

# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



June 28, 2012

### VIA E-MAIL and U.S. MAIL

Mr. Ellis Boal, Attorney 9330 Boyne City Road Charlevoix, Michigan 49720

Dear Mr. Boal:

SUBJECT: Request for a Declaratory Ruling

Deanna Hughes, Heather Schiele, and Ban Michigan Fracking Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended

On April 27, 2012, you submitted a Petition for Declaratory Ruling to the Department of Environmental Quality (DEQ) under the provisions of the Administrative Procedures Act, 1969 PA 306, as amended. Consistent with the administrative rule concerning declaratory rulings, I am issuing the enclosed Declaratory Ruling.

Sincerely,

Director

517-373-7917

#### Enclosure

cc/enc: Mr. Frank Mortl, Michigan Oil and Gas Association

Mr. John Griffin, Michigan American Petroleum Institute

Ms. Brenda Linster, Michigan Encana Mr. Alan James, Michigan Devon

Mr. S. Peter Manning, Department of Attorney General

Mr. Robert Reichel, Department of Attorney General

Mr. Dan Bock, Department of Attorney General

Mr. Jim Sygo, Deputy Director, DEQ Ms. Liane J. Shekter Smith, DEQ

Mr. Harold R. Fitch, DEQ Mr. Rick Henderson, DEQ Ms. Susanne Biteman, DEQ

### Michigan Department of Environmental Quality

In the Matter of Deanna Hughes, Heather Schiele, and Ban Michigan Fracking
Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection
Act, 1994 PA 451, as Amended

June 28, 2012

### **DECLARATORY RULING**

### I. <u>JURISDICTION</u>

The Petitioners Deanna Hughes, Heather Schiele, and Ban Michigan Fracking, seek a declaratory ruling from the Michigan Department of Environmental Quality (MDEQ) that Administrative Rule 324.102(x) of the administrative rules promulgated pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.61501 *et seq.*, applies to "fracking" (i.e., hydraulic fracturing) completions of oil and gas wells, and that operators who frack or intend to frack such wells must comply with the MDEQ's rules, forms, and practices regarding injection wells, including in the associated permit applications and operational requirements.

Section 63 of the Administrative Procedures Act,1969 PA 306, as amended, MCL 24.263, provides that "... an agency may issue a declaratory ruling as to the applicability to an actual state of facts of a statute administered by the agency or of a rule or order of the agency." The MDEQ's Administrative Rule 324.81 prescribes detailed requirements for requesting and issuing declaratory rulings. Under R 324.81(1), the MDEQ may issue a declaratory ruling "as to the applicability of a...rule...administered by the department to an actual state of uncontested facts..." Conversely, under R 324.81(4), "[i]f relevant facts necessary to issue a declaratory ruling are contested, then a declaratory ruling shall not be issued." Here, certain basic facts regarding hydraulic fracturing, as stated in Section III.A., below, are uncontested. The MDEQ has determined that the issuance of a declaratory ruling in response to the instant Petition and with respect to those uncontested facts is appropriate.<sup>1</sup>

### II. QUESTION ADDRESSED

The Petitioners ask the MDEQ to declare that R 324.102(x), R 324.201(2)(j)(v) and (vi), and all other MDEQ rules, forms, and practices for injection wells, apply to all

<sup>&</sup>lt;sup>1</sup> The Petitioners' request also relies in part upon portions of an affidavit of their counsel, Mr. Ellis Boal, recounting his exchanges with certain individuals employed in the oil and gas industry regarding the purposes of hydraulic fracturing (Petition, Paragraphs 24-28, Boal Affidavit Paragraphs 16-22). As discussed in Section IV.C, below, the Petitioners' assertion that these statements evidence an "uncontested consensus" (Petition Paragraph 31) that hydraulic fracturing completions of oil and gas wells are a form of "injection well" within the meaning of R 324.102(x) is without merit. While this Declaratory Ruling will briefly address those statements in the interest of completeness, the MDEQ does not concede that the statements are even relevant to the legal issue of rule interpretation addressed here. In any event, they are not necessary to the issuance of a declaratory ruling on the applicability of R 324.102(x) to hydraulic fracturing, the nature of which, as described in Section III.A., is uncontested.

pending and future applications for and operations of oil and gas wells intended to be hydraulically fractured.

