

**BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA**

APPLICANT:	HUNTER DISPOSAL LLC) (WHOLLY OWNED SUBSIDIARY) OF PLYMOUTH EXPLORATION,) L.L.C.)) 110 W. 7 TH ST., SUITE 2600) TULSA, OK 74119-1031))	
RELIEF SOUGHT:	NON-COMMERCIAL SALT) WATER DISPOSAL WELL) VICTORIA FALLS #1-5 WELL))	CAUSE PD NO. 201400143
LEGAL DESCRIPTION:	SW/4 SE/4 SW/4 SW/4 AND) SW/4 NE/4 NW/4 SW/4 OF) SECTION 5, TOWNSHIP 24) NORTH, RANGE 4 WEST,) GARFIELD COUNTY,) OKLAHOMA)	FILED FEB 22 2016 COURT CLERK'S OFFICE - OKC CORPORATION COMMISSION OF OKLAHOMA

REPORT OF THE OIL AND GAS APPELLATE REFEREE

This Cause came on for hearing before **Andrew T. Dunn**, Administrative Law Judge for the Corporation Commission of the State of Oklahoma, on the 23rd day of September, 2015, at 8:30 a.m. in the Commission's Courtroom, Jim Thorpe Building, Oklahoma City, Oklahoma, pursuant to notice given as required by law and the rules of the Commission for the purpose of taking testimony and reporting to the Commission.

APPEARANCES: **J. Fred Gist**, attorney, appeared on behalf of applicant, Hunter Disposal, L.L.C. ("Hunter"); **Susan Conrad**, Deputy General Counsel, appeared on behalf of the Conservation Division, Oklahoma Corporation Commission ("Staff" or "Commission"); and **James L. Myles**, Deputy General Counsel for Deliberations, filed notice of appearance.

The Administrative Law Judge ("ALJ") filed his Report of the Administrative Law Judge on the 10th day of November, 2015, to which Exceptions were timely filed and proper notice given of the setting of the Exceptions.

The Appellate argument concerning the Oral Exceptions was referred to **Patricia D. MacGuigan**, Oil and Gas Appellate Referee ("Referee"), on the 8th day of January, 2016. After considering the arguments of counsel and the record contained within this Cause, the Referee finds as follows:

STATEMENT OF THE CASE

HUNTER TAKES EXCEPTION to the recommendation of the Administrative Law Judge ("ALJ") that the Second Interim Order be recommended with additional modified requirements.

On October 24, 2014, this cause originally came on for hearing before ALJ Susan Osburn. ALJ Osburn recommended that the Commission grant the requested relief, but only on an interim basis, recommending that the Commission issue an Interim Order in this cause. Interim Order No. 635847 approved the Victoria Falls #1-5 well to dispose into the Arbuckle at a depth of 6,626 feet to 9,326 feet, injecting at a maximum 25,000 barrels per day at a maximum pressure of 1,500 psi. Interim Order No. 635847 imposed special requirements on Hunter because of seismicity in the area where the Victoria Falls #1-5 well is located. These requirements are shown on page 6, paragraph 10 of Interim Order No. 635847.

On September 23, 2015, this cause was re-opened. Interim Order No. 635847 requires the record to be re-opened for the purpose of evaluating the pressure information and other data submitted by Hunter. The Interim Order also requires the Conservation Division and the Underground Injection Control ("UIC") departments to state their position in the cause and whether they support or oppose the issuance of a Final Order granting the Hunter application and the utilization of the Victoria Falls # 1-5 SWD well. (See page 6, paragraph 10 of Interim Order No. 635847). The re-opening is for the Commission to adjudge whether Hunter is in compliance with Interim Order No. 635847.

HUNTER TAKES THE POSITION:

1) Specifically, Hunter asserts that the Report of the ALJ should be affirmed insofar as it recommends the issuance of a Second Interim Order with suitable reporting and operating requirements, but reversed insofar as it recommends that Hunter be required to conduct 3-D seismic studies covering the area around the Victoria Falls #1-5 well. As grounds for said exception, Hunter alleges and states as follows:

FACTS

2) Hunter, pursuant to OCC-OAC 165:5-7-27 and 165:10-5-5, filed Form 1015 seeking authority to drill, complete and utilize the Victoria Falls #1-5 well as a non-commercial salt water disposal ("SWD") well, for the purpose of disposing of salt water into the Arbuckle formation. Hunter filed this Application for administrative approval as provided by OCC-OAC 165:10-5-5. Hunter provided all of the required attachments, caused publication and provided notice as required by the rules. The UIC department reviewed the request and found Hunter's application was sufficient for administrative approval, however, due to recent seismic activity in proximity to the disposal application, UIC requested this matter be placed on the docket for hearing. There are no parties protesting the Hunter application.

3) Following an evidentiary hearing before ALJ Osburn on October 24, 2014, this Commission entered Interim Order No. 635847 on January 29, 2015, approving the Hunter application to operate the Victoria Falls #1-5 well and to dispose into the Arbuckle formation, injecting a maximum of 25,000 barrels per day at a maximum pressure of 1,500 psi. Said Interim Order, imposed special requirements on the operator because of seismicity in the area. This Interim Order No. 635847 also provided for the record to be re-opened for the purpose of evaluating the pressure information and other data submitted by the operator to the Commission.

4) In accordance with the terms of said Interim Order No. 635847, this cause came on for further hearing on September 23, 2015, before ALJ Dunn. Upon re-opening the record, Hunter provided the data required by the Interim Order and also submitted evidence demonstrating that it was in compliance with the other requirements of said Interim Order. The witness for the Commission UIC department testified that UIC had no objection to the operator's continuing operations of the Victoria Falls #1-5 well as provided in the Interim Order if the operator continued to voluntarily maintain current injection volumes at 5,000 BWPD.

5) During the re-opened hearing of this cause before ALJ Dunn, no evidence was presented related to conducting 3-D seismic. In fact, there was no mention whatsoever of 3-D seismic studies. However, the ALJ recommended in his filed Report that a Second Interim order be entered with the same stipulations as the first Interim Order No. 635847 and with the operator keeping the injection volumes at a maximum of 5,000 BWPD (a reduction agreed to voluntarily by Hunter), and also with the conditions that the operator submit the Hall integral and derivative data for the Victoria Falls #1-5 well, and also that the operator conduct 3-D seismic studies and submit those studies to the Commission for review. The ALJ recommended on Pages 20 and 21 of his Report that a "Second Interim Order be recommended, containing the same stipulations as Interim Order No. 635847 (including the present UIC

Department's guidance to Hunter to keep the injection volumes voluntarily at 5,000 barrels of water per day) with the additional requirements, provided below:

a. Hall integral and derivative data for the Victoria Falls #1-5 well. This data must be submitted with a calculated coefficient of determination (which is to provide a "goodness-of-fit" measure for UIC Department to interpret). This information must cover the cumulative injection for the life of the well.

b. 3-D seismic studies must be conducted and submitted to the Commission for technical experts to review to determine whether the components found necessary for significant injection-induced seismicity are or are not present in the Arbuckle and Reagan formations and the Granite basement rock in the vicinity of the SWD wells. The 3-D seismic must be provided in an adequate format for UIC staff to examine the data. This may require technological considerations and coordination between the Commission and the Applicant.

c. The Applicant shall collect from the OGS seismic data within 6.21 miles of the injection well and shall supply such data, if any, to UIC on a weekly basis. UIC Department shall independently collect seismic data for review and comparison.

d. This information is to be provided at the time of the re-opening of the Second Interim Order cause within 6 months of the date this cause is recommended. The Victoria Falls #1-5 will be allowed to operate at the present time with [sic] Hunter gathers the data for submission to the Commission."

