s response notes that “hundreds of existing Class II-D wells in Michigan already use the Dundee Formation as the injection zone for oilfield brine disposal” but does not add the critical detail of whether those other wells traverse an aquifer that is the sole drinking water source for a community *and* heavily perforated by prior exploratory wells. Region 5 cites MPO’s “extensive research” on old wells in the combined AOR, as if the applicant has gone above and beyond its duty in providing this research, when in fact 40 C.F.R. 146.14 requires:

For both existing and new Class I wells certain maps, cross-sections, tabulations of wells within the area of review and other data may be included in the application by reference provided they are current, readily available to the Director (for example, in the permitting agency’s files) and sufficiently identified to be retrieved. In cases where EPA issues the permit all the information in this section must be submitted to the Administrator.

(a) Prior to the issuance of a permit for an existing Class I well to operate or the construction or conversion of a new Class I well the Director shall consider the following:

(1) Information required in 40 CFR 144.31 and 144.31(g);

(2) A map showing the injection well(s) for which a permit is sought and the applicable area of review. Within the area of review, the map must show the number, or name, and location of all producing wells, dry holes, surface bodies of water, springs, mines (surface and subsurface), quarries, water wells and other pertinent surface features including residences and roads. The map should also show faults, if known or suspected. Only information of public record is required to be included on this map;

(3) A tabulation of data on all wells within the area of review which penetrate into the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the Director may require....

(emphasis added). In providing this research, MPO did only what was required of it by federal regulations. Region 5 in turn:

conducted independent research of the Michigan EGLE GeoWebFace and Data Explorer data bases to construct a combined AOR map and a list of all deep wells within the combined AOR, with detailed individual well records. Review of these well records indicate that each well was properly closed, plugged, and abandoned, with documentation of state approval of well closure. In conclusion, there is no evidence that injection into additional formations will “unplug” abandoned wells, which are plugged with cement after plugging and abandonment of the wells.

In other words, this was purely a paperwork exercise.

The records produced by MPO and reviewed by Region 5 include hundreds of pages of bore well history, confirming efforts to plug the borings while offering little or no information about how successful those efforts were.¹³

If there is “no evidence that injection ... will ‘unplug’ abandoned wells”, there is also no evidence that it *won't*, because no testing whatsoever has been done. There is no evidence that either the applicant or EPA pursued any field testing or “groundtruthing” to confirm the validity of these records, the continued proper function of cement well plugs dating back to at least the 1940s, or the existence of unmapped well bores in unknown condition¹⁴. The record of exploration by a long list of companies, many no longer in existence, is a historical odyssey of varying practices and skill levels, regulatory oversight (or lack thereof), and evolving equipment and approaches to plugging, including some bore wells that were only ‘temporarily abandoned’ and

¹³ See *id.*

¹⁴ See, e.g., **Attachment 7**, MPO 2015 Class I UIC well permit application at 45.

therefore possibly not plugged as completely as a permanently abandoned well would have been¹⁵. There is no evidence that either the applicant or Region 5 pursued any field testing or “groundtruthing” to confirm the validity of these records, the continued proper function of cement well plugs dating back to at least the 1940s, or the existence of unmapped well bores in unknown condition.¹⁶

Brine injection well failures are a well-documented phenomenon across the US. A few examples include:¹⁷

Location	Waste	Mishaps
Bucks (Stauffer Chem. Inc.), Alabama	Sodium Chloride (NaCl, salt) and sodium hydroxide (NaOH) brine; traces of phosphates and organic compounds; by-products of agricultural chemicals	Casing failure leakages (HWTC 1985, Henry 1983). ¹⁸
Tuolumne River, California	Brine effluents (Class II)	Leakage from abandoned gas well (US Congress 1973). ¹⁹
Adams and Wade Counties, Colorado	Salt water disposal wastes (Class II)	Polluted water wells (Reports 1973). ²⁰
Pinellas County (City of St. Petersburg facilities), Florida	Highly likely that saline waters were pushed upward by injectate; elevated ammonia	Probable and confirmed migration of fluids upward into USDW; significant change in water quality (USEPA 2002). ²¹

¹⁵ See, Bear, J. (1972). Dynamics of Fluids in Porous Media. Dover Publications *id.* at 342.

