

## Comments on request for Primacy of Regulation for Class II Wells in Michigan

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### Subject of comments

Michigan Department of Environmental Quality (MDEQ) Office of Oil, Gas, and Minerals (OOGM), State of Michigan Underground Injection Control Program Primacy Application to U.S. Environmental Protection Agency (EPA) – Region V Application draft dated 12/1/2014 (Draft Application)

Application by the MDEQ is being made pursuant to Part C, Section 1425, of Title XIV of the Public Health Service Act: Safety of Public Water Systems (SDWA), Public Law 93-523, as amended from the United States Environmental Protection Agency (Safe Drinking Water Act) <sup>(1)</sup>

### Acronyms and references used in these comments

EPA – United States Environmental Protection Agency

MDEQ – Michigan Department of Environmental Quality

MIR – Risk Based Data Management System

OOGM – Michigan Department of Environmental Quality Office of Oil, Gas, and Minerals

References are footnoted. In some cases, footnotes contain explanatory comments.

### Introduction

The MDEQ and the OOGM have prepared the Draft Application requesting that they be given primacy of the regulation for Class II wells in Michigan. Currently the EPA has the primary responsibility for the regulation of Class II wells in Michigan.

Obtaining primacy of regulation for Class II wells presents an opportunity for the MDEQ and the OOGM to advance their dual responsibilities of protecting drinking water and assisting the oil and gas industry.

## Background

At the present time Michigan has approximately 1,268 Class II wells. According to the Draft Application, approximately 69 percent of these wells are disposal wells and the remainder are operated as secondary recovery wells.

In Michigan over one million households are served by water wells that must be free from contamination. Waste waters from oil and gas operations disposed of in Class II wells contain chemical and radiological constituents that if released into shallow water aquifers would be moderately to extremely hazardous to humans. Therefore it is of utmost importance that Class II wells be properly constructed and their mechanical integrity carefully monitored to insure that these Class II wells do not leak into shallow aquifers that Michigan residents depend on for their water.

The oil and gas industry is dependent on Class II wells as a place to put the waste they produce in oil and gas operations. The ability to expeditiously permit new Class II wells and have certainty in the regulations of existing Class II wells is an important requisite for a successful oil and gas industry in Michigan.

### Additions needed in the Draft Application

In order to achieve the dual goals of improving the protection of drinking water and providing the necessary facilities for the oil and gas industry the MDEQ and OOGM's plan to assume the primacy of the regulation of Class II wells in Michigan should be such that the Draft Application would include the following:

- provisions for adequate staffing to take over the prime responsibility for regulating Class II wells
- express representation that the systems that the OOGM will have available for record keeping for Class II wells are adequate
- discussion of where the funding will come from for the prime responsibility for the regulation of Class II wells
- undertaking to provide for the more expeditious approval of new Class II wells
- assurance that the mechanical integrity tests of Class II wells will be witnessed by a representative from the OOGM
- statement from the Attorney General covering the topics of legal authority, standing, and public comment on the Draft Application
- representation that the Michigan Underground Injection Control Program for Class II wells administered by the State of Michigan will be changed to

provide:

- decision for a hearing for a Class II well will be considered on its merit

- hearings for Class II wells will not be denied based on the determination by the MDEQ, OOGM, or the Attorney General that the requester for the hearing does not have standing

### Staffing

In a public meeting held on the Draft Application on December 9, 2014 representations of the OOGM stated that if they are awarded primacy for the regulation of Class II wells the OOGM would add only one program administrator to their staff. Although the Draft Application states that OOGM currently has 63 full time employees, an audit conducted by the Michigan Office of the Auditor General prepared in September of 2013 stated that the OOGM did not conduct field inspections of all well sites at the targeted intervals to ensure compliance with Michigan's oil and gas regulations. In general the audit report suggests that all of the present 63 employees of the OOGM are needed to accomplish the OOGM's current present tasks of regulating oil and gas activities in Michigan.<sup>(2)</sup>

Ohio, a state that has primacy of regulation for Class II wells, has 8 full time equivalent staff members devoted to class II wells. Ohio also has about twice the number of Class II wells as Michigan. If Michigan is to take over the regulation of Class II wells and use Ohio as a guide, Michigan should have four full time staff members devoted to Class II wells.<sup>(3)</sup>

Proper staffing levels could be addressed by the OOGM by hiring the number of professionals to conduct the necessary field inspections and the record keeping for the oversight of Class II wells.

### Record keeping

It is unclear from the Draft Application and from statements made by representatives of the OOGM at the public meeting held on December 9, 2014 that the OOGM has the ability to assume the record keeping responsibilities necessary if they obtained regulatory primacy for Class II wells. The audit report by the Michigan Office of the Auditor General referenced in the Staffing section of these comments noted that the Risk Based Data Management System (MIR) automated system used by the OOGM is an old system. The MIR system was noted in the audit report as having limitations on the amount of data it can track and count.

The Draft Application should make an explicit representation that the systems the OOGM would use if they assume the prime responsibility for the regulation of Class II wells will be available and adequate for the needed record keeping tasks.