6) As authority for the requirement that Hunter conduct seismic studies, the ALJ states that the purpose of the Federal UIC program, which Oklahoma enforces, is to protect the public health and environment from harm, although the ALJ recognizes that the "primary context" for enforcing the UIC rules has been to protect the groundwater and surface waters of the state from harm. ALJ Report at 15, ¶ 54. The ALJ found: "The contemporary context for enforcing these rules is to regulate UIC activities which endanger the public health or environment in regards to seismicity. Presently, the recent phenomena of frequent seismic events requires refocusing the application of

the Commission's rules as earthquakes endanger the public health and environment of the state." (See ALJ Report at 15, ¶ 55).

EXCEPTIONS TO ALJ REPORT

7) Hunter accepts the ALJ's recommendations set forth in subparagraphs a., c. and d. on pages 20 and 21. However, Hunter strenuously objects and takes exception to the ALJ's recommendation in paragraph 6.b on pages 2 and 3 and subparagraph b. on page 21, which would require Hunter to conduct 3-D seismic studies and submit them to the Commission. Hunter requests that the Commission reverse said ALJ Report and delete from it said recommendation of the ALJ.

8) The ALJ's recommendation is contrary to the applicable Oklahoma Statutes and case law, is contrary to the facts, and is not supported by substantial evidence.

9) The ALJ's recommendation does not serve to prevent waste or to protect correlative rights.

10) As noted in paragraph 63 of the ALJ Report, Hunter has submitted the data required by said Interim Order No. 635847, and thus satisfies the Interim Order requirements. In fact, Hunter went above and beyond those requirements, submitting the Hall Integral and Derivative Plot and maps showing earthquake events within a 6.21 mile radius of the Victoria Falls #1-5 well, rather than the two mile radius dictated in said Interim Order.

11) As noted in paragraph 64 of the ALJ Report, UIC also presented testimony by Mr. Charles Lord, who stated that UIC neither supports nor opposes the Hunter application. However, the ALJ concluded that the UIC's decision to request that the well be regulated to maximum injection volumes of 5,000 BWPD, "at least supports (as implied through its request for regulation to Hunter) the operations of the Victoria Falls # 1-5 to that limit. Therefore, such complies with the Interim Order's stipulation that UIC take a position regarding this underground injection application." In paragraph 66, page 19, of the ALJ Report, the ALJ correctly concludes that a Second Interim order allowing the continued operation of said Victoria Falls #1-5 well is appropriate in this case.

12) The testimony in this cause shows that there has been no seismic activity within a two mile radius of the Victoria Falls #1-5 well. However, as noted in paragraph 69, page 20 of the ALJ Report, there have been earthquakes in areas further away, north and south of the Victoria Falls #1-5 well. More importantly, the ALJ further notes in said paragraph 69 that the areas to the north of the Victoria Falls #1-5 well, where more seismic "swarms"

have occurred, are devoid of faults. However, areas to the south of the Victoria Falls #1-5 well, where existing maps show the presence of faults, have much less seismic activity. Therefore, one must conclude that, in this area, there is no evidence of a direct correlation between increased seismicity and the presence of faults.

13) In direct contradiction to the facts and conclusions set forth in paragraph 69, page 20 of the ALJ Report, the ALJ erroneously concludes in paragraph 70, page 20 of the ALJ Report, that "3-D seismic information is necessary so the Commission can determine whether components found essential for significant injection —induced seismicity are or are not present in the area of the Victoria Falls # 1-5 Well." This conclusion is not supported by any evidence in this cause, and is contradicted by his own statements in paragraph 69, page 20 of the ALJ Report+.

14) There is no evidence in the record of this cause that 3-D seismic studies would provide any useful, relevant or probative evidence in this cause. In addition, as noted above, there was absolutely no mention of 3-D seismic by any witness during the hearing before ALJ Dunn. In fact, the only mention of 3-D seismic in the record in this cause came during the initial hearing of this cause before ALJ Osburn on October 24, 2014, when Hunter's geologist testified that Hunter does not have any 3-D seismic studies covering this area.

15) Under Oklahoma Constitution art. 9, §18, Commission orders must be supported by the law and substantial evidence. It has been held that when the Commission applies its "rules in order to prevent waste or to regulate production, it acts in a capacity at least quasi judicial, and it must act either under rules of procedure and evidence provided by the Legislature, or under rules of procedure and evidence provided by itself, and it may not then act without evidence or upon incompetent, irrelevant, and immaterial evidence." *H.F. Wilcox Oil & Gas Co. v. State*, 19 P.2d 347 (Okl. 1933), syl. 6. Therefore, the recommendation of the ALJ requiring Hunter to conduct 3-D seismic studies must be reversed because it is not supported by any evidence whatsoever.

16) Hunter further asserts that the clearly unsupported and erroneous recommendation of the ALJ requiring Hunter to conduct 3-D seismic studies must be reversed because this Commission lacks jurisdiction and authority to require an operator to conduct a seismic study as a condition to continued operations of a disposal well. The Commission does not have the authority to require an operator to conduct seismic exploration in order to provide a study to the Commission, where such a study has not been conducted, because there is no statute or rule authorizing the Commission to require such a study.

17) Hunter has not conducted seismic exploration of the area in question. Conducting such seismic exploration may be cost prohibitive and it may be

impossible to obtain the necessary permissions to conduct such operations. In order to conduct a seismic study, Hunter would be required to obtain rights to conduct seismic exploration where it does not already have such rights, and there is no guarantee that such rights would be granted, and we are not aware of any statutory right to condemn private property for the purposes of conducting seismic exploration. Moreover, Hunter would also be required to pay surface damages under the Seismic Exploration Regulation Act, 52 O.S. §§ 318.21-318.23. Hunter would also have to hire a seismic company to perform the seismic exploration. Further, seismic data is considered confidential trade secret and proprietary information.

18) The ALJ's recommendation is inappropriate and must be reversed because (1) there is no statute or rule authorizing the Commission to require an operator to conduct seismic exploration operations under any circumstances; and (2) the statutes and rules relied upon by the ALJ do not authorize denial of an application to continue to operate a disposal well based upon a failure to conduct seismic exploration.

