

**State of Michigan  
Ingham County Circuit Court**

Deanna Hughes, Heather Schiele, and Ban  
Michigan Fracking,

v

Case No 12-497-CE  
Hon William E. Collette  
Filed: May 7, 2012

Michigan Department of Environmental  
Quality

\_\_\_\_\_/

Ellis Boal (10913)  
Attorney for Plaintiffs  
9330 Boyne City Road  
Charlevoix, MI 49720  
231/547-2626  
ellisboal@voyager.net

Daniel P. Bock (P71246)  
Attorney General  
525 W Ottawa  
Box 30755  
Lansing, MI 48909  
517/373-7540  
bockd@michigan.gov

**Motion and Brief for Summary Disposition**

Ellis Boal (10913)  
Attorney for Plaintiffs  
9330 Boyne City Road  
Charlevoix, MI 49720  
231/547-2626  
ellisboal@voyager.net

## Table of Contents

I.	Introduction.....	1
II.	Urgency of this motion.....	3
III.	Uncontested facts.....	4
	A. Plaintiffs' concern with State Sherman 1-8 .....	5
	B. The industry's understanding of the rule's key phrase .....	6
	C. Plaintiff communications with the department .....	8
	D. The Wyant letter.....	8
IV.	Baseline testing.....	11
V.	Proceedings and follow-up pleadings .....	14
VI.	The timing and status of the Wyant letter .....	14
VII.	Argument.....	16
	A. Basic errors.....	17
	B. Specific errors.....	19
	1. The rule must be read in context and it supposedly follows that a gas well cannot also be an injection well .....	19
	2. The department's interpretation is supposedly consistent with the industry's.....	22
	3. Modern technology supposedly does not change the game .....	23
XIII.	Conclusion.....	25

## **I. Introduction**

This is an appeal under MCL 24.264, 324.1704(2), and 600.631 of an agency's refusal to issue a declaratory order. This motion arises under MCR 2.116(A) and stipulated facts. At issue is the second supplemental complaint, answered on August 6.

Plaintiffs seek a declaration that administrative rules for “injection wells” cover “frack” wells as they are defined by defendant Michigan Department of Environmental Quality. “Fracking” – an industry-borne colloquialism for “fracturing” or “hydraulic fracturing” – is defined and described on department URLs quoted in section III below.

Plaintiffs contend frack wells come within the definition of “injection wells” because they are:

used to inject ... fluids for the purpose of increasing the ultimate recovery of hydrocarbons

from a reservoir. The industry has repeatedly acknowledged that frack wells fit this wording. It is taken verbatim from the definition, R 324.102(x). Additionally plaintiffs seek the revocation of permits issued on May 9, 2012, to two deep-shale Utica-Collingwood wells of Encana Oil & Gas on Sunset Trail in Kalkaska County, despite that certain required chemical information was not attached to Encana's applications. Finally, plaintiffs ask the court to revoke any permits issued to frack operators, where the applications did not contain the chemical information, since this case was filed.

As will be seen, horizontal wells in the Utica-Collingwood shale layer have the most attention in recent controversy about fracking in Michigan. A department list of Utica-Collingwood permits issued or applied for as of July 25, 2012, is attached .<sup>1</sup> But horizontal and vertical fracking is being done in other layers as well, and this case applies to all of it.

Plaintiffs filed a petition, affidavits, and exhibits (collectively “the petition”) advocating their position to the department on April 27,<sup>2</sup> and were refused ostensibly by a letter of department head Dan Wyant of June 28.<sup>3</sup>

The department's court answer pleads an affirmative defense, that plaintiffs didn't exhaust administrative remedies, a contention addressed in section VI below. As explained there, plaintiffs refer to the June 28 letter as the “Wyant letter” or the “letter.”

The issue before the court is whether R 324.102(x) should be interpreted, as plaintiffs contend, (1) literally and (2) as leaders of the gas industry understand them. If so, then R 324.201(2)(j)(vi) will require pre-disclosure of the frack well's planned injectate. It must be disclosed when an operator applies for a permit to drill and frack, not later after the well is completed. Additionally drillers/frackers will have to comply

---

1 “Utica-Collingwood Permit and Application Activity”,  
[http://www.michigan.gov/documents/deq/utica.collingwood\\_spreadsheet1\\_35843\\_8\\_7.pdf](http://www.michigan.gov/documents/deq/utica.collingwood_spreadsheet1_35843_8_7.pdf) (attached exhibit 1)

2 The petition was attached to the initial court complaint filed May 7, 2012.

3 Letter, Dan Wyant to Ellis Boal, 6/28/12 (attached exhibit 2).

with other rules and practices for injection wells, including R 324.801-08.

