

**STATE OF NEW MEXICO  
ENERGY MINERALS AND NATURAL RESOURCES  
DEPARTMENT OIL CONSERVATION DIVISION**

**APPLICATION OF THE NEW MEXICO OIL CONSERVATION DIVISION  
THROUGH THE SUPERVISOR OF DISTRICT II FOR AN EMERGENCY ORDER  
SUSPENDING CERTAIN APPROVED APPLICATIONS FOR PERMITS TO DRILL,  
AND FOR ADOPTION OF SPECIAL RULES FOR DRILLING IN CERTAIN AREAS  
FOR THE PROTECTION OF FRESH WATER, CHAVES AND EDDY COUNTIES,  
NEW MEXICO**

**CASE NO 15487  
ORDER NO R-14164-D**

**CLOSING ARGUMENT FOR COG OPERATING, LLC, OXY USA  
INC., AND FASKEN OIL AND RANCH**

COG Operating LLC ( COG ’) OXY USA Inc ( OXY ), and Fasken Oil and Ranch ( Fasken ’) appeared on May 18 2017 along with Pecos Valley Artesian Conservancy District, EOG Y Resources Inc Lime Rock Resources II A L P , Mack Energy Corporation, Devon Energy Production Company L P and the Independent Petroleum Association of New Mexico (collectively Joint Applicants ’) to provide evidence in support of two proposed amendments to the Commission’s Special Provisions authorized by Order R 14164 D The proposed amendments were 1) limiting the breadth of the Designated Area and 2) clarifying the proposed language comprising 19 15 39 11(C)(2) The Commission heard arguments and evidence on these two issues and requested written closing arguments In support of the Joint Applicants’ position COG OXY and Fasken state as follows

**A The Designated Area Should Be The Area of Overlapping Aquifers**

The record from the initial hearing and the re hearing establish that no evidence was presented to support a Designated Area where only one aquifer is present In adopting a new rule an administrative agency is required to provide a statement of reasons for doing so *Earthworks Oil & Gas Accountability Project v New Mexico Oil Conservation Comm n*, 2016

NMCA 055 ¶ 12, 374 P 3d 710 The Division's experts testified at the initial hearing that the purpose of the Special Provisions was to prevent commingling of fluids between aquifers. This only has potential to occur in the area of overlap. At the re-hearing the Division's expert shifted course and testified, without supporting evidence, that the purpose of the Special Provisions was to protect the deeper aquifer. Neither purported purpose provides a basis for the broader Designated Area.

Furthermore, both of the Division's purported purposes for the Special Provisions are completely unsupported by evidence in the record. Basic findings, "supported by evidence", are required to show the commission has heeded the mandate and the standards set out by statute." *Continental Oil Co. v. Oil Conservation Commission*, 1962 NMSC-062 ¶ 20, 373 P 2d 809 (emphasis added). The Division's expert, Paul Kautz, established at the initial hearing that the existing regulations are protective of the aquifer where only one aquifer exists. Transcript of 12/6/17 Hearing, Vol. 2 p. 15, 13-25 and p. 16-1. The Division's next expert, Phillip Goetze, testified at the initial hearing that under the current regulations, no report of contamination had ever occurred. Transcript of 12/5/17 Hearing, Vol. 1 p. 54, 22-25 p. 55, 4-15. Because no evidence supports a broader Designated Area, the Order should be amended to apply only to the 'well defined' area in which two aquifers exist, plus a one-mile buffer zone.

1) No record evidence supports the need for the larger Designated Area to prevent commingling between aquifers

The Division's articulated purpose for the Special Provisions, as set forth by its experts in the initial hearing, was to protect the area where two aquifers overlap to prevent water commingling between the two aquifers. This was expressly set forth by both the Division's expert geology witness, Paul Kautz and Phillip Goetze.

