

Brine Injection/UIC: U.S. EPA Environmental Appeals Board Addresses Challenges to Class II Permit



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The United States Environmental Protection Agency (“EPA”) Environmental Appeals Board (“EAB”) addressed in an August 8th Order challenges to an Underground Injection Control (“UIC”) Class II Permit (“Permit”) issued by the Region 5 Office of EPA to Jordan Development Company, L.L.C. (“Jordan”). See UIC Appeal Nos. 18-06, 18-07, 18-08, and 18-09.

The EAB reviewed petitions filed by several individuals.

The Permit authorizes Jordan to convert an existing production well in Gladwin County, Michigan. The well would be utilized for injection of brine. Brine is a byproduct of oil and natural gas drilling activities.

The Permit was issued pursuant to the UIC program Part C of the Safe Drinking Water Act and implementing regulations at 40 C.F.R. Parts 124 and 144-148.

The intent of the UIC regulations is to prevent the movement of fluids containing contaminants into underground sources of drinking water if the presence of such contaminants could cause a violation of a primary drinking water regulation or otherwise adversely affect human health.

The UIC program addresses six classes of injection wells. Class II wells are used to inject fluids for three different purposes:

- Storage of hydrocarbons
- Enhanced recovery of oil or natural gas
- Disposal of fluids from oil or gas production

Michigan has not been delegated this federal program. Therefore, EPA administers the UIC program in Michigan.

The well at issue would be used for disposal of fluids from oil or gas production.

The Petitioners challenged the issuance of the Permit on the grounds that EPA:

1. erred in its evaluation of environmental justice matters in issuing the Permit;
2. failed to adequately analyze the risks of natural and induced seismicity, rock fracturing, and rock dissolving events associated with injection at this well;
3. inadequately considered deficiencies in the agency’s oversight of state UIC programs and the existence of many violations and problems in Jordan’s compliance history;

4. failed to respond to comments questioning Jordan's financial assurances or ensure the company's ability to pay for environmental costs of cleanup leaks or spills;
5. clearly erred and abused its discretion by issuing a Permit with no fixed limits of injection fluid volume, but only a recommended maximum, and failed to respond adequately to concerns that seismic activity may be induced by rapid injection of large volumes of fluids;
6. provided an insufficient response to comments criticizing, as too small, the area of review around the proposed well;
7. misrepresented the nature of the fluids Jordan will inject and purposefully mislead the public on this point;
8. erred by stating the public failed to offer specific sources of information to support claims that Class II wells leak;
9. erred by finding that commenters' concerns about frequent well leaks do not reflect EPA's experience in Michigan; and
10. abused its discretion by failing to consider possible adverse impacts of UIC well leaks on non-endangered fish and wildlife.

The EAB's Order concluded there was a failure to preserve for review EPA's alleged lack of consideration of certain demographic and other factors. Further, there was a finding of a failure to find clear error in the agency's determination that comments were outside the scope of the UIC permitting process or that there was abuse of discretion in not considering environmental justice issues.

As to the argument concerning seismicity, rock fracturing and rock dissolving, it was held there was a failure to confront EPA's explanation on its consideration of the issues or otherwise demonstrate clear error about the technical judgments. Regarding EPA's oversight of the state UIC programs and Jordan's environmental compliance history, there was a determination that they were procedurally flawed and a failure to confront EPA's responses to comments on the issues. A similar conclusion was held in regards to the financial assurance claims.

As to the induced seismicity analysis and determination of the area of review, there was a similar conclusion as to the failure to confront EPA's response to comments and that it clearly erred or abused discretion. A similar conclusion was held in regards to the leak-related claims and fish, wildlife, and surface water claims.

Therefore, the EAB denied the Petitions for Review.

A copy of the EAB Order can be downloaded [here](#).