Administrative rules cited by either party are collected and attached as exhibit 3.

Except where noted, exhibits are documents created by defendant. All dates are in 2012.

## **II. Urgency of this motion**

This motion is urgent since, as said in a featured story in a trade paper of last week, Encana is proceeding to drill the challenged Sunset Trail wells. For at least one of them the rig is nearing 8900 feet, the approximate “kick-off” point for the start of the horizontal leg.<sup>4</sup>

This means the well may be ready for the start of fracking/injecting operations shortly, before the court has a chance to rule.

As seen from the attached correspondences, Encana is aware of the petition and this litigation and the specific challenge to the Sunset Trail wells. Particularly on May 23 counsel wrote Encana's Brenda Linster, the signer of the company's applications for the wells, delivering the letter both by email and regular mail, saying:

---

4 *Michigan Oil & Gas News*, volume 118 # 35, August 31, 2012, pp 1, 4, 7, 16, 29, attached exhibit 5. The copyrighted cover photo and article, published only last week, is not part of the administrative record. Plaintiffs cite it only to show irreparable harm should there be delay in the court's adjudication. Plaintiffs expect the department subscribes to the magazine.

I write to inform you that plaintiffs do intend to challenge these two wells.... I inform you as a matter of fairness, and so you might not needlessly expend resources should our efforts succeed.

Counsel emailed Linster again on May 29 and June 18, attaching copies of the supplemental complaint in the case, and asking her to call. After the May 29 email counsel followed up by phone to her office. Linster was out but counsel left a message with her colleague saying the May 29 email involved a legal matter, and asking that Linster call back.<sup>5</sup>

She did not, and Encana chose not to intervene, seemingly indifferent to the outcome. Despite its interest, the statute and rules do not require that Encana be formally served with process, or be served at all. Counsel made the above efforts anyway. So whatever the outcome of this case, and on whatever timetable, there will be no prejudice to Encana.

### **III. Uncontested facts.**

While Michigan has had thousands of shallow vertical frack wells for decades, deep-shale horizontal fracking is relatively new here. Exhibit 1 shows just 28 Utica-Collingwood wells permitted, and 14 applications pending, as of July 25.

---

<sup>5</sup> Emails to or copied to Encana on April 27 (5 on this date), May 8, May 10, May 23, May 29, and June 18, and a letter to Encana of May 23 (attached exhibit 4). The Wyant letter was also copied to Encana.

**A. Plaintiffs' concern with State Sherman 1-8**

The individual plaintiffs live near a proposed horizontal frack well, in Sherman Township Gladwin County, identified as “State Sherman 1-8.” According to the affidavit of plaintiff Heather Schiele's husband Guy Bradmon attached to the petition, on April 23 Alan James, Devon Energy's senior Michigan production engineering adviser, threatened by phone that the company would apply for, drill, and frack the well by the end of the year. Bradmon had inquired of James after seeing and photographing stakes and flags on the site.

State Sherman 1-8 will probably look similar to the challenged Encana Sunset Trail wells, now in progress. A newspaper article of last week shows the big production-gas-powered drill rig at one of them.<sup>6</sup>

At ¶ 19 the petition details that, together with an existing well on the same pad, the two new Sunset Trail wells would have combined wellbore depths (vertical + horizontal) of over 10 miles. Each of the three would be deeper than any other oil or gas well plaintiffs know of in the state. At ¶ 8 and exhibit 4, the Boal affidavit notes they are in the Mackinaw State Forest near a Boy Scout camp. There is a description and pictures from late 2011 of the unfenced unguarded 60-foot drill rig at the existing well, which was not yet completed at the time.

---

6 See footnote 4 above, and accompanying text.

The record does not disclose whether Devon is proceeding today to complete State Sherman 1-8 by the end of the year or perhaps at some later time. Plaintiffs advise the court and defendant that as of this writing the site remains staked and flagged but no drilling has started.

The Wyant letter agrees frack fluids can have adverse health or environmental impacts if improperly handled. Plaintiffs fear for their groundwater and are undertaking this proceeding.

## **B. The industry's understanding of the rule's key phrase**

At a meeting on April 12, Devon's Alan James wrote undersigned counsel that one of its purposes in fracking was to “increase the ultimate recovery of hydrocarbons,” language which tracked key wording of R 324.102(x).