¹⁶ See, e.g., **Attachment 2**, MPO 2015 Class I UIC well permit application at 45.

¹⁷ “Deep Well Injection: An Explosive Issue”, Center for Health, Environment & Justice, May 26, 2009, at 21-29. <https://chej.org/wp-content/uploads/Deep%20Well%20Injection%20-%20PUB%20056.pdf>

¹⁸ Hazardous Waste Treatment Council (HWTC 1985) “Deep Well Injection” Fact Sheet; Henry, Lowerre and Mason (Henry 1983) “Reports of Industrial Waste Injection Well Failures.” In-house Memorandum, Henry, Lowerre and Masons, attorneys, December 29, 1983.

¹⁹ U.S. Congress (US Congress 1973) Reports of Industrial Waste Injection Well Failures. Presented as part of hearings before the Subcommittee on Public Health and the Environment, 93rd Congress, First Session on H.R. 5368, H.R. 1059, H.R. 5995. March 8-9 (Safe Drinking Water Revisions).

²⁰ *Id.*

²¹ U.S. Environmental Protection Agency (USEPA 2002) Relative Risk Assessment of Management Options for Treated Wastewater in South Florida. Available at <http://www.epa.gov/Region4/water/uic/ra.htm>

Fort Peck Indian Reservation in Daniels County (Summernight Oil Company LLC and Miocene Oil and Gas Ltd.), Montana	Brine (Class II)	Summernight was fined for violations of SDWA including failing to conduct required well tests and Miocene was fined for injecting without a permit; both incidents could have threatened groundwater (USEPA 2007c). ²²
Medena County, Ohio	Brine Wastes (Class II)	Contaminated fresh water aquifer leakage through abandoned unplugged well (US Congress 1973). ²³
Okmulgee, Rogers, Muskogee, Nowata Counties, Oklahoma	Brine Wastes (Class II)	Polluted shallow aquifer (US Congress 1973, ²⁴ Hensch 1985). ²⁵
McKean County, Pennsylvania	Crude oil and brine (Class II)	Polluted freshwater aquifer through abandoned well (US Congress 1973). ²⁶
Mt Pleasant (Stauffer Chemical Company, later Zeneca Holding, Inc.), Tennessee	Organophosphate, hydrochloric acid, brine, sulphur dioxide; contaminated wastewater	When owned by Stauffer: 7-inch casing ruptured between 2,000-3,000 feet (HWTC 1985, USEPA 1984a). After Zeneca took over in 1978, they continued to inject into an aquifer until 1999, when ordered by the EPA to stop injection and pay \$3.5 million in fines for violations of the SDWA, RCRA, CAA, CWA and UIC regulations (USDOJ 1998). ²⁷
Wilbarger, Hockley and Hutchinson County, Texas	Brine/gas (Class II)	Polluted fresh water aquifer (US Congress 1973). ²⁸
Utah	Solution mining of pot-ash (Class III)	Polluting streams and groundwater (US Congress 1973). ²⁹

²² U.S. Environmental Protection Agency (USEPA 2007c) “Agreement reached concerning injection well violations on Fort Peck Indian Reservation.” USEPA Region 8 Newsroom, June 13. Available at <http://www.epa.gov/newsroom/newsrooms.htm>.

²³ *Supra* n. 19.

²⁴ *Id.*

²⁵ Hensch D.A. (1985) Correspondence to Mr. W.J. Lamberton, Chemical Resources, Inc, Re: Permit Application Notice of Deficiency Letter, via certified mail from Donald A. Hensch, Director, Industrial Waste Division Oklahoma Department of Health, Oklahoma City, Oklahoma, January 22.

²⁶ *Supra* n. 19.

²⁷ U.S. Department of Justice (USDOJ 1998) “Zeneca Agrees to Pay Civil Penalty, Cease Deep Well Injection.” Press Release. August 26. Available at <http://www.usdoj.gov/opa/pr/1998/August/388enr.html>.

²⁸ *Supra* n. 19.