19) The Oklahoma Supreme Court has held that the Corporation Commission's authority is "definitely limited to the power expressly or by necessary implication granted to it and must be exercised in strict conformity therewith." *Carter Oil Co. v. State*, 240 P.2d 787, 794 ¶16 (Okl. 1951). *Conoco, Inc. v. Corporation Commission*, 764 P.2d 516, 518 (Okl. 1988) provides:

It is clearly established that the authority over the Corporation Commission relating to the conservation of oil and gas is limited to the powers expressly or by necessary implication granted to it by the Constitution or by statute. Further, the exercise of the Commission's authority, to be valid, must be in strict conformity with the grant of power.

20) See also *Merritt v. Corporation Commission*, 438 P.2d 495 (Okl. 1968). An example of the strict limitation upon the Commission's authority is provided in *Minshall v. Corporation Commission*, 485 P.2d 1058 (Okl. 1971) in which the Court addressed 52 O.S. Section 317. Although Section 317 authorized the Commission to plug a leaking well, prior to its amendment in 1965, the statute did not provide that the Commission could require anyone to plug a well and it did not impose liability on any person for the plugging of a well. The Court held that in the absence of language in the statute authorizing the Commission to require someone to plug or replug a well, the Commission did not have the authority to enter an order requiring an operator or any other person to conduct such operations. *Id.* at 1061. Likewise, in the present cause, there is no statute authorizing the Commission to require an operator to conduct seismic exploration. Further, there is no Commission rule addressing procedures for requiring any seismic exploration to be conducted. Even if a

statutory authorization existed to require an operator to conduct seismic exploration, which Hunter denies, the Commission is required to adopt rules that implement such a statutory requirement. See *Hoover v. Boone Operating, Inc.*, 274 P.3d 815 (Okl.Civ.App. 2012).

21) After the *Minshall* decision, the statutes were amended to allow the Commission to require an operator or any other responsible person to plug, replug or repair a leaking well, as discussed in *Currey v. Corporation Commission*, 617 P.2d 177 (Okl.1979). In *Hoover*, the court held that the Commission's statutory authority to regulate and supervise the plugging of oil and gas wells meant that the Commission had the authority to take action to prevent and prohibit waste and pollution relating to activities under its jurisdiction, "without regard to who or what entity may be the perpetrator of the waste or pollution." *Hoover*, ¶ 11, at 817. However, the Court held that the Commission could not require a surface owner or a salvage company to plug an abandoned well without adopting a rule that would make such persons liable. The Commission rules provided that the Commission could require operators, owners, and other responsible persons to plug wells, but did not set forth any criteria for ascertaining who may be considered responsible persons. The Court therefore reversed the Commission's order that required the surface owner and salvage company to plug the well from which they had removed the casing and equipment.

22) Several of the ALJ's Conclusions of Law refer to EPA delegated primary enforcement authority and other matters which were not discussed at all during the hearing of this cause. Furthermore, the statutes and regulations cited and discussed by the ALJ clearly do not authorize the Commission to deny permission to conduct underground disposal operations without conducting a seismic study. The statutes and regulations cited by the ALJ provide the Commission with jurisdiction over underground injection wells in order to protect groundwater and surface water. This is true under the federal UIC program as well as the laws existing in Oklahoma prior to the State implementation of that program as shown by *Appeal of Cummings & McIntyre*, 319 P.2d 602 (Okl. 1957), where the Oklahoma Supreme Court reversed a Commission order that denied an application to dispose of salt water underground. The Court held that the Commission had authority to allow underground disposal of saltwater under its authority pursuant to 52 O.S. Section 86.2, to prevent waste and for the protection of fresh water strata, and also under 52 O.S. Section 139, which vests the Commission with authority to make rules, regulations and orders regulating the handling, storage, and disposition of salt water, mineral brines, waste oil, and other deleterious substances produced from or used in connection with drilling, development, producing, refining, and processing of oil and gas or in the operation of oil and gas wells. The court held that in order to deny an application for a disposal well, the Commission is required to find, based upon substantial evidence, that

the disposal sought by the applicant "has caused, will cause, or is reasonably likely to cause" pollution of surface or subsurface waters or damage to an oil or gas bearing strata. Id. at 606. The unrefuted evidence presented in this cause shows that Hunter's application and its operations are in compliance with the applicable rules and regulations of this Commission.

23) Hunter requests that the Commission set these exceptions for hearing, either en banc or before the Appellate Referee, and, upon such hearing, that the Commission affirm the recommendation of the ALJ and issue a Second Interim in this cause with the same stipulations as set forth in the first Interim Order, with the additional terms and requirements recommended by the ALJ, but reverse said Report of the ALJ and delete the ALJ's specific recommendation that Hunter be required to conduct 3-D seismic studies. Furthermore, the Commission should grant such additional relief as it deems just and reasonable.

THE ALJ FOUND:

Jurisdictional Charges

1) The Environmental Protection Agency ("EPA") delegated primary enforcement authority for the Federal UIC program through Part C of the Safe Drinking Water Act ("SDWA") to the State of Oklahoma. The State of Oklahoma under 52 O.S. Section 139 granted the Commission exclusive jurisdiction over the Federal UIC program related to Class II wells."

2) 52 O.S. Section 139 states that "The Corporation Commission is vested with exclusive jurisdiction, power and authority, and it shall be its duty, to make and enforce such rules and orders governing and regulating the handling, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing, and operating of oil and gas wells and brine wells within this state as are reasonable and necessary for the purpose of preventing the pollution of the surface and subsurface waters in the state, and to otherwise carry out the purpose of this act."

3) 17 O.S. Section 52(A)(i) states that the Commission shall have jurisdiction over: "the handling, transportation, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing and operating of oil and gas wells...."

4) OCC-OAC 165: 10-7-2(c)(8)(9) and (10) provides that the Commission has jurisdiction over "(8) The handling, transportation, storage and disposition of saltwater, drilling fluids, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling,

development, production, and operation of oil and gas wells at any facility or activity specifically subject to Commission jurisdiction or other oil and gas extraction facilities and activities. (9) Spills of deleterious substances associated with facilities and activities specified in O.A.C. 165:10-7-4(c)(8) or otherwise associated with oil and gas extraction and transportation activities. (10) Groundwater protection for activities subject to the jurisdictional areas of environmental responsibility of the Commission."

5) The Commission is thereby charged to "carry out the purpose" of the Federal UIC program by enforcing its requirements (as provided under 40 C.F.R. Section 145.1(f)).

6) 40 C.F.R. Section 145.1(f) states that "Any State program approved by the Administrator shall at all times be conducted in accordance with the requirements of this part." However, it is noted the Commission is also not precluded from adopting or enforcing requirements that are more stringent than the federal regulations (under 40 C.F.R. § 145.1(g)(1)) See 40 C.F.R. Section 145.1(g)(1) which states that "Nothing in this part precludes a State from adopting or enforcing requirements which are more stringent or more extensive than those required under this part."