On April 18 at an industry meeting at the Grand Traverse Resort in Acme, John Griffin and David Miller made the same statements of purpose, verbally to counsel. The two are Michigan and national leaders respectively of the American Petroleum Institute (API), an association of nearly 500 companies in the oil and gas industry, one of whose missions is to develop and publish engineering standards. Michigan regulations frequently cite them.

Griffin's statement was made only to counsel in a hallway conversation. But

Miller's (who is API's leading exponent of best fracking practices) was witnessed by 100 top state industry leaders at the conference. None took exception during Q&A to his acknowledgment that fracking's purpose is to “increase the ultimate recovery of hydrocarbons.”

The Wyant letter does not question that James, Griffin, and Miller made these statements. After all, the department's operations chief Rick Henderson was present for Miller's talk. Like the industry people, during Q&A he also made no objection to the statement. His silence is significant because he was copied on the Boal/Fitch email colloquy of April 11-12, below, and was aware of ongoing injection well/frack well disagreements.

API materials distributed at the April 18 session and published on the API website corroborate the three men's statements. See for instance the API definitions of “injection well” and “hydraulic fracturing” and the statement in an API video at the conference.<sup>7</sup>

The industry has been copied on many emails, letters, and pleadings concerning this case without response.<sup>8</sup>

---

7 Boal affidavit ¶¶ 26-29 and its exhibit 11, “Water Management Associated With Hydraulic Fracturing – HF2,” attached to the petition. The video, titled “Hydraulic Fracturing: safe oil and natural gas extraction” and viewable at <http://www.energyfromshale.org/shale-extraction-process>, is described at ¶ 29 of the Boal affidavit.

8 Attached exhibits 2, 4.

### **C. Plaintiff communications with the department**

On April 11-12, counsel corresponded by email with Hal Fitch, the longstanding head geologist of the department's office of geological survey (the division of the department charged with oil and gas regulation) on the injection well/frack well issue. The correspondence pertained to Encana's then-pending applications for the Sunset Trail frack wells, named "State Excelsior 2-25 HD-1" and "State Excelsior 3-25 HD-1."

Particularly, counsel asked whether Fitch would enforce injection well rules on the Sunset Trail wells. Fitch answered no, claiming the purpose of fracking is not to increase the "ultimate" recovery of hydrocarbons. He wrote:

While it could be argued that hydraulic fracturing is intended to increase the recovery of hydrocarbons, its objective is the *initial* recovery.<sup>9</sup>

(emphasis added) Rick Henderson was copied on the emails.

### **D. The Wyant letter**

Plaintiffs' petition highlighted Fitch's ultimate/initial distinction for interpreting R 324.102(x), and noted it has no textual support in the statute or rules. The Wyant letter did not adopt the distinction.

Instead the letter began with uncontested facts . Plaintiffs have no quarrel with

---

<sup>9</sup> The emails are attached to and summarized at ¶¶ 12-14 and exhibit 8 of the Boal affidavit attached to the petition.

them as far as they go. Plaintiffs would highlight certain of them on the second page:

Hydraulic fracturing is a one-time procedure that is part of the completion of some types of oil or natural gas wells. *More recently, horizontal drilling is being utilized*, particularly in the deeper gas reservoirs. The purpose of both of these technologies is the same: to *increase exposure of more reservoir* rock formation to the well bore *to maximize gas production*.

*Horizontal drilling* has been used commercially since the 1980s but has not been widely applied for natural gas development *until recent years*.

...

Hydraulic fracturing involves *pumping water at high pressure* to create fractures in reservoir rock that allow the oil or natural gas to flow more freely to the well bore.

...

Some of the chemical additives can have adverse health or environmental impacts if they are not properly handled or contained.

...

*Typically, 25 to 75 percent of the hydraulic fracturing fluid is recovered initially as “flowback” water. The rest remains in the gas-bearing formation* or is recovered over time along with the gas that is produced.

(emphasis added) The letter notes at footnote 2 that the above is taken from the first page of a department URL. On the second page of the same URL<sup>10</sup> is added:

---

10 “Hydraulic Fracturing of Natural Gas Wells in Michigan” , [http://www.michigan.gov/documents/deq/Hydrofrac-2010-08-13\\_331787\\_7.pdf](http://www.michigan.gov/documents/deq/Hydrofrac-2010-08-13_331787_7.pdf) , attached exhibit 7.