### III. BACKGROUND

### A. <u>UNCONTESTED FACTS REGARDING HYDRAULIC FRACTURING</u>

As the Petitioners note (Petition, Paragraph 13) the MDEQ has recently explained that hydraulic fracturing, sometimes called "hydrofracking" or "fracking," is a method used to complete the development of certain oil and gas production wells:

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 has been utilized throughout the United States for more than 60 years. In Michigan, since the 1960s, more than 12,000 wells have been hydraulically fractured. Most of these are Antrim Shale Formation gas wells in the northern Lower Peninsula.

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. Proppants, usually silica sand, are added to the water to hold the fractures open once they are created. Small concentrations of chemicals are added to improve the effectiveness of the fracture job. Typically, a compound is added to increase the viscosity of the water to enable it to carry the proppant more effectively. Another typical compound is a friction-reducing additive, to allow fracturing fluids and proppant to be pumped to the target zone at a higher rate and reduced pressure than if water alone were used. Other additives include: biocides to prevent microorganism growth that could plug the fractures; stabilizers to prevent corrosion of metal pipes; and acids to remove drilling mud damage near the wellbore. Some of the chemical additives can have adverse health or environmental impacts if they are not properly handled and contained.

After a hydraulic fracture treatment, when the pumping pressure has been relieved from the well, the water-based fracturing fluid begins to flow back through the well casing to the wellhead. 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. The flowback water may be mixed with native

water from the formation itself (together, this is termed "produced water") that generally contains salts and other dissolved constituents.<sup>2</sup>

### B. <u>CLASSIFICATION OF WELLS REGULATED UNDER PART 615 AND PART 615 ADMINISTRATIVE RULES</u>

Part 615 authorizes the MDEQ to regulate a broad range of activities related to oil and gas development. MCL 324.61506. The activities and wells regulated under Part 615 include not only oil and gas production wells, but also wells drilled for secondary recovery;<sup>3</sup> the disposal of salt, brine, and other oil field wastes; and the development of reservoirs for the storage of liquid or gaseous hydrocarbons. MCL 324.61506 distinguishes these various types of wells and provides in part:

The supervisor shall prevent the waste prohibited by this part. To that end, acting directly or through his or her authorized representatives, the supervisor is specifically empowered to do all of the following:

\* \* \*

(c) To require the locating, drilling, deepening, redrilling or reopening, casing, sealing, operating, and plugging of wells drilled for oil and gas or for secondary recovery projects, or wells for the disposal of salt water, brine, or other oil field wastes, to be done in such manner and by such means as to prevent the escape of oil or gas out of [one] 1 stratum into another, or of water or brines into oil or gas strata; to prevent pollution of, damage to, or destruction of fresh water supplies, including inland lakes and streams and the Great Lakes and connecting waters, and valuable brines by oil, gas, or other waters, to prevent the escape of oil, gas, or water into workable coal or other mineral deposits; to require the disposal of salt water and brines and oily wastes produced incidental to oil and gas operations in a manner and by methods and means so that unnecessary damage or danger to or destruction of surface or underground resources, to neighboring properties or rights, or to life does not result.

\* \* \*

<sup>&</sup>lt;sup>2</sup> The MDEQ Position Paper on Hydraulic Fracturing, May 2011, accessed at: http://www.michigan.gov/documents/deq/Hydrofrac-2010-08-13\_331787\_7.pdf. See also, MDEQ Supervisor of Wells Instruction 1-2011 (May 23, 2011), which similarly explains "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." accessed at: http://www.michigan.gov/documents/deg/SI 1-2011 353936 7.pdf.

<sup>&</sup>lt;sup>3</sup> Part 615 does not define "secondary recovery" but that term is defined in the Part 615 Administrative Rules: "Secondary recovery' means the introduction or utilization of fluid or energy into or within a pool for the purpose of increasing the ultimate recovery of hydrocarbons from the pool." R 324.103(j).

(i) To regulate the **secondary recovery** methods of oil and gas, including pulling or creating a vacuum and the introduction of gas, air, water, and other substances into the producing formations.

\* \* \*

(o) To promulgate rules or issue orders for the *classifications of wells as oil wells or gas wells; or wells* drilled, or to be drilled, *for secondary recovery* projects, *or for the disposal of salt water, brine, or other oil or gas field wastes; or for the development of reservoirs for the storage* of liquid or gaseous hydrocarbons, or for other means of development, extraction, or production of hydrocarbons. (Emphasis added.)