Mr Kautz testified

- Q And would you explain that further for us, please?
- A I believe it s important to keep – **make sure those two aquifers are isolated from each other in order to protect it** Transcript of 12/5/17 Hearing Vol 1 p 99 3-7
- Q So is the overarching idea here that the string would be set not more than 50 feet above the first show of hydrocarbons?
- A That's correct
- Q No matter where the show is?
- A No matter where the show is
- Q And why is that?
- A **To isolate the two aquifers and protect them** Transcript of 12/5/17 Hearing Vol 1, p 100, 15 22 (emphasis added)

Mr Goetze testified

- Q All right Now you said that your concern here related to this shallow aquifer of less quality somehow migrating to the deeper aquifer of higher quality?
- A This was something raised in discussion, yes
- Q **All right So if I'm understanding, that can only occur when you have both aquifers overlying one over the other, correct?**
- A **Correct**
- Q **We don't have concern outside of the shallow aquifer area identified on your Figure 2?**
- A **That's correct**
- A Correct Tr p 54, 22-25, p 55, 4 15 (emphasis added)

In considering this evidence and testimony the Commission's Order expressly found in Paragraph 87

The Division and PVACD presented testimony that there is a concern about the possibility of fluid movement between the aquifers during oil and gas drilling until the protective casing string is set Kautz, Goetze, Atkins, and Peery testimony **This possibility only exists in a limited area where both aquifers are present and does not exist in the portion of the RAB where only the artesian aquifer is present** (emphasis added)

The Commission considered the evidence of its own experts, the experts of the Joint Applicants, and the expressed rationale of the Division and then authorized Special Provisions covering the larger Designated Area. This conclusion was erroneous because it directly contradicted the evidence presented by its own experts and by terms within its own Order. See *Viking Petroleum Inc. v. Oil Conservation Commission of State of N.M.* 1983 NMSC 091, ¶ 8, 100 N.M. 451 (“administrative findings of the Commission should be sufficiently extensive to show the basis of the order”). Because the purported purpose of the Special Provisions to protect the deeper aquifer is not supported by evidence, the Order is erroneous and should be amended. The Designated Area should be limited to the area where two aquifers overlap.

2) No record evidence supports the need for the larger Designated Area for the purpose of protecting the Artesian aquifer

At the Re hearing on May 18, 2017, Phillip Goetze, the Division’s geology witness, attempted to recalibrate the Division’s rationale for requesting a more expansive Designated Area, stating

Q What is your sense of the goal, and what are we trying to get at, since the Division was the one that proposed this rule?

A Our goal was to have protection for the deeper artesian, that you can achieve both goals with consideration given to the absence or presence of the artesian. And clearly that seems to be the most difficult aspect of this rule. When do you call it quits, and how do you decide to make that decision viable and uniform? It’s going to be very difficult in realization that the boundaries of this aquifer there are situations where a specific rule might be adequate for a little area but after that you start moving around in the area with the extent of the aquifer and it’s not going to be applicable.

Q So the artesian aquifer should be protected even if this is no shallow aquifer?

A That’s correct.

Q Okay. And that would justify having the larger description of the area that’s currently in the rule?

A This would provide a reminder to district, as well as the Division, that we do have an obligation, and it is a unique resource, as was brought out in hearing. Transcript of 5/18/17 Hearing, p. 9,

Mr. Goetze's conclusory statement without any evidentiary support that the larger Designated Area is necessary to protect the deeper artesian' aquifer and to provide a reminder to the district" is insufficient as a matter of law to support a Commission finding. An expert must give a satisfactory explanation as to how his opinion is reached. *Dahl v. Tuerner*, 1969 NMCA-075, ¶ 22, 458 P.2d 816, *see also Galvan v. City of Albuquerque*, 1973 NMCA 049 ¶¶ 5-6, 508 P.2d 1339 (An expert must be able to give a satisfactory explanation as to how he arrives at his opinion, and without such an explanation the opinion is not competent evidence). Mr. Goetze did not offer testimony regarding why the deeper aquifer needed protection beyond the Statewide rules, nor did he offer testimony that he was aware of incidents requiring protection beyond the Statewide rules. His testimony is thus unsubstantiated opinion, unsupported by any evidence necessary to show the Commission has heeded the mandate and the standards set out by statute. *See Continental Oil Co.*, 1962 NMSC-062, ¶ 20. As such, it is not sufficient to support a determination that the Designated Area should be expanded to areas where two aquifers do not overlap. Accordingly, and as originally intended, the Designated Area should be limited to where two aquifers overlap.