A fracture treatment of a typical Antrim gas well requires about *50,000 gallons* of water. In the emerging Utica/Collingwood Shale gas development, *the amount of water needed to fracture a horizontal well may be up to 5,000,000 gallons or more.*

Another definitional URL of the department is cited at footnote 2 of the Wyant letter:

Hydraulic fracturing is a well completion operation that involves pumping fluid and proppants into the target formation to create or propagate artificial fractures, or enhance natural fractures, for the purpose of improving the deliverability and production of hydrocarbons.<sup>11</sup>

The cited passage goes on to say:

The technique dates back over sixty years. However in recent years some completion operations have utilized larger volumes of hydraulic fracturing fluids in conjunction with horizontal drilling. Such operations typically involve multiple fracturing stages and *total volumes of fracturing fluid exceeding 100,000 gallons* .

Combining all these figures, the amount of water typically used in a horizontal Utica/Collingwood well is 5,000,000 gallons or more. Each such well also has 100,000 gallons or more of frack fluid, or 2% by volume. This means each horizontally-fracked Utica-Collingwood well uses 100 times the amount of water as a traditional vertically-fracked 50,000-gallon Antrim well, and uses twice as much frack fluid as the total water in an Antrim well. Also, a significant fraction of the frack fluid remains in the ground after fracking.

---

11 “High Volume Hydraulic Fracturing Well Completions,” [http://www.michigan.gov/documents/deq/SI\\_1-2011\\_353936\\_7.pdf](http://www.michigan.gov/documents/deq/SI_1-2011_353936_7.pdf) (attached exhibit 8)

## IV. Baseline testing

If frack wells were treated as injection wells, then according to R 324.201(2)(j) (vi) applicant drillers/frackers would have to provide advance data about the chemical composition of intended frack compounds. The petition and court complaints assert that advance data would enable plaintiff landowners to do prophylactic baseline testing of the water near State Sherman 1-8 more accurately and cheaply.

The department does not dispute that advance data would assist plaintiffs' baselining, but it is not amiss to explore the issue more deeply. Baseline testing is important, as the industry agrees. Section 10.2 of API's best fracking practice for "Well Construction and Integrity – HF1"<sup>12</sup> says:

*Once the location for a well has been selected and before it is drilled, water samples from any source of water located nearby should be obtained and tested in accordance with applicable regulatory requirements. This would include rivers, creeks, lakes, ponds, and water wells. If testing was not done prior to drilling, it should be done prior to hydraulically fracturing a well. The area of sampling should be based on the anticipated fracture length plus a safety factor. This procedure will establish the baseline conditions in the surface and groundwater prior to any drilling or hydraulic fracturing operations. If subsequent testing reveals changes, this baseline data will allow the operator to determine the potential sources causing any changes. Because the constituents of the hydraulic fracturing fluid are known, a determination can be made regarding the source of the changes in the groundwater composition. However, it is important to note that changes to groundwater composition can come from other sources not related to drilling, hydraulic fracturing, or oil and natural gas development activities.*

---

12 Attached as exhibit 10 to the Boal affidavit in the petition.

(emphasis added)

R 324.201(2)(j)(vi) is one of Michigan's rules for injection wells. It requires an applicant-operator to include operating data with an application for an injection well, before drilling starts. The applicant must identify the types of fluids and provide:

[a] qualitative and quantitative analysis of a representative sample of fluids to be injected. A chemical analysis shall be prepared for each type of fluid to be injected showing specific conductance as an indication of the dissolved solids and a determination of the concentration of the following parameters for chemical balance and indicators for comparison of water quality: Cations, Anions, Calcium, Chloride, Sodium, Sulfate, Magnesium, Bicarbonate, Potassium.

Curiously, this list does not include some of the more dangerous chemicals (hydrogen sulfide and the BTEX/VOC<sup>13</sup> chemicals benzene, toluene, ethylbenzene, and xylene) which, according to the rules,<sup>14</sup> may show up in produced brines.

FracFocus.org – a project of the Interstate Oil and Gas Compact Commission (of which defendant is a member) and the Ground Water Protection Council, national organizations of state officials – includes the BTEX/VOC chemicals in its recommendation for baseline testing.<sup>15</sup> (FracFocus notes that Pennsylvania has regulations which presumptively place the burden of proof for causation on the operator

---

13 VOC = “volatile organic compound.”

14 R 324.705(3)(c), 705(3)(d)(iii), and 1101-30.

15 “Groundwater Quality & Testing”, <http://fracfocus.org/groundwater-protection/groundwater-quality-testing> (attached exhibit 6). The department is an active IOGCC member. Plaintiffs expect it subscribes to the views and protocols in this article.

