

DEQ cranking out administrative rules in new bid for "primacy" in regulation of injection wells

by Ellis Boal

Call to action

Michigan's Department of Environmental Quality (DEQ) is proposing new administrative rules which will allow it to be the prime regulator of injection wells in the state.

Send your comments about this [to DEQ](#) by 5:00 pm on March 16.

Here is a [template](#) for requesting a 30-day extension of the comment period.

Background of primacy in Michigan

Even as DEQ staff in 2014 incurred [multiple felony charges](#) in the Flint water crises, it was beginning a process of seeking "primacy" from the federal Environmental Protection Agency (EPA) over regulation of oil-gas injection wells.

These wells, called "[class II injection wells](#)," are reverse wells, in which operators pour liquids or gas into the earth -- for toxic waste disposal, storage, or enhancement of oil-gas extraction -- instead of taking product out and selling it.

The injected wastes include flowback of the fracturing/acidizing slurry used to complete oil-gas wells, as well as salty brines originally below ground which come to the surface during oil-gas extraction. These liquid wastes are sometimes radioactive.

Michigan has [about 1300](#) class II injection wells. DEQ expects this number to increase.

At present, the regulatory matrix in Michigan requires that both DEQ and EPA sign off on new class II permits.

But unlike Michigan, 34 states [have primacy](#) for class II wells. Like Michigan, Pennsylvania and New York have significant oil-gas reserves, but don't have primacy. Michigan doesn't need it either.

Under the federal [Safe Drinking Water Act](#), Michigan could have sought primacy 35 years ago, when most other oil-gas producing states [sought it and got it](#). But Michigan once had a long-time concern for groundwater protection.

Injection wells are an important issue. As we [reported in 2016](#), they leak, eventually most wells fail,

and in 10 to 100 years from now we will find most groundwater in the US is polluted. This is particularly noticeable given the increased number of wells recently which use fracturing completion methods.

2014: Michigan seeks injection primacy

In 2014 DEQ began the process of seeking primacy. In November 2014 DEQ circulated a "[briefing report](#)" boasting that:

The State of Michigan is well equipped for Class II ... primacy, understanding state specific geography, geology, cultural, climactic [sic], social, and economic issues. ... The State of Michigan's record of accomplishment for excellent environmental protection and regulation for Class II injection will continue....

A month later it held a "public hearing," illegally with no advance public notice that a record would be made and public comments accepted. Only two people from the public showed up, one representing BMF. For our part, we noted DEQ had advanced no reason for primacy other than that it wanted the power.

In 2015 again with no public notice, DEQ submitted a draft primacy application to EPA, calling for the two agencies to "maintain" their high level of "cooperation."

In January 2017, as [we reported later in the year](#), EPA ripped the DEQ application. It cited "fundamental" concerns that the program provisions "limit effective protection" of public water supplies, the DEQ's definition of fresh water "is narrower in scope" than the EPA's, and the DEQ application had "inconsistencies and unclear descriptions."

As examples, EPA noted:

- the application had no information about confining zones;
- the definition of class II wells did not include frack wells which use diesel fuels;
- DEQ didn't know the difference between "fracture gradient" and "fracture pressure"; and
- certain DEQ rules place a high documentation burden on people who want to petition for a hearing.

But before it could even consider primacy, EPA added, DEQ would have to upgrade its formal administrative rules, a process which involves a for-real public hearing, and can take a year or more.

The same year Kentucky [sought primacy and EPA granted](#) it.

The new DEQ bid

Unbowed, DEQ [drafted new administrative rules](#) last December. Its 8-member [Oil and Gas Advisory Committee](#) -- of which 6 members represent industry -- [helped develop the draft](#).

Most of the revisions consist of a "[comprehensive](#)" update for injection wells. But others would:

- increase bonds for casing, plugging, and repairing all types of wells, the last increase having been in 1996,
- provide flexibility to extend permit termination dates so as to diminish problems for operators,
- streamline requirements for approving minor changes to well locations prior to drilling, and
- fix one typographical error.

Importantly, the primacy-related injection well changes "[do not go beyond](#)" current federal requirements. Thus there is no requirement that an injection well test and identify waste before it goes down the hole.