MCL 324.61525, which requires permits for wells, likewise distinguishes the various types of wells subject to regulation, and provides in part:

(1) A person shall not drill or begin the drilling of any well for oil or gas, for secondary recovery, or a well for the disposal of salt water, or brine produced in association with oil or gas operations or other oil field wastes, or wells for the development of reservoirs for the storage of liquid or gaseous hydrocarbons, except as authorized by a permit to drill and operate the well issued by the supervisor of wells pursuant to part 13... (Emphasis added.)

Pursuant to the authority granted by the Legislature in MCL 324.61506(a), the MDEQ has promulgated the Part 615 Administrative Rules, MAC R 324.101 – R 324.1301. Like Part 615, those rules distinguish various types of wells subject to regulation. For example, R 324.201(1) differentiates between oil and gas wells, and various types of "injection wells," including injection wells for secondary recovery:

Until a person has complied with the requirements of subrule (2) of this rule, a person shall not begin the drilling or operation of a well for any of the following:

- (a) Oil or gas, or both.
- (b) Injection for secondary recovery.
- (c) Injection for the disposal of brine, oil or gas field waste, or other fluids incidental to the drilling, producing, or treating of wells for oil or gas, or both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas.
- (d) Injection or withdrawal for the storage of natural dry gas or oil well gas.

(e) Injection or withdrawal for the storage of liquid hydrocarbons or liquefied petroleum gas.

The definition of "permit" in the Part 615 Administrative Rule 324.102(e) likewise distinguishes oil and gas wells from "injection wells":

(e) "Permit" means a permit to drill and operate *an oil or gas well, or both, or an injection well,* including associated surface facilities and flow lines. (Emphasis added.)

In sum, under Part 615 and the Part 615 Administrative Rules, a well is either: (a) an oil and/or gas well, or (b) an injection well. Furthermore, under Part 615 and the Administrative Rules, a secondary recovery well is one type of injection well. Finally, injection wells are subject to permitting, operational, and monitoring requirements distinct from those governing oil and gas wells. See R 324.201(j) and R 324.801 – R 324.808.

### IV. ANALYSIS

The Petitioners' request for declaratory ruling focuses on a single phrase in the definition of "injection well" in R 324.102(x) of the Part 615 Administrative Rules:

"Injection well" means a well used to dispose of, into underground strata, waste fluids produced incidental to oil and gas operations or a well used to inject water, gas, air, brine, or other fluids for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir or for the storage of hydrocarbons. (Emphasis added.)

The Petitioners assert that an oil or gas well completed with hydraulic fracturing must be considered an "injection well" within the meaning of the Part 615 Administrative Rules because: (1) such a well completion involves the pumping (i.e., injection) of water and additives though the well into the target formation; and (2) according to the Petitioners, "[the oil and gas] industry and [the] petitioners agree the purpose of fracking is to increase the ultimate recovery of hydrocarbons." (Petition, Paragraph 31.)

The MDEQ disagrees with the Petitioners' interpretation and conclusion for several reasons. First, it is inconsistent with well-established rules of statutory construction that courts also apply to the interpretation of administrative rules. *Great Wolf Lodge of Traverse City v Public Service Comm*, 489 Mich 27, 37-38; 199 NW2d 155 (2011). Those rules include the principle that the language of a statute, or here a rule, should be read and interpreted in the context of the statute or rules as a whole, rather than in isolation, in order to determine its meaning. See, e.g., *People v Jackson*, 487 Mich 783, 791; 790 NW2d 340 (2010); *Herman v Berrien Co*, 481 Mich 352, 366; 750 NW2d 570 (2008); *Sun Valley Foods Co v Ward*, 460 Mich 230, 237; 596 NW2d 119 (1999).

## A. RULE R 324.102(x) MUST BE READ IN CONTEXT OF PART 615 AND ADMINISTRATIVE RULES AS A WHOLE

The Petitioners' interpretation of R 324.102(x) narrowly focuses on a single phrase in that one rule, disregarding the context and structure of Part 615 and the Part 615 Administrative Rules as a whole in several critical respects.