7) The importance of the Commission's authority to restrain individuals engaged in such endangering or damaging activities is implicit in the state's delegation of jurisdiction to the Commission authority over the Federal UIC program as such a delegation creates the exclusive obligation of the Commission to ensure UIC operations are being conducted properly statewide. It is the duty of the Commission to "carry out the purpose" of the federal law by restraining, when necessary, individual activities that pose an imminent risk to the public health, safety, and welfare.

8) The Commission's authority to restrain any person from engaging in any activity which endangers or causes damage to public health or the environment derives from these delegations of primary enforcement authority.

9) 40 C.F.R. Section 145.13(a) which states that "Any State agency administering a program shall have available the following remedies for violations of State program requirements: (1) To restrain immediately and effectively any person by order or by suit in State court from engaging in any unauthorized activity which is endangering or causing damage to public health or environment." This power to restrain extends over any individual who is engaged in the potentially endangering or damaging activities involving "the handling, transportation, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing and operating of oil and gas wells."

10) Commission rules have been promulgated under these federal and state delegations of exclusive authority which govern the location, installation and operation of Class II wells in a manner that protects against harm to the public health or environment.

11) OCC-OAC 10- 5-9, titled "Duration of underground injection well orders or permits" provides under subsection (a) the Commission power over disposal well permit revocations for 'just cause.'

12) OCC-OAC 165:10-5-9 states that "(a) Subject to 165:10-5-10, authorization of injection into enhanced recovery injection wells and disposal wells shall remain valid for the life of the well, unless revoked by the Commission for just cause or lapses and becomes null and void under the provisions of 165:10-5-5(g). (b) An order granting underground injection may be modified, vacated, amended, or terminated during its term for cause. This may be at the Commission's initiative or at the request of any interested person through the prescribed complaint procedure of the Conservation Division. All requests shall be in writing and shall contain facts or reasons supporting the request. (c) An order may be modified, vacated, amended, or terminated after notice and hearing if; (1) There is a substantial change of conditions in the enhanced recovery injection well or the disposal well operation, or there are substantial changes in the information originally furnished. (2) Information as to the permitted operation indicates that the cumulative effects on the environment are unacceptable. (d) If an operator fails to complete or convert a well as approved by the Conservation Division within eighteen (18) months after the effective date of the order or permit authorizing injection into the well, then the order or permit authorizing injection into the well shall expire."

13) Continuing, subsection (c) of OCC-OAC 165: 10-5-9 stipulates that Commission orders may be "modified, vacated, amended, or terminated after notice and hearing if; (1) There is a substantial change in conditions in the enhanced recovery injection well or the disposal well operation, or there are substantial changes in the information originally furnished. (2) Information as to the permitted operation indicates that the cumulative effects on the environment are unacceptable.

14) To summarize, OCC-OAC 165: 10-5-9(a) provides that disposal well permits may be revoked for 'just cause' and OCC-OAC 165: 10-5-9(c) authorizes, after notice and hearing, that the Commission may modify, vacate, amend or terminate any order granting underground injection upon its own initiative if information related to the operation of a well indicates evidence of substantial change or unacceptable environmental effects. Therefore, the Commission has explicit authority to revoke disposal well permits under OCC-OAC 165: 10-5-9.

15) It stands to be noted that the Commission also has authority to deny disposal well permits under OCC-OAC 165: 10-5-9. Legal reasoning leads to the aforementioned conclusion: If the Commission has the authority to modify, vacate, amend or terminate any order that has been granted (permitting underground injection) based on new information of substantial change or unacceptable environmental effects, it also has the authority to modify, vacate, amend, or deny an application (seeking underground injection) for the same reasons. Therefore, in addition to its explicit authority to revoke a permit, the Commission also has the implied authority to deny a permit.

16) Commission rules have been promulgated under the federal and state delegations of exclusive authority to govern the location, installation, and operation of Class II wells in a manner that protects against harm to the public health and the environment. OCC-OAC 165: 10-5-9 provides, in summary, that underground injection is to be regulated based on the environmental impacts of its associated activities. Therefore, the Commission, through its promulgation and enforcement of rules regulating underground injection carries out the purpose of the federal law by restraining, when necessary, individual activities that pose an imminent risk to the public health, safety, and welfare.

17) The primary context for enforcing these rules has been regulation of UIC activities which may endanger the public health or environment in regards to the groundwater and surface water of the state. Initially, Commission rules promulgated to govern the location, installation and operation of Class II wells in accordance with the Federal UIC program (including OCC-OAC 165: 10-5-9) were applied with a focus on protecting groundwater and surface water from pollution as harm to the ground and surface waters represents an endangerment to the public health and environment.

18) The contemporary context for enforcing these rules is to regulate UIC activities which endanger the public health or environment in regards to seismicity. Presently, the recent phenomena of frequent seismic events requires refocusing the application of the Commission's rules as earthquakes endanger the public health and environment of the state. It is common knowledge that earthquakes are capable of causing catastrophic damage to any society.

19) The authority of the Commission to address the risks and dangers of harm to property, human health safety, and the environment arising from induced seismicity derives from the same delegation to the Commission of jurisdiction over UIC operations cited to protect against pollution. The same restraining powers of the Commission extend to preventing the same subjects from risks of harm—only now those risks come from earthquakes rather than surface and groundwater pollution. The increasing frequency and magnitude of earthquakes requires a new analysis of the harm UIC wells present to the

state's public health and/or environment. Conclusively, the Commission has broad authority to regulate UIC Class II wells to protect the state from activities that endanger or cause damage to the public health and that such authority is not limited by the type of cause of harm, whether it be pollutants, earthquakes, or some other harm inducer. Furthermore, it is not beyond the Commission's authority to take preventative, restraining measures based on the information available. Such restraints, when used to protect property, human health and safety, and the environment, "carry out the purpose" of these federal and state acts. It is noted while the science linking oil and gas activity to induced seismicity has not been settled conclusively, the Commission has authority to restrain UIC activities as a preventative measure to protect the public health and environment.

20) It stands to be noted, that induced seismicity is not "pollution" per se. "Pollution" is defined under OCC-OAC: 10-1-2 as the contamination of fresh water or soil, either surface or subsurface, by salt water, mineral brines, waste oil, oil, gas, and/or other deleterious substances produced from or obtained or used in connection with the drilling, development, producing, refining, transporting, or processing of oil or gas within the State of Oklahoma." While induced seismicity does not fit into the definition of pollution, earthquakes are known to cause the release of energy vibrations and shocks which can damage the facilities and equipment used in oil and gas activities. Such destruction could very likely lead to pollutant releases into the groundwater and surface water of the state, the exact type of releases which the SDWA seeks to prevent. Therefore, the Commission has the power to restrain underground injection for its potential to cause earthquakes which would, in turn, cause harm to the public health and environment through injury to the ground and surface waters of the State of Oklahoma.