in the event of contamination of water near a gas well. Michigan has no similar regulation.) FracFocus advises landowners who live near actual or potential frack wells that:

a good basic list of constituents that should be considered for analysis prior to oil and gas operations: Major cations and anions, pH, Specific Conductance, Total Dissolved Solids, *Benzene, Toluene, Ethylbenzene, Xylene (BTEX)*, Diesel Range Organics (DRO), Gasoline Range Organics (GRO), Total Petroleum Hydrocarbons or Oil & Grease (HEM), Arsenic, Barium, Calcium, Chromium, Iron, Magnesium, Selenium, Boron, Sodium, Chloride, Potassium, Bicarbonate, Dissolved Methane.

(emphasis added)

The weakness of Michigan's disclosure list compared to FracFocus's is an indication that, should the court enforce R 324.102(x), no great burden will be imposed on the industry. Indeed, the Wyant letter does not argue enforcement would burden industry. It is notable that, though notified of the administrative proceeding before the department, no industry entity intervened.

Nevertheless, with disclosure just of the chemicals on the department's injection-well list in hand (most of the department's chemicals are also in the FracFocus list), certified water testers working for anxious landowners who live near frack wells will have their task eased a bit compared to if they begin empty-handed.

## **V. Proceedings and follow-up pleadings**

On April 27 plaintiffs petitioned the department for a declaratory order under MCL 24.263 and R 324.81.

On May 8, the day after the court suit was filed, the parties met on the record. Notified, the industry declined to attend. Limited preliminary relief was agreed to, which the court memorialized on May 17.

The next day on May 9, the department granted Encana's Sunset Trail permits, without chemical disclosure information being attached to the applications. Plaintiffs' supplemental complaint, filed on May 30, timely challenged the permits on that basis.

Throughout the petition and court proceedings plaintiffs kept Devon, Encana, and state industry associations informed of the case and its progress.<sup>16</sup> Wyant also copied his letter to them.

## **VI. The timing and status of the Wyant letter**

On June 28 department director Dan Wyant wrote plaintiffs, with copies to Encana, Devon, and the state industry organizations.<sup>17</sup> The letter purported to be a declaratory ruling in response to the petition. But it was signed two days after the 60-

---

16 See footnote 5 above.

17 Exhibit 2.

day time period within which, according to R 324.81(2), the department had to rule.

That rule says the department “shall” grant or deny the request or demand extra time within the 60 days.<sup>18</sup> Particularly if the department needs extra time:

(2) *Within 60 days* of receipt of the request, the department *shall* take 1 of the following actions . . . (c) advise the person requesting the ruling that further clarification of the facts must be provided, or that the department requires additional time to conduct a review, including, but not limited to, an on-site investigation.

(emphasis added) The department elected none of the options within 60 days. Just last month in an election case our supreme court emphasized the mandatory nature of the word “shall.” The second paragraph of the lead opinion holds:

However, because MCL 168.482(2) uses the mandatory term “shall” and does not, by its plain terms, permit certification of deficient petitions with regard to form or content, a majority of this Court holds that the doctrine of substantial compliance is inapplicable to referendum petitions submitted for certification.<sup>19</sup>

Indeed, there is no such thing as substantial compliance when it comes to timeliness.

The word “shall” means the department said nothing. The Wyant letter is not an agency ruling under MCL 24.263. The views expressed are only his personally, in the nature of an *amicus* position. The court owes the letter no deference as it otherwise would had the department itself spoken. The director's personal views are not “presumed, prima

---

18 Accord: *Human Rights Party v Michigan Corrections Commission*, 76 Mich App 204, 256 NW2d 439 (1977).

19 *Stand Up For Democracy v Secretary Of State*, Case No SC 145387 (8/3/12).

facie, to be lawful and reasonable.”<sup>20</sup>

## VII. Argument

Plaintiffs have no quarrel with the legal principle on page 5 of the letter that rules are to be interpreted in the context of the regulatory scheme as a whole.<sup>21</sup>

The letter cites three cases in support. Again plaintiffs have no quarrel with them. But quotes from the same cases put the rules of construction in a different light than the letter does: There is no need for resort to context if the language of a rule is unambiguous.<sup>22</sup> And in the middle of page 11 the Wyant letter concedes the language of R 324.102(x) is “not ambiguous.”

---

20 Cf constitution 1963, article 6, § 28; MCL 462.26(8); *Great Wolf Lodge of Traverse City v Public Service Commission*, 489 Mich 27, 37-38, 199 NW2d 155 (2011).