### <u>Distinction Between Oil and Gas and Injection Wells</u>

First, as outlined above in Section III.B., both Part 615 and the Part 615 Administrative Rules categorize the various types of wells subject to regulation and plainly distinguish "oil and gas wells" from "injection wells." See, e.g., MCL 324.61506(c); MCL 324.61506(o); MCL 324.61525(1); R 324.201(1); R 324.102(e). Under this statutory and regulatory structure, a well is *either* an "oil and [or] gas well" *or* an "injection well"; it cannot be both. Under the Petitioners' interpretation of "injection well," an oil or gas well completed with hydraulic fracturing would be just that — *both* an oil and gas well *and* an injection well — something that makes no sense in the context of Part 615 and the Part 615 Administrative Rules. That alone strongly indicates that the Petitioners' interpretation is incorrect.

### Types of Injection Wells

Second, other provisions of Part 615 and the Part 615 Administrative Rules ignored by the Petitioners demonstrate that "injection well," as used in the statute and the Administrative Rules includes several specific types of wells, one of which is a well used for "secondary recovery." As noted above, MCL 324.61506(o) authorized the MDEQ to promulgate administrative rules "for the classifications of wells as oil wells or gas wells; or wells drilled, or to be drilled, for secondary recovery projects, or for the disposal of salt water, brine, or other oil or gas field wastes; or for the development of reservoirs for the storage of liquid or gaseous hydrocarbons, or for other means of development, extraction, or production of hydrocarbons." Consistent with that statutory authority, the MDEQ has promulgated administrative rules that classify wells as either (1) oil and/or gas wells, or (2) various types of injection wells. Again, as noted above, R 324.201(1) identifies and requires permits for oil and gas wells and several separate classes of injection wells, including wells used for secondary recovery:

Until a person has complied with the requirements of subrule (2) of this rule, a person shall not begin the drilling or operation of a well for any of the following:

- (a) Oil or gas, or both.
- (b) Injection for secondary recovery.
- (c) Injection for the disposal of brine, oil or gas field waste, or other fluids incidental to the drilling, producing, or treating of wells for oil or gas, or

both, or the storage of natural hydrocarbons or liquefied petroleum gas derived from oil or gas.

- (d) Injection or withdrawal for the storage of natural dry gas or oil well gas.
- (e) Injection or withdrawal for the storage of liquid hydrocarbons or liquefied petroleum gas.

The Part 615 Administrative Rules governing injection wells (R 324.801 – R 324.808) similarly identify and regulate the operation of the various types of injection wells covered by the Administrative Rules. For example, R 324.806(1) specifies varying monitoring and reporting requirements applicable to three broad categories of injection wells: "a brine disposal injection well," "a secondary recovery injection well," and "injection wells utilized for gas storage." Notably, the Administrative Rules do not specify monitoring or reporting requirements for any other type of injection well, further indicating that Part 615 and the Part 615 Administrative Rules do not contemplate or cover any kind of injection well outside of those categories.

This is in keeping with the rule of statutory construction known as "expressio unius est exclusio alterius," which means that the expression of one thing is the exclusion of all else. In other words, if a statute or rule enumerates a list of things to which it applies, that list is presumed to be exhaustive. Hoerstman Gen Contractor, Inc v Hahn, 474 Mich 66, 74-75 (2006) (citing Feld v Robert & Charles Beauty Salon, 435 Mich 352, 362; 459 NW2d 279 (1990), and Taylor v Michigan Public Utilities Comm, 217 Mich 400, 403; 186 NW495 (1922).

### Secondary Recovery Wells

As noted above, under R 324.102(j), "Secondary recovery' means the introduction or utilization of fluid or energy into or within a pool *for the purpose of increasing the ultimate recovery of hydrocarbons from the pool.*" (Emphasis added.)

Similarly, R 324.612(1), which governs "Secondary oil recovery projects," provides: "A person desiring to inject water, gas, or other fluid into a producing formation or use other technology *for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir* shall file a petition for hearing pursuant to part 12 of these rules." (Emphasis added.) This is, of course, the same language used in R 324.102(x) that the Petitioners rely upon.

In sum, the Part 615 Administrative Rules distinguish oil and gas wells from injection wells. The Administrative Rules list the various types of "injection wells," one of which is a "secondary recovery well." Also, under the Administrative Rules, "secondary recovery well" is a well used "for the purpose of increasing the ultimate recovery of hydrocarbons."