21) Additional sources exist that provide the Commission the power to protect property, human health and safety, and the environment. These sources derive from interpretations of the Commission's rules and from nuisance law. The Commission is thereby empowered to regulate UIC activities accordingly under these sources of authority.

22) The legal doctrine of *in pari materia* provides that statutes and rules with a common purpose and comparable subject matter "should be construed together as one system of regulations." See *Fiske v. Framingham Manufacturing Co.*, 29 Mass. (12 Pick.) 68 (1831). Under this accepted legal principle, this public policy set forth for the regulation of storage tanks should extend to the regulation of Class II UIC wells and systems since both sets of statutes and rules have the common purpose and comparable subject matter of oil and gas conservation. The Commission is authorized to issue orders necessary to protect property, human health and safety, and the environment with respect to the risks and hazards associated with above ground storage tanks.

23) OCC-OAC 165:26-1-26(a) states that "The Commission will issue orders as necessary to enforce the provisions of this Chapter to protect property, human health and safety, and the environment." It stands to logic that the Commission has authority to protect property, human health and safety, and the environment in Oil and Gas Conservation matters other than storage tanks.

24) The Commission also has the power to stop public nuisances that arise from oil and gas activities. In *Union Texas Petroleum Corp. v. Jackson*, 909 P.2d 131 (Okl.Civ.App. 1995) the Court defined a nuisance as "unlawfully doing an act or omitting to perform a duty, which act or omission either annoys, injures or endangers the comfort, repose, health or safety of others or in any way renders other persons insecure in life or in the use of property."

25) See 50 O.S. 1991 Section 1; and *Cities Service Oil Company v. Merritt*, 332 P.2d 677, 684 (Okl. 1958). In *Cities Service*, the Supreme Court determined the basis of liability for injury or damage to property by pollution of subterraneous waters, from oil, gas or saltwater from oil wells, must be either negligence or nuisance. *Id.* at 684. Cities or towns may seek abatement of a public nuisance, including protection of public water supplies, within their respective corporate limits in district court. 50 O.S. 1991 Sections 16, 17. A public nuisance is one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon the individuals may be unequal.

26) See 50 O.S. 1991 Section 2; *Miller v. State*, 123 P.2d 699 (Okl. Crim. App. 1942). The remedies for public nuisance are through indictment or information, civil action, or abatement. 50 O.S. 1991 Section 8. A public nuisance may be abated by any public body or officer authorized thereto by law. 50 O.S. 1991 Section 11."

27) The *Union Texas* Court held that "although the proper forum for a landowner to recover damages for nuisance caused by encroaching saltwater is in district court, the Commission may proceed to abate such nuisance including assessment of liability therefore, in accordance with State statutes and court decisions, including the law of nuisance in order to enforce compliance with its rules and regulations." Induced seismicity, through releases of energy vibrations and shocks, fits the definition of a public nuisance as it can injure or endanger the comfort, repose, health, or safety of others or render people insecure in life and use of property. Therefore, the Commission has authority to assess and to abate a public nuisance related to induced seismicity.

28) In conclusion, the Commission has exclusive jurisdiction to govern the location, installation and operation of Class II wells in a manner that protects

against harm to the public health or environment for all of the legal reasons aforementioned in the ALJ's Report.

29) In summary;

a) The EPA has delegated primary enforcement authority for the Federal UIC program through Part C of the SDWA to the State of Oklahoma.

b) The State of Oklahoma has given charge of the Federal UIC program related to Class II wells to the Commission.

c) Therefore, the Commission is in charge of "carrying out the purpose" of the federal program.

d) The federal program provides under 40 C.F.R. Section 145.1(f) that: "Any State program approved by the Administrator shall at all times be conducted in accordance with the requirements of this part." This provides the Commission these remedies for violations of State program requirements: "(1) To restrain immediately and effectively any person by order or by suit in State court from engaging in any unauthorized activity which is endangering or causing damage to public health or environment." See 40 C.F.R. Section 145.13(a)."

e) Therefore, the Commission is charged with ensuring that the public health and environment is protected from harm under the Federal UIC program.

f) The Commission has followed through on its duties through the promulgation of rules governing the location, installation and operation of UIC Class II wells. OCC-OAC 165: 10-5-9 empowers the Commission to revoke or deny disposal well permits and provides the Commission the power to modify, vacate, amend, or terminate an application or order after notice and hearing for disposal wells.

g) The primary context for enforcing these rules has been regulation of UIC activities which may endanger the public health or environment in regards to the groundwater and surface water of the state as harm to these waters represents an endangerment to the public health and environment.

h) The contemporary context for enforcing these rules is the regulation of UIC activities which may endanger the public health or environment in regards to seismicity. It is common knowledge that earthquakes are capable of causing catastrophic damage to any society.

i) The increasing frequency and magnitude of earthquakes requires a new analysis of the harm UIC wells present to the state's public health or

environment. While the science linking oil and gas activity to induced seismicity has not been settled conclusively, the Commission is authorized to restrain UIC activities as a preventative measure. The Commission has broad authority to regulate UIC Class II wells to protect the state from activities that endanger or cause damage to the public health and that authority is not limited by the type of cause of harm, whether it be pollutants, earthquakes, or some other harm inducer.

j) Additional sources of the Commission's power to protect property, human health and safety, and the environment derive from interpretations of the Commission's rules and from nuisance law. The Commission is empowered to regulate UIC activities accordingly under these sources of authority.

k) In conclusion, the Commission has exclusive jurisdiction to govern the location, installation and operation of Class II wells in a manner that protects against harm to the public health or environment for all of the legal reasons aforementioned in this report.

Victoria Falls #1-5: Re-opening of Interim Order No. 635847

30) The re-opening of Interim Order No. 635847 is for the Commission to adjudge whether Hunter is in compliance with the Order's requirements regarding the operations of the Victoria Falls #1-5 well. Specifically, Interim Order No. 635847 required the record to be re-opened for the purpose of evaluating the pressure information and other data submitted by Hunter. Hunter has submitted the required data set out on page 6, paragraph 10 of Interim Order No. 635847; and, thus, it satisfies the Interim Order requirements. It should be noted that Hunter submitted additional information not required under the Interim Order; the Hall Integral and Derivative Plot (Exhibit 14) and earthquake events within a 6.21 mile radius (rather than a two mile radius) of the Victoria Falls #1-5 well (Exhibits 15 and 16) voluntarily at the request of UIC.