21 *Great Wolf Lodge of Traverse City v Public Service Commission*, 489 Mich 27, 37-38, 199 NW2d 155 (2011).

22 *People v Jackson*, 487 Mich 783, 791, 790 NW2d 340 (2010) (“In determining the legislative intent, we must first look to the actual language of the statute.”); *Herman v Berrien County*, 481 Mich 352, 366, 750 NW2d 570 (2008) (“... in statutory interpretation, if the language of the statute is unambiguous, the Legislature must have intended the meaning clearly expressed, and the statute must be enforced as written.”); *Sun Valley Foods Co v Ward*, 460 Mich 230, 236, 596 NW2d 119 (1999) (“Only where the statutory language is ambiguous may a court properly go beyond the words of the statute to ascertain legislative intent.”).

## A. Basic errors

The most basic problems with the Wyant letter are:

- The letter ignores straightforward language, that a well is an injection well if it is “used to inject . . . fluids for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir.” An uncontested fact on page 2 of the letter says exactly that, that fracking's purpose is “to increase exposure of more reservoir rock formation to the well bore to maximize gas production.”
- The letter ignores uncontested standard industry parlance, and holds the parlance irrelevant, even as the letter asserts that specialized understanding of the term must be considered.
- The letter's conclusion ignores the uncontested fact, at the bottom of page 2, that a fraction of the fluids injected into a frack well – presumably a substantial fraction – stays down forever. (The rest of it comes up for shipping to some different injection well, the letter points out at the bottom of page 8.) The fact that such a well produces gas and disposes of part of the waste makes it literally both a gas production well and a disposal well. This is by intention, per the ancient maxim that we intend the natural and foreseeable consequences of our acts.<sup>23</sup> Intent to dispose waste forever is within the phrase “intention that it

---

23 *Massachusetts v Feeney*, 442 US 256, 278 (1979) (“ . . . the presumption, common

remain there for an extended length of time,” cited by the Wyant letter at the bottom of page 8 as a benchmark for all injection wells.

- If the Wyant letter were correct, it would mean the department has no statute or rule to regulate or even define fracking or (as it is sometimes called) stimulation. Two administrative rules do require stimulation records,<sup>24</sup> and three others refer to it as part of “completion.”<sup>25</sup> There are also three supervisor's orders issued specifically for fracking last year,<sup>26</sup> but supervisor's orders don't have the force of law.<sup>27</sup> But the only definition of fracking or stimulation before the court is in the department's URLs (exhibits 7-8) in the parties' uncontested facts. By contrast administrative rules for injection wells are many and specific. They require notice to the department of loss of well integrity, and set standards for tubing,

---

to the criminal and civil law, that a person intends the natural and foreseeable consequences of his voluntary actions.”); *Monroe v Pape*, 365 US 167, 187, 207 (1961) (“a man is responsible for the natural consequences of his acts.”).

24 R 324.416(2)(b)-(d), R 324.418(b).

25 R 324.103(s), R 324.511(1), R324.606.

26 “High Volume Hydraulic Fracturing Well Completions,” [http://www.michigan.gov/documents/deq/SI\\_1-2011\\_353936\\_7.pdf](http://www.michigan.gov/documents/deq/SI_1-2011_353936_7.pdf) (attached exhibit 8); “Permit application reviews for wells that may be hydraulically fractured,” [http://www.michigan.gov/documents/deq/SL\\_2011-1\\_353937\\_7.pdf](http://www.michigan.gov/documents/deq/SL_2011-1_353937_7.pdf) (attached exhibit 9); and “Water Withdrawal Analysis for High Volume Hydraulic-fracturing,” [http://www.michigan.gov/documents/deq/Water\\_Withdrawal\\_Analysis\\_for\\_High\\_Volume\\_Hydrofracturing\\_363046\\_7.pdf](http://www.michigan.gov/documents/deq/Water_Withdrawal_Analysis_for_High_Volume_Hydrofracturing_363046_7.pdf) (attached exhibit 10).

27 Cf *Jones v Department of Corrections*, 185 Mich App 134, 137; 460 NW2d 575 (1990); *Bentley v Department of Corrections*, 169 Mich App. 264, 270; 425 NW2d 778 (1988).

packer, surface access to casing annuli, stratum confinement, innermost annulus testing, maximum surface injection pressure, 5-year integrity testing, and reporting of pressure, rates, and volume.<sup>28</sup> As mentioned and seen above, the new Sunset Trail wells are huge. How the law could allow an almost-free hand to such mighty beasts, new and unfamiliar in this state, while having minutely detailed requirements for the shallower disposal, secondary, and storage injection wells, is unexplained.