### Second Clause of R 324.102(x) Refers to Secondary Recovery

It is against this background of the Administrative Rules as a whole that the following definition of "injection well" contained in R 324.102(x) and the three constituent clauses in that Administrative Rule are properly understood:

"Injection well" means [1] a well used to dispose of, into underground strata, waste fluids produced incidental to oil and gas operations or a well [2] used to inject water, gas, air, brine, or other fluids for the purpose of increasing the ultimate recovery of hydrocarbons from a reservoir or [3] for the storage of hydrocarbons. (Emphasis added.)

The first clause in the definition – injection wells used for disposal – corresponds to the injection wells covered in R 324.201(1)(c). The second clause in the definition – wells used to inject substances for the purpose of increasing the ultimate recovery of hydrocarbons – refers to secondary recovery wells and corresponds to the injection wells covered in R 324.201(1)(b). The third clause in the definition – wells used for the storage of hydrocarbons – corresponds to the injection wells covered in R 324.201(1)(d)-(e). Thus, read in the context of Part 615 and the Part 615 Administrative Rules as a whole, the injection wells referenced in the second clause of R 324.102(x) do not include any oil and gas wells, including wells completed with hydraulic fracturing.

### Well Completion Operations Under R 324.103(s)

Instead, the hydraulic fracturing activities that are the subject of the Declaratory Ruling request are "well completion operations" within the meaning of R 324.103(s), which states:

"Well completion operations" means work performed in an oil or gas well, or both, after the well has been drilled to its permitted depth and the production string of casing has been set, *including* perforating, *artificial stimulation*, and production testing. (Emphasis added.)

Specifically, as described in Section III.A., above, in a well completion operation using hydraulic fracturing, the fluids and additives are pumped into the well as a means of stimulating the production of oil and gas when the well is first developed. Moreover, the processes used in injection wells and in hydrofracturing completions of oil or gas wells are functionally distinct. In all of the types of injection wells listed in R 324.201(1)(b) through (e), above, the gas or fluid is injected into the formation with the intention that it remain there for an extended length of time. Conversely, in the process of hydraulic fracturing, much of the fluid pumped into the well is recovered shortly afterward and is separately disposed of in a permitted injection well.

Thus, consideration of the text and structure of Part 615 and the Part 615 Administrative Rules is sufficient to establish that Petitioners' interpretation of R 324.102(x) is incorrect.

### B. THE SPECIALIZED MEANING OF "INJECTION WELL" MUST BE CONSIDERED

Further, when interpreting technical terms with specialized meanings, such as "injection well," the specialized understanding of the term should be considered. See MCL 8.3a.<sup>4</sup> The MDEQ's interpretation of Michigan's definition of injection well is consistent with the generally accepted industry definition in the *Williams & Meyers Manual of Oil & Gas Terms*, Eleventh Edition, Updated and Revised by Patrick H. Martin and Bruce M. Kramer, 2000. This definition states:

Injection well – a well employed for the introduction into an underground stratum of water, gas, or other fluid under pressure. Injection wells are employed for the disposal of salt water produced with oil or other waste. They are also employed for a variety of other purposes, including: (1) PRESSURE MAINTENANCE, to introduce a fluid into a producing formation to maintain underground pressures which would otherwise be reduced by virtue of the production of oil and/or gas; (2) CYCLING or RECYCLING to introduce residue gas into a formation after liquefiable hydrocarbons have been extracted from gas produced from the formation; (3) SECONDARY RECOVERY operations, to introduce a fluid to decrease the viscosity of oil, reduce its surface tension, lighten its specific gravity, and/or drive oil into producing wells, resulting in greater production of oil; and (4) TERTIARY RECOVERY operations to introduce chemicals or energy as required for displacement and for the control of flow rate and flow pattern in the reservoir.

Under this definition, like MDEQ's interpretation of Part 615 and the Part 615 Administrative Rules, injection wells include wells used for waste disposal or for secondary recovery, as distinct from injection of fluids into an oil or gas well during well completion to stimulate production.

The Petitioners assert (Petition, Paragraph 13, and accompanying Affidavit of Mr. Ellis Boal, Paragraphs 24 - 30) that guidance documents regarding hydraulic fracturing published by the American Petroleum Institute (API) (attached to the Petition as Exhibits 10 and 11) support their claim that hydraulic fracturing completions of gas wells are a "species" of "injection well" within the meaning of R 324.102(x). The MDEQ disagrees.