The text of the current rules is [here](#). The text of the proposed revision is [here](#). The regulatory impact statement/cost-benefit analysis is [here](#).

[DEQ emphasizes:](#)

Injection wells are essential to the future of Michigan oil and gas production for disposal of waste fluids and for recovery projects in existing oil fields. Having a single regulatory structure protective of underground sources of drinking water will have a positive impact on oil and gas development and will reduce the cost of regulatory compliance by elimination of duplicative regulations.

DEQ adds that current EPA injection standards are good enough. Accordingly construction and operation [will not change](#) under the proposed rules, nor will performance and design standards. [Stated otherwise:](#)

The proposed rule set ... will ... position Michigan to eliminate dual regulation by obtaining primacy.

In other words the new rules would simply bring state standards up to the level of the federal standards which are already in place. So if the standards will remain the same, will thereby any benefit from DEQ primacy? Yes but only for industry.

The public hearing -- Industry

DEQ held a public hearing on the revisions in Lansing on February 28. A [transcript](#) was produced.

Eight industry leaders attended and spoke, including Bill Myler Jr. and Robert Long, both members of [Oil and Gas Advisory Committee](#) which helped write the draft, and James R. Neal, a [longtime outspoken advocate](#) of compulsory pooling.

Jordan Exploration's Ben Brower said "we certainly don't like the duplicity and dealing with the EPA has been extremely difficult."

Dave Farner of Dart Oil and Gas claimed that 43 states have primacy.

West Bay Exploration's Tim Baker claimed that under the EPA his company had waited seven years for a particular permit because EPA gave standing to opponents based on "nebulous science issues," but DEQ staff were "better trained."

Though Myler helped write the draft, he and Brower ridiculed it as "overkill."

Overkill? Even so, industry's support was unqualified and adamant, asking for primacy "the sooner the better."

Why? Farner said EPA staff "ask the wrong questions." Brower said "We work with you [DEQ] a lot." Long said, "They [DEQ staff] know us. We know them."

The public hearing -- MCWC

Four people appeared representing [Michigan Citizens for Water Conservation](#), Jeff Ostahowski, Peggy Case, Wendy Nystrom, and Pamela Gilbert, to speak in opposition. Some of the points they made:

- Term-limits should be imposed on injection wells. Otherwise at some point there will be an earthquake.
- Much of the injectate will travel underground two miles or more. Yet the DEQ area of review covers only a ¼-mile radius.
- A [Richter](#) 4.2 earthquake such as Michigan had in 2015 can affect strata up to two miles away.
- MCWC once sent DEQ data on 115 old well bores in the area where an injection well was being proposed, but it didn't matter. Waste should be tested and identified before it goes in the ground.
- There are no maps for flow or transfer lines from existing contiguous operations.
- Injection wells are serviced by secondary contracted LLC companies which are unbonded.

- For oil-gas enhancement, only brine should be allowed not fresh water.
- The comment period should be extended beyond the current end-date of March 16.

MCWC will be following up with written comments.

BMF critique of the new rules: quakes, faults, site assessment

This article will elaborate only on one of the points raised by MCWC:

An [EPA regulation](#) currently requires that injection pressure must be such as to assure it will not "initiate new fractures or propagate existing fractures in the confining zone" and will not cause the "movement" of injection or formation fluids into public water supplies.

The DEQ draft requires that there be a geologic confining interval that can "limit" fluid movement above an injection interval, and information demonstrating that well construction "will prevent" fluid movement so as to endanger public water supplies. But it does not specifically require assurance that injection pressure will not "propagate existing fractures."

Nor does it require identification of faults outside the ¼-mile "area of review." By contrast an [EPA regulation](#) rejects a fixed radius, where inappropriate based on operational parameters and local geologic information, in favor of evaluation within a formula-determined "zone of endangering influence" which can be wider than ¼-mile.

Your chance to comment

As seen, when it comes to injection EPA already has a low opinion of DEQ.

Unless DEQ extends the comment period, in order for you to be considered send them to [the DEQ](#) by 5:00 pm on March 16.