## **B. Specific errors**

The Wyant letter opposes plaintiffs' and the industry's literal interpretation via several rationales:

### **1. The rule must be read in context and it supposedly follows that a gas well cannot also be an injection well**

On pages 3-9 the letter says R 324.102(x) must be read in context of the statute and rules read as a whole.<sup>29</sup> Citing R 324.201(1), R 324.806(1), and the rule of “expression of one is exclusion of the other,” the letter asserts on page 6:

Under this statutory and regulatory structure, a well is *either* an “oil or gas well” *or* an “injection well”; it cannot be both.

---

28 R 324.801-08.

29 Cited statutes are MCL 324.61505-06 and 61525. Cited rules are R 324.102, 103, 201, 612, and 801-08, which are copied into attached exhibit 3.

(emphasis in original) If a well could be both an oil/gas well and an injection well, the letter continues, the statute and rules would make no sense.

The claim of no overlap is puzzling. Lawmakers and policymakers knew how to express themselves clearly when they wrote the cited rules. The laws and rules say nothing about non-overlap.

But, if we are going to look at context, two definitional rules overlooked by the Wyant letter militate *against* a supposed either/or distinction between injection wells and oil/gas production wells. The definitions of “oil and gas operations” and “operation of oil and gas wells” *both* include *both* oil/gas production wells and injection wells in their compass:

(b) "Oil and gas operations" means permitting activities required under R 324.201, drilling operations, well completion operations, operation of oil and gas wells, plugging operations, and site restoration.

(c) "Operation of oil and gas wells" means the process of *producing oil or gas*, or both, or the storage of natural hydrocarbons or liquefied petroleum gas, *including* all of the following:

- (i) Production, pumping, and flowing.
- (ii) Processing.
- (iii) Gathering.
- (iv) Compressing.
- (v) Treating.
- (vi) Transporting.
- (vii) Conditioning.
- (viii) Brine removal and disposal.
- (ix) Separating.
- (x) Storing.

- (xi) *Injecting*.
- (xii) *Testing*.
- (xiii) *Reporting*.
- (xiv) *Maintenance and use of surface facilities*.
- (xv) *Secondary recovery*.<sup>30</sup>

(emphasis added)

Note that according to (c), which is also part of (b), “injecting” is “included” as item (xi) in the process of “producing ... gas ... or the storage of natural hydrocarbons [including natural gas] ....”. But – according to exhibits 7-8 in the uncontested facts – fracking is involved only in *producing* gas; fracking is not involved in *storing* it. That leaves *producing* gas as the sole aspect of “operation of oil and gas wells” in R 324.103(c) in which “injecting” is involved.

Otherwise stated, according to R 324.103(c)(xi), “injecting” is *part of* the “producing” process. When it comes to fracking, there is no either/or distinction between injection wells and gas production wells. The lead rationale of the Wyant letter is obliterated.

Finally, the letter argues at pages 6-8 that the statutory/regulatory regime means that the key phrase in R 324.102(x) refers only to secondary wells as defined by R 324.103(j). In support the letter points to the well classifications enumerated in R 324.201(1). Certainly R 324.102(x) does encompass secondary wells. But the first classification in R 324.201(1) – “oil or gas or both” – is defined in turn by R 324.103(b)

<sup>30</sup> R 324.103(b) and (c).

and (c), which as seen just above includes injection wells in the operation of oil and gas wells. The letter's argument falls again.

**2. The department's interpretation is supposedly consistent with the industry's**

On page 9 the letter argues that:

the specialized understanding of the term [“injection well”] should be considered.... The [department's] interpretation is consistent with the generally accepted industry definition....

Then the letter cites a 12-year-old dictionary, written before the onset of horizontal fracking in the state. Contrary to Michigan, the dictionary does not recognize a storage well as a type of injection well. In the middle of page 10 the letter asserts incorrectly that the dictionary illustrates:

in the specialized terminology of the oil and gas industry, “enhanced recovery” is understood to include activities such as as “secondary recovery” rather than initial stimulation of a production well.

This passage is flatly contradicted by footnote 2 of the Wyant letter which says that the purpose of fracking is partly to “enhance natural fractures.” And the dictionary says nothing about “enhanced recovery” anyway. Indeed, nothing in the Wyant letter contradicts the API materials with definitions of “injection well” and “hydraulic

fracturing”<sup>31</sup> which are consistent with plaintiffs' interpretation.