<sup>&</sup>lt;sup>4</sup> MCL 8.3a, one of the Michigan statutes defining principles of statutory interpretation, provides: "All words and phrases shall be construed and understood according to the common and approved usage in the language; but technical words and phrases, and such as may have acquired a peculiar and appropriate meaning in the law, shall be construed according to such peculiar and appropriate meaning."

In fact, both of the referenced API documents, like the MDEQ, classify hydraulic fracturing as a "well stimulation technique" [a well completion operation covered by R 324.103(s)], not as a type of "injection well":

Hydraulic fracturing is a *well stimulation* technique that has been employed in the oil and gas industry since the late 1940s. Hydraulic fracturing is intended to increase the exposed flow area of the productive formation and to connect this area to the well by creating highly conductive path extending a carefully planned distance outward from the well bore into the targeted hydrocarbon-bearing formation, so that hydrocarbons can flow easily to the well. [API Guidance Document, *Water Management Associated with Hydraulic Fracturing*, HF2 (2010), p. 6, Petitioners' Exhibit 11 (Emphasis added and footnote omitted.)]<sup>5</sup>

As the Petitioner notes, the API Guidance Document, Water Management Associated with Hydraulic Fracturing, HF2 (2010), p. 2, does contain the following definition of "injection well": "A well used to inject fluids into an underground formation either for enhanced recovery or disposal." [Petitioners' Exhibit 11.] The Petitioners assert that the phase "enhanced recovery" in that definition somehow establishes that hydraulic fracturing is or should be understood to fall within that definition and the definition of injection well in R 324.102(x). But, in the specialized terminology of the oil and gas industry, "enhanced recovery" is understood to include activities such as "secondary recovery" rather than initial stimulation of a production well. See, e.g., the definition of injection well in Williams & Myers Manual of Oil & Gas Terms quoted above. In any event, nothing in the API Guidance Document in question remotely suggests or implies that hydraulic fracturing is a type of injection well. Indeed, the only substantive discussion of injection wells in that document is in the context of the use of separately constructed and permitted injection wells to dispose of waste "flowback" fluids that come out of oil or gas wells completed with hydraulic fracturing. [API Guidance Document, Water Management Associated with Hydraulic Fracturing, HF2 (2010), p. 21, Petitioners' Exhibit 11.1

In sum, the Petitioners' interpretation of R 324.102(x) is not supported by the text and structure of Part 615 and the Part 615 Administrative Rules, or established principles of statutory and rule construction. For all those reasons, the Petitioners' interpretation must be, and is, rejected.

## C. STATEMENTS ATTRIBUTED BY PETITIONERS TO OIL AND GAS INDUSTRY EMPLOYEES ARE NEITHER LEGALLY RELEVANT NOR PERSUASIVE

As noted above, the Petitioners also rely, in part upon portions of an affidavit of their counsel, Mr. Ellis Boal, recounting his exchanges with certain individuals employed in the oil and gas industry regarding the purposes of hydraulic fracturing (Petition,

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<sup>&</sup>lt;sup>5</sup> The other document referenced by the Petitioners, API Guidance Document HF 1 (2009), p. 15 [Petitioners' Exhibit 10] describes hydraulic fracturing in substantively identical terms as a "well stimulation technique," not a type of injection well.

Paragraphs 24 - 28, Boal Affidavit Paragraphs 16 - 22). According to that affidavit, Mr. Boal approached some individuals who are active in the oil and gas industry at public meetings and asked them whether the purposes of hydraulic fracturing included "increasing the ultimate recovery of hydrocarbons from a reservoir," the phrase in the second clause of the definition of "injection well" in R 324.102(x). The Petitioners contend that because those individuals reportedly answered that question affirmatively, there is an "uncontested consensus" (Petition, Paragraph 31) that gas wells completed with hydraulic fracturing are injection wells that should now form the MDEQ's interpretation of that language in the rule.