Mr. Goetze's testimony is contradicted both by his testimony at the initial hearing (no incidents reports) and by Mr. Kautz's statement that the current regulations are sufficiently protective of the area where a single aquifer exists. Evidence presented to the Commission at the initial hearing established that the Statewide Rule adequately protects the aquifer. *Rio Grande Chapter of Sierra Club v. New Mexico Mining Comm'n*, 2003-NMSC 005, ¶ 12, 61 P.3d 806 ("Normally an agency rule would be arbitrary or capricious if the agency offered an explanation for its decision that runs counter to the evidence before the agency"). At the initial hearing, Mr. Kautz testified

Q Okay But if we take your rules today Mr Kautz, and if everybody is educated about the current rules and if they are properly applied, you re not aware of any evidence indicating that they are not protective of the aquifers correct?

A Correct

Q All right And the only issue that has arisen, and that you are alluding to, is that certain applications to drill were mistakenly approved without casing that is sufficient to cover both aquifers because some people were not aware of the aquifers or not aware of the regulations, is that correct?

A That's correct Transcript of 12/6/17 Hearing, Vol 2 p 15 13 25, and p 16 1

Finally, Mr Goetze s belief that that the artesian aquifer should be protected by the Special Provisions is not supported by any evidence of need for such protection As Mr Goetze stated at the initial hearing

Q **Do you have any evidence of any fluid migration caused by oil and gas drilling between the shallow aquifer and the deeper artesian aquifer?**

A **I have no reports or evidence of such**

Q Zero zip nada?

A Correct Transcript of 12/5/17 Hearing, Vol 1 p 54, 22 25, p 55 4 15 (emphasis added)

The record currently before the Commission is as follows No evidence suggests that the deeper aquifer is not adequately protected no reports or record evidence suggests that the deeper aquifer has been contaminated and the Division's witness testified that the Statewide rules adequately protect the deeper aquifer In sum, the Special Provisions are necessary only in the area of aquifer overlap Accordingly the Order should be amended to apply only to the 'well defined' area in which two aquifers exist as recognized by the Office of the State Engineer and other published studies, plus a one mile buffer zone

#### **B The Joint Applicant's Proposed Language in 19 15 39 11(C)(2) should be Adopted**

The current language in 19 15 39 11(C)(2) creates ambiguity with regard to the

locations where an operator ' shall set a surface casing string not more than 50 feet above the first show of hydrocarbons on a mud log At the Rehearing Lime Rock provided testimony in support of the following language

The operator shall set a surface casing string 50 feet below the base of the artesian aquifer and circulate cement to the surface, except that, in areas of known hydrocarbon shows or production from the confining unit or the artesian aquifer, the operator shall set a surface casing string not more than 50 feet above the first show of hydrocarbons on a mud log and circulate cement to the surface

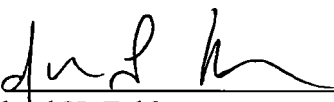
COG OXY, and Fasken agree with Lime Rock that the language in 19 15 39 11(C)(2) should be clarified by the Commission to avoid future confusion regarding implementation of the surface casing requirements and provide protection of fresh water in the aquifers in the Designated Area

### **CONCLUSION**

For the reasons stated, COG Operating LLC OXY USA Inc , and Fasken Oil and Ranch respectfully request that the Commission amend Order R 14164 D to 1) limited the Designated Area to apply only to the well defined area in which two aquifers exist, plus a one mile buffer zone and 2) adopt the Joint Applicants' proposed language amending 19 15 39 11(C)(2)

Respectfully submitted

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**CERTIFICATE OF SERVICE**

I hereby certify that on this 6th day of June 2017 I served a true and correct copy of the foregoing document via email to

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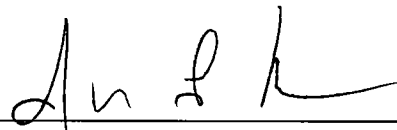
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