31) Interim Order 635847 also requires the Conservation Division of the Commission and the UIC to state its position in the case and whether they are in support of, or opposed to, the issuance of an order granting Hunter's application for relief regarding the utilization of the Victoria Falls #1-5 well. During the hearing, Mr. Lord testified that UIC neither supports nor opposes underground injection applications regarding whether the well presents a threat to the health, safety, welfare of the State of Oklahoma. Mr. Lord also testified during the hearing, however, that UIC did—in the case of the Victoria Falls #1-5 well—request a reduction in barrels injected to 5,000 per day with these concerns in mind. While the Interim Order stipulates that UIC either support or oppose the underground injection application without the option of opting out from either position, the ALJ determined that UIC, through its

actions in requesting that the well be regulated to maximum injection volumes of 5,000 BWPD, at least supports (as implied through its request for regulation to Hunter) the operations of the Victoria Falls #1-5 well to that limit. Therefore, such complies with the Interim Order's stipulation that UIC take a position regarding this underground injection application.

32) Both parties request that the requirements set out on page 6, paragraph 10 of Interim Order No. 635847 be incorporated into the order to issue in this cause, regardless of whether the order to issue is an Interim order or Second Interim order. As well, both parties agree that the interim for the order to issue should be six months in length. These points are not in dispute.

33) It is disputed whether Interim Order No. 635847 should be continued for six months or whether a Second Interim order should issue for a period of six months. It is the determination of the ALJ that a Second Interim order is appropriate in this case. This is because an initial order has already issued, concluding with the re-opening of this cause. Furthermore, a second interim order is also appropriate because it is necessary to add to the terms, conditions, and requirements provided in the Interim Order. It is noted that Hunter requested that Interim Order 635847 be granted for a period of six months under the same terms, conditions, and requirements. The Commission (via Conservation and UIC divisions) requested that a Second Interim order be granted for a period of six months under the same terms, conditions, and requirements as Interim Order 635847.

34) An extension of the radius from two miles (provided in the Interim Order 635847) to 6.21 miles for collecting seismic information provided by the OGS is necessary. The OGS seismic data radius of 6.21 miles requested by UIC was voluntarily honored by Hunter at the time of the hearing. The extension of the radius from 2 miles to 6.21 miles for the Second Interim order merely memorializes the understanding between the Commission and Hunter.

35) Earthquakes and faults in the 6.21 mile radius of the Victoria falls #1-5 well necessitate additional information be submitted to the Commission under the Second Interim order because they indicate that a substantial change in conditions exists, a substantial change in the information originally furnished exists, and that the cumulative effects on the environment may be unacceptable as shown by information regarding the well's permitted operations.

36) There are significant earthquakes and faults in the 6.21 mile radius area of the Victoria Falls #1-5 well. To the north of the Victoria Falls #1-5 well, Exhibit 15 shows three major earthquake swarms. Specifically, Exhibit 15 shows that, in the six months preceding this re-opening, many earthquakes have occurred in these swarm areas (depicted by red circles in green boxes on the exhibit). The areas where these seismic swarms are occurring are devoid of

faults. To the south of the Victoria Falls #1-5 well, faults optimally aligned with regional stress (i.e, the fault is optimally oriented to slip) are present. Mr. Lord testified that these 'slip faults' are the faults seismologists are concerned with because of the likelihood of shifting. Despite the presence of these faults, seismic activity in the area to the south of the Victoria Falls #1-5 well does not occur with the frequency and magnitude as in the area to the north of the well.

37) Additional information is needed to better understand the relationship, if any, between seismic activity in the area and the injection activity of the Victoria Falls #1-5 well. The Hall integral and derivative data and statistics are necessary to gather information regarding the well's operations and its environmental impact concerning seismicity. The 3-D seismic information is necessary so the Commission can determine whether components found essential for significant injection-induced seismicity are or are not present in the area of the Victoria Falls #1-5 well.

38) It is the determination of the ALJ that a Second Interim order be recommended, containing the same stipulations as Interim Order No. 635847 (including the present UIC's guidance to Hunter to keep the injection volumes voluntarily at 5,000 BWPDP) with the additional requirements provided of:

a. Hall integral and derivative data for the Victoria Falls #1-5 well. This data must be submitted with a calculated coefficient of determination (which is to provide a 'goodness-of-fit' measure for the UIC Department to interpret). The information must cover the cumulative injection for the life of the well.

b. 3-D seismic studies must be conducted and submitted to the Commission for technical experts to review to determine whether the components found necessary for significant injection-induced seismicity are or are not present in the Arbuckle and Reagan formations and the Granite basement rock in the vicinity of the SWD wells. The 3-D seismic must be provided in an adequate format for UIC staff to examine the data. This may require technological considerations and coordination between the Commission and the Applicant.

c. The Applicant shall collect from the OGS seismic data within 6.21 miles of the injection well and shall supply such data, if any, to the UIC Department on a weekly basis. The UIC Department shall independently collect seismic data for review and comparison.

d. This information is to be provided at the time of the re-opening of the Second Interim order cause within 6 months of the date this cause is recommended. The Victoria Falls #1-5 will be allowed to operate at the present time while Hunter gathers the data for submission to the Commission.

39) In conclusion, the Commission has exclusive jurisdiction to govern the location, installation and operation of Class II wells in a manner that protects against harm to the public health or environment for all of the legal reasons aforementioned in the ALJ Report. The Commission also has the authority to modify, vacate, amend, terminate, or deny any order permitting underground injection for just cause based on new information of substantial change or unacceptable environmental effect under OCC-OAC:10-5-9. Induced seismicity in the area of the Victoria Falls #1-5 well is frequent and the risk of it continuing threatens the public health and environment of the State of Oklahoma. For this reason, it is the recommendation of the ALJ (after taking into consideration all of the facts, circumstances, evidence and testimony presented) that the Victoria Falls #1-5 well be recommended as a Second Interim order under the same terms, conditions, and requirements as Interim Order No. 635847, with the additional requirements provided in paragraph 38 above.

POSITIONS OF THE PARTIES

HUNTER

1) **J. Fred Gist**, attorney, appearing on behalf of Hunter, believes the additional requirement for Hunter to run a 3-D seismic study over the area covered by the Victoria Falls #1-5 well is unwarranted, and unsupported by facts, rules and statutes.

2) Hunter notes this application was unopposed yet UIC requested that the cause be set for a merit hearing due to the Victoria Falls #1-5 well being within an earthquake prone area in the State of Oklahoma. ALJ Osburn had recommended an interim order and Interim Order No. 635847 issued on January 29, 2015, which Hunter has been in compliance with.

3) Hunter has complied with all of the provisions contained in paragraph 10 of Interim Order No. 635847--run pressure studies, report volume data, report pressure data, and report other data required. Hunter notes this interim order has recommended another hearing after six months, at which time the Commission should review the data to determine whether to issue a

second interim order or to issue a final order. Hunter believes the ALJ properly concluded that Hunter has complied with all the data requested within said Interim Order No. 635847.

4) Hunter notes the Commission staff did not have any objections. Hunter voluntarily restricted injection to 5000 barrels/day. Hunter is willing to maintain that rate, if that is what UIC wishes them to do. Hunter has complied with all of UIC requirements here for data.