### Funding

It is not stated in the Draft Application or in comments from the OOGM staff in the public meeting held on December 9, 2014 that the OOGM has the funding necessary to take over primacy of the regulation of Class II wells. Although federal grants are available to states that have primacy in regulating Class II wells, this funding has remained relatively constant at about \$11 million per year for many years and represents only a small fraction of the funding for the Class II program. For example, in 2012 Ohio received from the Federal Government only 17% of the funds (\$152,000) necessary to run their Class II program.<sup>(4)</sup>

Additional funding sources for regulating Class II wells could be obtained by the OOGM by increasing the fee for monitoring, surveillance, enforcement, and administration of oil and gas

wells authorized under Michigan law (324.61524, Section 61524). Under Michigan State Law, a fee of up to 1% of the market value of oil and gas produced in the state can be collected from Michigan oil and gas producers. In 2014 this fee was .92% and therefore the ability exists to collect more funds to pay for the costs Michigan will incur if they obtain primacy for the regulation of Class II wells.

#### Approval times for new Class II wells

It is not clear from the Draft Application that the DEQ will be able to reduce the time it takes between the application for a new Class II well and approval for construction.

- It is important to the oil and gas industry that new Class II wells are approved in a timely manner so that a place exists to dispose of oil and gas waste.
- It is important to the general public that new Class II wells be approved so that old Class II wells can be retired. Michigan has old Class II wells that are still being used.

The time necessary for the approval of a Class II well can be expedited if the OOGM has adequate staff to consider applications.

#### Class II well integrity

Existing Class II well regulations require that the well integrity of Class II wells be tested every 5 years.

In a guidance note for Class II wells published by the EPA on January 10, 2007, the EPA makes the following statement:

Tests for which a mechanical, digital or third-party record is produced may be conducted without an Agency witness when it proves impossible to resolve scheduling conflicts with both the USEPA contract inspectors and the Regional technical staff.<sup>(5)</sup>

In the case where the integrity of Class II wells is self-certified by the company that operates the disposal well, it seems like a driver of a semi-truck sending in a form once every five years that states that based on the driver's self-administered driver's test and vision test he should be allowed to drive for another five years. Self-certification of semi-truck drivers seems like a bad idea for the rest of the drivers on the road; self-certification of Class II disposal wells seems like a bad idea for the million plus households in Michigan that rely on water wells.

The notice of the December 23, 2014 deadline to file comments on the Draft Application was only given on December 9, 2014. The author has not received a response to a Freedom of Information Request made with the EPA on well integrity tests in the short time since December 9, 2014 and therefore I can't represent the percentage of well integrity tests for Class II wells in Michigan that are not currently being witnessed by a representative of the EPA.

Mechanical integrity tests in the past have found Class II wells that have failed. For the period from 1983 to 1991, Browning and Smith reviewed records from 9,553 scheduled mechanical integrity tests in four States (Pennsylvania, Michigan, Louisiana, and Nebraska). The overall mechanical integrity failure rate was 10.5% (ranging from 3% to 12% in the different States). Because many operators "pre-test" their wells and repair any defects prior to the official scheduled mechanical integrity test, Browning and Smith reported that the actual number of potential mechanical integrity test failures could conceivably be 50% higher than reported in their study.<sup>(6)</sup>

Michigan regulations (R 324.803) require that before an integrity test, a permittee of a well shall notify the supervisor or authorized representative of the supervisor of the date and time of the test. The DEQ should represent in the Draft Application that their staffing and funding will allow a representative of the DEQ to witness 100% of Class II well integrity tests.

#### Legal authority and notice of Draft Application

The Draft Application was incomplete inasmuch as it did not include statement of legal authority from the Attorney General.

As I note later in these comments, the Attorney General Opinion should address the issue of who would have standing to request a hearing for a Class II well if Michigan were to obtain primacy of regulation.

The Attorney General's opinion should also address the question of what constitutes the required public meeting and comment period under state and federal law for the MDEQ's and OOGM's Application for Primacy of Regulation.

Additional time should be provided for comments to the Draft Application. As noted in the Well Integrity section of these comments, the fourteen days allowed by the OOGM for comments to the Draft Application was not sufficient to collect data to evaluate the Draft Application.

#### Ability of public to comment on Class II wells

These comments are submitted by the author with the hope that the author will be deemed to have standing to submit comments. The author is:

- a resident of the state of Michigan
- concerned about clean water in Michigan
- interested in the oil and gas industry in Michigan being able to conduct its business with appropriate regulations (member of the American Association of Petroleum Geologists, member of the Society of Petroleum Engineers, and a Certified Petroleum Geologist)
- knowledgeable in the geology of Michigan (holds B.S. and M.S. degrees in geology from Michigan State University)

Beyond the acceptance of these comments on the Draft Application, the issue of standing is important in the event that the State of Michigan is granted primacy of regulation over Class II wells. In a DEQ Order for Cause No. 01-2014 (Brady / Jyla Case) dated May 16, 2014, the Assistant Supervisor of Wells ruled that individuals living adjacent to a drilling unit and an individual using state lands have interests that do not rise to the level of an "interested person" because "merely owning adjoining or nearby property" does not *per se* convey standing. <sup>(7)</sup>