Finally – foregoing its argument on page 9 that the industry's specialized understanding of terms is to be considered – on page 11 the letter rejects the Michigan industry experts' statements.

The argument goes that counsel's questions treated the men unfairly by not reminding them of the rule's definition of “injection well” or spelling out the regulatory consequences of their answers. “[I]t is highly unlikely,” the Wyant letter concludes, that the executives understood the “point” of counsel's straightforward factual questions.

Of course, understanding the “point” is not critical to a witness giving a direct candid answer. The letter's argument implies that had the men really understood the point, they would have not answered directly. But they did answer. The argument is entirely speculative.

### **3. Modern technology supposedly does not change the game**

In ¶¶ 8-9 of the petition, plaintiffs asserted that because of their proximity to State Sherman 1-8 they feared fracking, development, and contamination would affect their property or that of their neighbors.

It's a reasonable fear. Recall that modern horizontal frack wells use a hundred

---

31 See footnote 7 above and accompanying text.

times the water of traditional vertical frack wells, and twice as much frack fluid as vertical wells' total water, and that some of the fluids can have adverse health or environmental impacts.

The Wyant letter responds first on page 12 that the recent changes in well operations' scale and volume cannot change the wording or meaning of R 324.102(x). On that point plaintiffs have no quarrel. Enforcement of R 324.102(x) would impact all frack wells, both shallow vertical and deep horizontal.

More to the point, just before the conclusion on page 12, the letter asserts that last year's new supervisor's instructions:<sup>32</sup>

ensure that high-volume hydraulic fracturing well completions are conducted in an environmentally sound and protective manner.

No data or facts are cited for this, and in other forums plaintiffs would disagree.

But for purposes of this litigation plaintiffs need not quarrel (except to note that new chemical disclosure rule on the last page of exhibit 8, such as it is, kicks in only when records are filed 60 days after completion,<sup>33</sup> months after the start of drilling which is the time baselining needs to be done).

Even if true the assertion of environmental soundness is irrelevant. It doesn't speak to the issue of requiring the department to adhere to the literal language of R 324.102(x).

---

32 Attached exhibits 8-10.

33 R 324.418(b).

## VIII. Conclusion

In a 1997 case before the eleventh circuit, the Environmental Protection Agency made an argument similar to that of the Wyant letter, in *LEAF v EPA*, 118 F3d 1467 (CA11, 1997). The court rejected the EPA's argument as “spurious,” equated fracking operations to underground injection, and enforced the literal terms of the Safe Drinking Water Act<sup>34</sup> as it was then worded. Subsequently in 2005 Congress amended the SDWA via the so-called “Halliburton loophole”<sup>35</sup> (named for the company which patented the process in vertical fracking operations of the late 1940s in Texas), which exempted fracking fluids from the law's protections.

Fortunately our state did not follow suit. Per R 324.102(x), whose language has stood for ten years, there is no loophole in Michigan. Even so, unlike in Pennsylvania, plaintiff landowners have the burden to establish causation in the event the water near State Sherman 1-8 goes bad.

But the Wyant letter speaks as though Michigan did have a “Halliburton loophole.”

This court is not the forum for debating the wisdom of adopting one. Should the

---

34 42 USC § 300f, et seq.

35 42 USC 300h(d)(1)(B)(ii).

department be inclined, there are processes for it to do so which include public input.<sup>36</sup>

But for now the rule should be enforced.

Wherefore plaintiffs ask for a declaration that R 324.102(x) requires that frack wells, defined as in the department URLs in exhibits 7-8, be treated for purposes of R 324.201(2)(j) and R 324.801-08 and all other purposes as injection wells, including particularly that any application for a frack well with incomplete chemical information must be rejected summarily.

Plaintiffs also ask under MCL 600.631 that the court revoke the department's grant of permits for State Excelsior 2-25 HD-1 and State Excelsior 3-25 HD-1 for failure of Encana's applications to comply with R 324.201(2)(j)(v) and (vi), and to revoke any frack permits issued to Encana, Devon, or other operators in the state during the pendency of this case based on similar applications.

Plaintiffs ask the court finally to grant any other relief it thinks just.

---

36 MCL 24.231et seq.

Respectfully submitted,

S

---

Ellis Boal (10913)  
Attorney for Plaintiffs  
9330 Boyne City Road  
Charlevoix, MI 49720  
231/547-2626  
ellisboal@voyager.net

Dated: September 5, 2012