5) Hunter concurs that a second Interim order should issue for Hunter to continue the status quo and reporting the requested data the UIC Staff has requested.

6) Hunter notes there is no evidence in the cause about 3-D seismic. ALJ Osburn was aware that Hunter did not have any 3-D seismic studies when the case was heard and did not require that such be conducted. Further, Hunter points out that there were no mention of 3-D seismic studies had before current ALJ Dunn.

7) Hunter notes the ALJ's recommendation for the 3-D seismic study has no evidence to support it. Additionally it is counter to the facts. Hunter's Victoria Falls #1-5 well did not penetrate beyond the Arbuckle, i.e. it terminated in the Arbuckle. Hunter notes this fact was established at the original hearing held in October 2014 before ALJ Osburn.

8) The ALJ discussed the seismic activity that occurred in 1969 and 1970. Hunter notes the area where the Victoria Falls #1-5 well is in has not had any seismic activity within two miles of the site for several months. What activity has been present, Hunter points out, has been to the north where the maps show no faults being present. Hunter notes to the south, where there are faults indicated being present, there has not been any type of earthquake activity. Hunter disputes the need to run an expensive 3-D seismic study in an area where there is no direct correlation between increased seismicity and the presence of faults. Hunter believes this is an irrelevant requirement.

9) This additional 3-D study, if required, would be difficult for Hunter to comply with, in any event, due to its sheer complexity. Such a study could run into thousands of wasted dollars, requiring permits and agreements from surface owners, etc, when this application was not protested by any party.

10) Hunter notes this proposed 3-D seismic study data would have to be provided in an adequate format for the UIC to examine, whatever that means, and such would require technological considerations and coordination between the Commission and Hunter. Hunter points out again that this cause was not protested by any parties here.

11) Hunter asserts there is no evidence that such a 3-D study would provide relevant data to the Commission to determine the current issues: Should this well be allowed to function as a noncommercial disposal well? Is the fresh water protected? Is pollution being prevented? Is the public safety protected? Hunter notes that all of those issues are on the positive side as Hunter has complied with the requirements of Interim Order No. 635847.

12) Hunter notes the Commission does have jurisdiction over this subject matter, yet this does not authorize the Commission to order a particular test or study unless there is a specific rule or statute that empowers the Commission to do such. Hunter notes this is not the situation here in this cause.

13) Hunter notes the transcript shows no mention of any need for a 3-D seismic study and believes the ALJ's Report should be reversed in this recommendation only.

14) Hunter notes the UIC had no objections to a second interim order that allowed the continued operation of the Victoria Falls #1-5 well for another six-month period with the same special provisions shown from the first interim order and the two other special provisions recommended by ALJ Dunn.

15) Hunter believes there is no evidence that the Victoria Falls #1-5 well is not in compliance with all of the applicable Commission rules. Hunter thinks there is no evidence to support the additional requirement to require a 3-D seismic study be conducted.

16) Hunter submits there is no state statute or Commission rule that authorizes the Commission here to require an operator to obtain duplicate data that the Commission already has in its possession. Hunter believes the Commission has no authority to deny this application based on Hunter's objection to obtain a 3-D seismic study this late in time.

17) Hunter finds such 3-D seismic study is unwarranted by the facts, unwarranted by law and the Commission rules, and believes that portion of the ALJ's report must be reversed. Hunter is willing to comply with all other recommendations in the interim order, except this extra 3-D seismic study that came out of the blue from the ALJ without basis.

COMMISSION STAFF

1) **Susan D. Conrad**, Deputy General Counsel, appearing for the Commission, stated the Conservation Division's position regarding the relief requested by Hunter is a neutral one. Further, the Conservation Division is

also neutral regarding the recommendation of ALJ Dunn for the second interim order.

CONCLUSIONS

The Referee finds the Report of the Administrative Law Judge should be affirmed.

1) After review of the September 23, 2015 transcript of the proceedings and the exhibits presented by the parties, the Referee finds the Report of the ALJ should be affirmed as to his recommendation that a second interim order be recommended, containing the same stipulations as Interim Order No. 635847 (including the present UIC department guidance to Hunter to keep the injection volumes voluntarily at 5,000 barrels of water per day) and with the additional modified requirements set out in his Report in paragraph #6(a)(b)(c) and (d). Hunter did not take exceptions to the recommendation of the ALJ to issue a second interim order in this cause with the same stipulations as set forth in the first interim order and with the additional terms and requirements recommended by the ALJ, but did file an exception to the ALJ's recommendation that Hunter be required to conduct 3-D seismic studies.

2) The Commission is vested with exclusive environmental jurisdiction, power and authority governing the disposition of the deleterious substances incidental to petroleum production for the purpose of preventing the pollution of the surface, subsurface waters and preventing earthquake activity. *Meinders v. Johnson*, 134 P.2d 858 (Okl.Civ.App. 2005); *State ex rel Pollution Control Coordinating Board v. Oklahoma Corporation Commission and Ensearch Exploration, Inc.*, 660 P.2d 1042 (Okl. 1983).

3) 17 O.S. Section 52(A)(1)(i) provides:

A. 1. Except as otherwise provided by this section, the Corporation Commission is hereby vested with exclusive jurisdiction, power and authority with reference to:

i. The handling, transportation, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing and operating of oil and gas wells,...

4) 52 O.S Section 139(A) provides:

A. The Corporation Commission is vested with exclusive jurisdiction, power and authority, and it shall be its duty, to make and enforce such rules and orders governing and regulating the handling, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing, and operating of oil and gas wells and brine wells within the state as are reasonable and necessary for the purposes of preventing the pollution of the surface and subsurface waters in the state, and to otherwise carry out the purpose of this act.

5) OCC-OAC 165:10-7-2(c)(8)(9) and (10) provides:

(c) Specific areas of Conservation Division jurisdiction to which Pollution Abatement rules apply:

* * *

(8) The handling, transportation, storage and disposition of saltwater, drilling fluids, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, production, and operation of oil and gas wells at any facility or activity specifically subject to Commission jurisdiction or other oil and gas extraction facilities and activities.

(9) Spills of deleterious substances associated with facilities and activities specified in OAC 165:10-7-4(c)(8) or otherwise associated with oil and gas extraction and transportation activities.

(10) Groundwater protection for activities subject to the jurisdictional areas of environmental responsibility of the Commission.

6) OCC-OAC 165:10-5-9(a)(b)(c)(d) provides as follows:

(a) Subject to 165:10-5-10, authorization of injection into enhanced recovery injection wells and

disposal wells shall remain valid for the life of the well, unless revoked by the Commission for just cause or lapses and becomes null and void under the provisions of 165:10-5-5(g).

(b) An order granting underground injection may be modified, vacated, amended, or terminated during its term for cause. This may be at the Commission's initiative or at the request of any interested person through the prescribed complaint procedure of the Conservation Division. All requests shall be in writing and shall contain facts or reasons supporting the request.