²⁹ *Id.*

Kanawa and Roane County, West Virginia	Brine effluents (Class II)	Polluted freshwater aquifer through abandoned and unplugged wells (US Congress 1973). ³⁰
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In response to related comment 15, regarding the lack of integrity testing, Region 5’s response is that plugged wells are “inaccessible to any future mechanical integrity testing.” This may be true, but it does not absolve Region 5 of its statutory responsibility to ensure that the condition of these abandoned wells will not pose a threat to drinking water. This response is insufficient.

These omissions and dodges matter because there are substantive as well as procedural requirements underlying the UIC permitting program. The regulations governing review and approval of Class I injection wells for hazardous and non-hazardous fluids prioritize the importance of protecting irreplaceable potable groundwater as a mandatory duty:

(1) Regulations under subsection (a) for State underground injection programs shall contain minimum requirements for effective programs to prevent underground injection which endangers drinking water sources within the meaning of subsection (d)(2). Such regulations shall require that a State program, in order to be approved under section 1422 [42 USCS § 300h-1]—

(A) shall prohibit, effective on the date on which the applicable underground injection control program takes effect, any underground injection in such State which is not authorized by a permit issued by the State (except that the regulations may permit a State to authorize underground injection by rule);

(B) shall require (i) in the case of a program which provides for authorization of underground injection by permit, that the applicant for the permit to inject **must satisfy the State that the underground injection will not endanger drinking water sources**, and (ii) in the case of a program which provides for such an authorization by rule, that no rule may be promulgated which authorizes any underground injection which endangers drinking water sources;

³⁰ *Id.*

42 U.S.C.S. 300(h) (emphasis added). Region 5's paperwork-only actions in reviewing and approving six new UIC wells into the fissured and heavily perforated Dundee formation do not meet this necessarily high standard.³¹ If this is not clear error, it is at minimum a problematic policy that should be corrected.

As a final point: as the EAB is doubtless aware, confidentiality around oil and gas exploratory well logs requires neighbors to place an extraordinary level of trust in administrative agencies charged with protecting groundwater. This responsibility places an exceptional burden on Region 5 in this context, to ensure that due diligence has confirmed the reliability of all information on which it bases well permitting decisions. In this case, due diligence apparently consisted only of reviewing records submitted by the applicant and state records, which may or may not be complete or accurate. They are certainly not up to date. MCWC has raised concerns based on local oral history about older, unlined, unmapped wells in the area. A community relying on Region 5's careful review to protect its groundwater deserves the fullest attention to these potential threats.

VI. CONCLUSION

Region V's analysis of the UIC permit and permit modification applications is flawed for several reasons. Through inadequate due diligence despite a lengthy review period, Region 5 has failed to ensure protection of the sole source of precious drinking water for a rural community, in a state already widely affected by contaminated aquifers from under-regulated industrial activity. Review and remand are appropriate.

³¹ See **Attachment 8**, Appendix I, MPO Application, Johnson 1-36D, March 2024, at 1.

Respectfully submitted, this 16th day of June 2025.

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STATEMENT OF COMPLIANCE

The foregoing complies with 40 C.F.R. § 124.19(d)(1)(iv) and (3), limiting the petition to 14,000 words, exclusive of table of contents, table of authorities, table of attachments, statement requesting oral argument, statement of compliance with the word limitation, and any attachments. The length is 4,855 words, using the word count function in Microsoft Word.

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document, upon the following parties by

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Dated this 16th day of June 2025.

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1	Final UIC Permits (UIC Permits No. MI-133-1I-0004, MI-133-1I-0005, MI-133-1I-0006 (as modified 5.15.2025), and MI-133-1I-0007, MI-133-1I-0009, and MI-107-1I-0005) as approved by US EPA Region V on May 15, 2025
2	MPO Permit Class I Underground Injection Final Application at Osceola County, Michigan, Form 7520-6, January 2015 (“Final Application”)
3	Comments on behalf of the MCWC (July 11, 2024)
4	IN RE: Michigan Potash & Salt Co.’s applications to modify UIC permit numbers: MI-133-1I-0004, MI-133-1I-0005 and MI-133-1I-0006. Marco S. Menezes.
5	Re. Proposed permit modifications, Michigan Potash Operating, LLC, MI-133-1I-0004, MI-133-1I-0005, and MI-133-1I-0006. Douglas C. Miller.
6	EPA Response to Comments
7	Appendix I, MPO Application, Johnson 1-36D, March 2024