Once again, the MDEQ disagrees. As a threshold matter, this sort of "evidence," outside the text of the rule, of statements made by individuals, is not even relevant to the legal question of Part 615 Administrative Rules interpretation presented in this Declaratory Ruling. Under established principles of statutory interpretation (also applicable to administrative rules), the meaning of a statute or rule is determined by the language of the statute or rule itself, read as a whole. See, e.g., *People v Jackson*, 487 Mich at 791. Unless the statutory or rule language is ambiguous, it is unnecessary and improper to look beyond it to extrinsic evidence of the intended meaning. *Echelon Homes, LLC v Carter Lumber Co*, 472 Mich 192, 196; 694 NW2d 544 (2005). Here, as discussed above, the language of Part 615 and the Part 615 Administrative Rules relevant to the meaning of "injection well" is not ambiguous.

Second, even if the statements quoted in the Boal Affidavit were relevant, they are not persuasive as to the meaning of "injection well" in Part 615 and the Part 615 Administrative Rules. Notably, while Mr. Boal was apparently careful to quote one phrase from R 324.102(x) in posing his question, there is no indication that he asked the individuals whether they considered "hydrofracked" oil or gas wells to be a type of "injection well" or in any way referenced the regulatory context of the phrase he used. Presumably, it is highly unlikely that any of the individuals he questioned had committed the text of R 324.102(x) to memory and, thus, understood the "point" that he apparently was attempting to make for purposes of the Petitioners' present legal argument. At most, the responses quoted in the affidavit signified nothing more than agreement with the basic and uncontested fact (see Section III.A., above) that hydraulic fracturing is a well completion technique intended to stimulate (i.e., increase or improve) the production of oil or gas in a well by allowing it to flow more readily into the well in question.

## D. CHANGES IN THE SCALE OF A WELL COMPLETION TECHNOLOGY DO NOT CHANGE THE MEANING OF PART 615 OR THE PART 615 ADMINISTRATIVE RULES

Finally, the Petitioners suggest that even if hydraulically fractured wells were not considered injection wells in the past, current high-volume hydraulic fracturing technology should now be considered "injection" and subject to additional permitting conditions and operational requirements under R 324.201(2)(j) and R 324.801 – R 324.808. The Petitioners state that they fear a variety of adverse environmental

effects that they perceive may result from the use of high-volume hydraulic fracturing technology. (Petition, Paragraphs 8 - 9.)

As a legal and regulatory matter, changes in the scale or volume of a well completion technology – hydraulic fracturing – do not and cannot change the text or meaning of Part 615 or the Part 615 Administrative Rules. As discussed above, the meaning of a statute or rule is determined by its terms. Under the regulatory framework of Part 615 and the Part 615 Administrative Rules, an oil or gas well remains an oil or gas well. Such a well is not transformed into an injection well within the meaning of the statute and rules because the volume of fluids used in the hydraulic fracturing well completion operation covered by R 324.103(s) increases.

With respect to the Petitioners' environmental concerns, the MDEQ notes that it has taken action within the existing statutory and regulatory framework of Part 615 to ensure that high-volume hydraulic fracturing well completions are conducted in an environmentally sound and protective manner. Specifically, pursuant to MCL 324.61505 and MCL 324.61506(a), the MDEQ issued Supervisor of Wells Instruction 1-2011, High Volume Hydraulic Fracturing Well Completions (effective June 22, 2011), imposing additional permitting, completion, and reporting requirements to address some unique conditions not typical of conventionally completed wells. including on-site large volume water withdrawals, freshwater pits, larger volumes of chemical additives, and larger volumes of flowback water.

#### ٧. CONCLUSION

Based on the foregoing analysis, the MDEQ's answer to the Petitioners' question is "no," oil or gas well completions with hydraulic fracturing are not "injection wells" under R 324.102(x) and are not subject to R 324.201(2)(j) or other requirements of the Part 615 Administrative Rules specific to injection wells.

In accordance with Section 63 of the Administrative Procedures Act, MCL 24.263, this Declaratory Ruling is subject to judicial review in the same manner as a final agency decision or order in a contested case. MCL 615.17(1) provides that "the circuit court of Ingham county has exclusive jurisdiction over all suits brought against the department, the supervisor, or any agent or employee of the department or supervisor, by or on account of any matter or thing arising under this part." As such, if the Petitioner wishes to seek judicial review of this Declaratory Ruling, a petition is to be filed in the Circuit Court of Ingham County.

Dan Wyant, Director

Michigan Department of ☐nvironmental Quality

June 28, 2012

Date