(c) An order may be modified, vacated, amended, or terminated after notice and hearing if:

(1) There is a substantial change of conditions in the enhanced recovery injection well or the disposal well operation, or there are substantial changes in the information originally furnished.

(2) Information as to the permitted operation indicates that the cumulative effects on the environment are unacceptable.

(d) If an operator fails to complete or convert a well as approved by the Conservation Division within eighteen (18) months after the effective date of the order or permit authorizing injection into the well, then the order or permit authorizing injection into the well shall expire.

7) The Oklahoma Court of Civil Appeals in *Union Texas Petroleum Corp. v. Jackson*, 909 P.2d 131 (Okla.Civ.App. 1995) provides:

A nuisance consists in unlawfully doing an act or omitting to perform a duty, which act or omission either annoys, injures or endangers the comfort, repose, health or safety of others or in any way renders other persons insecure in life or in the use of property. 50 O.S. § 1; *Cities Service Oil Company v. Merritt*, 332 P.2d 677, 684 (Okla. 1958). In *Cities Service*, the Supreme Court determined the basis of liability for injury or damage to property by pollution of

subterranean waters, from oil, gas or saltwater from oil wells, must be either negligence or nuisance. *Cities Service*, at 684. Cities or towns may seek abatement of a public nuisance, including protection of public water supplies, within their respective corporate limits in district court. 50 O.S. 1991 §§ 16, 17. A public nuisance is one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon the individuals may be unequal. 50 O.S. 1991 § 2; *Miller v. State*, 74 Okla. Crim. 104, 123 P.2d 699 (Okla. Crim. App. 1942). The remedies for public nuisance are through indictment or information, civil action, or abatement. 50 O.S. 1991 §8. A public nuisance may be abated by any public body or officer authorized thereto by law. 50 O.S. 1991 § 11.

8) The rules and regulations enacted by the Commission pursuant to the powers delegated to it have the force and effect of law and are presumed to be reasonable and valid. *Brumark Corporation v. Corporation Commission*, 864 P.2d 1287 (Okla.Civ.App. 1993); *Ashland Oil Inc. v. Corporation Commission*, 595 P.2d 423 (Okla. 1979); and *Toxic Waste Impact Group v. Leavitt*, 755 P.2d 626 (Okla. 1988).

9) The Referee agrees with the ALJ's findings and statements in paragraphs #68 and #70 on page 20 of his ALJ Report which states:

68. Earthquakes and faults in the 6.21 mile radius of Victoria Falls #1-5 necessitated additional information be submitted to the Commission under the Second Interim Order because they indicate that a substantial change of conditions exist, a substantial change in information originally furnished exists, and that the cumulative effects on the environment may be unacceptable as shown by information regarding the well's permitted operations.

* * *

70. Additional information is needed to better understand the relationship, if any, between seismic activity in the area and the injection activity of the Victoria Falls #1-5 well. Hall integral and derivative data and statistics are necessary to gather information regarding the well's operations and its environmental

impact concerning seismicity. 3-D seismic information is necessary so the Commission can determine whether components found essential for significant injection-induced seismicity are or are not present in the area of the Victoria #1-5.

10) Induced seismicity in the area of the Victoria Falls #1-5 well is frequent and the risk of it continuing threatens the public health and environment of the State of Oklahoma. The Oklahoma Corporation Commission issued on February 16, 2016 a "Media Advisory - Regional Earthquake Response Plan for Western Oklahoma". This document provides in pertinent part:

The Oklahoma Corporation Commission's (OCC) Oil and Gas Conservation Division (OGCD) is implementing the largest volume reduction plan yet for oil and gas disposal wells in western Oklahoma. The plan covers 5,281 square miles and 245 disposal wells injecting wastewater into the Arbuckle formation.

* * *

Baker says the earthquake activity in the region demands a regional response.

"We have taken a number of actions in the Medford, Fairview, and Cherokee areas," Baker said. "However, there is agreement among researchers, including our partners at the Oklahoma Geological Survey, that the data clearly underscored the need for a larger, regional response. That is why, even as we took actions in various parts of the region in response to specific earthquake events, we were already working on a larger plan."

Baker says while the plan is a response to the continued seismicity in the area, the action will also include areas that are not yet experiencing major earthquakes.

"The wells covered in this plan include those along the western area of the plan's boundaries where there has not yet been major earthquake activity," said Baker. "This plan is aimed not only at taking further action in response to past activity, but also to get ahead of it and hopefully prevent new areas from being involved.

* * *

Researchers largely agree that wastewater injection into the Arbuckle formation poses the largest potential risk for earthquakes in Oklahoma. Most of the wastewater comes not from hydraulic fracturing operations, but rather from producing wells. The water exists in the producing formation and comes up with the oil and natural gas.

* * *

Some of the other actions taken:

All applications for Arbuckle disposal wells must go through a seismicity review. If approved, permit is only good for six months and well can be shut in at any time because of seismicity concerns. Monitoring for seismicity and other requirements are also placed on the wells.

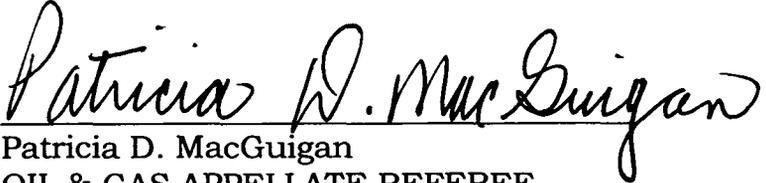
All Arbuckle disposal wells operating in earthquake area ("areas of interest") have to record daily and report weekly their volumes and pressures for use by researchers and regulators.

A map of the area concerning the above listed proposed plan (see Exhibit 1 attached to this Appellate Referee Report) clearly shows that the area and location of the Victoria Falls #1-5 well is in the western regional plan area in the north part of Garfield County, Section 5, T24N, R4W, Garfield County, Oklahoma.

11) The manner and method proposed by the ALJ is pursuant and complies with the above listed Corporation Commission February 16, 2016 Media Advisory concerning regional earthquake response plans for western Oklahoma and the ALJ's recommendations for evaluating the potential for injection induced seismicity would comply with the Commission's rules to protect human health and the environment.

12) Based upon the above stated reasons, rules and law, the Report of the ALJ should be affirmed.

RESPECTFULLY SUBMITTED THIS 22nd day of February, 2016.


Patricia D. MacGuigan
OIL & GAS APPELLATE REFEREE

PM:ac

xc: Commissioner Anthony
Commissioner Murphy
Commissioner Hiett
James L. Myles
ALJ Andrew T. Dunn
J. Fred Gist
Susan Conrad
Michael L. Decker, OAP Director
Oil Law Records
Court Clerks - 1
Commission Files

Attachment: Exhibit 1