In the Brady/Jyla case, The DEQ relied on an interpretation of Michigan case law for their ruling on standing. Given the DEQ's position on standing for their proceedings, the provision for a public hearing upon receipt of **relevant** (emphasis added) comment provided for in the Underground Program for Class II well presented in the Draft Application would appear not to offer the public any chance for a public hearing for a Class II well. Under the DEQ's requirement for standing no member of the public would have standing to make a relevant comment on a disposal well. (See Phase II Public Notification and Permit Decision. B. in the Draft Application)

Given the DEQ's current high hurdle for standing in their proceedings, their Draft Application (and if necessary their current rule on a hearing for Class II wells) needs to be amended to make it clear that requests for a public hearing for a class II disposal well will be based on the merit of the request for a hearing and not be denied on the basis of standing. This change is important since the shifting of primacy to the State of Michigan would appear to cut off any appeals to a federal jurisdiction on Michigan's approval of Class II disposal wells. The appeal process for Michigan's decision on disposal well permits is one that should be addressed in the Attorney General's opinion on the Draft Application.

### Conclusion

These comments have recommended the following if the OOGM is to assume primacy for the regulation of Class II wells in Michigan:

- addition of four full time staff members to the staff of the OOGM
- identification of the systems that the OOGM will have available for record keeping for Class II wells
- increasing the funding for the MDEQ by increasing the regulatory fee collected in Michigan from its current level of .92%
- an undertaking to provide for the more expeditious approval of new Class II wells
- assurance that the mechanical integrity tests of Class II wells will be witnessed by a representative from the DEQ
- statement from the Attorney General of the legal authority, standing issues, and public comment requirements for the Draft Application
- representation that the Michigan Underground Injection Control Program for Class II wells administered by the State of Michigan will be changed to provide that the decision for a hearing for a Class II well will be considered on its merit and hearings will not be denied based on the determination by the DEQ, OOGM, or the Attorney General that the requester for the hearing does not have standing.

Prior to Michigan receiving primacy for regulations, the above recommendation should be in place since it is unlikely that there will be any oversight of Michigan by the EPA for implementation of the Clean Water Act. The United States Government Accounting Office in a report dated June 2014 noted that the EPA is not consistently conducting annual on-site state program evaluations because according to some EPA officials, the agency does not have the resources to do so.<sup>(8)</sup> Therefore if Michigan is granted primacy for Class II regulation, it should be understood that in practice the total responsibility for the oversight of Class II wells will rest with the DEQ and the OOGM.

### Footnotes

(1) For a summary of the Safe Drinking Water Act (SDWA) see Mary Tiemann, (February 5, 2014) Safe Drinking Water Act (SDWA): A Summary of the Act and Its Major Requirements, Congressional Research Service, CRS Report, Prepared for Members of Congress, <http://www.fas.org/sgp/crs/misc/RL31243.pdf>

(2) Audit Report, Michigan Office of Auditor General, Performance Audit of the Office of Oil, Gas, and Minerals, Department of Environmental Quality, September 2013, [http://www.audgen.michigan.gov/finalpdfs/12\\_13/r761030013.pdf](http://www.audgen.michigan.gov/finalpdfs/12_13/r761030013.pdf)

(3) GAO's Report on EPA's Oversight of Class II Wells Recommends EPA Review Emerging Risks, Michael Paessum, August 19, 2014, Cox and Colvin, <http://www.coxcolvin.com/gaos-report-on-epas-oversight-of-class-ii-wells-recommends-epa-review-emerging-risks/>

(4) United States Government Accountability Office, Drinking Water, EPA Program to Protect Underground Sources from Injection of Fluids Associated with Oil and Gas Production Needs Improvement, June 2014, GAO-14-555 <http://www.gao.gov/assets/670/664499.pdf>

(5) Region 5, 1/10/2007, Unwitnessed Mechanical Integrity Test Form [http://www.epa.gov/r5water/uic/forms/unwitmit\\_new\\_instructions.pdf](http://www.epa.gov/r5water/uic/forms/unwitmit_new_instructions.pdf)

(6) Browning, L.A. and J.B. Smith, 1993, Analysis of the Rate of and Reasons for Injection Well Mechanical Integrity Test Failure, Presented at SPE/SPA Exploration and Production Environmental Conference, March 7-10, 1993, San Antonio, Texas reported in UIC Program Mechanical Integrity testing: Lessons for Carbon Capture and Storage?, Koplos, J. et al, Fifth Annual Conference on Carbon Capture and Sequestration – DOE/NETL, May 8-11, 2006 <http://www.netl.doe.gov/publications/proceedings/06/carbon-seq/Tech%20Session%20139.pdf>

(7) State of Michigan, Department of Environmental Quality, Supervisor of Wells, The Petition of Paul Brady and August Jyla, Cause No. 01-2014 [http://www.michigan.gov/documents/deq/01-2014\\_Order\\_Final\\_456737\\_7.pdf](http://www.michigan.gov/documents/deq/01-2014_Order_Final_456737_7.pdf) (6)

(8) United States Government Accountability Office *op. cit.*