

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

**APPLICATION OF GOODNIGHT
MIDSTREAM PERMIAN LLC FOR APPROVAL
OF A SALTWATER DISPOSAL WELL,
LEA COUNTY, NEW MEXICO**

CASE NO. 24123

**APPLICATIONS OF GOODNIGHT
MIDSTREAM PERMIAN LLC FOR APPROVAL
OF SALTWATER DISPOSAL WELLS,
LEA COUNTY, NEW MEXICO**

CASE NOS. 23614-23617

**APPLICATION OF GOODNIGHT
MIDSTREAM PERMIAN, LLC TO AMEND
ORDER NO. R-22026/SWD-2403 TO INCREASE
THE APPROVED INJECTION RATE IN ITS
ANDRE DAWSON SWD #1,
LEA COUNTY, NEW MEXICO**

CASE NO. 23775

**APPLICATIONS OF EMPIRE NEW MEXICO LLC
TO REVOKE INJECTION AUTHORITY,
LEA COUNTY, NEW MEXICO**

CASE NOS. 24018-24020, 24025

EMPIRE NEW MEXICO LLC'S MOTION FOR REHEARING

INTRODUCTION

Pursuant to NMSA 1978, § 70-2-25(A) and 19.15.4.25 NMAC, Empire New Mexico LLC (“Empire”) timely moves for rehearing on certain, limited aspects of the New Mexico Conservation Commission’s (“Commission”) Order Denying Goodnight’s Applications and Partially Granting/Partially Denying Empire’s Applications entered on September 12, 2025 (OCC Order No. R-24004).

Empire greatly appreciates the Commission’s thorough evaluation of the issues involved in this proceeding. At the hearing, the Commission was charged with determining whether Goodnight’s produced water injection activities are interfering with Empire’s recovery of residual hydrocarbons within the Eunice Monument South Unit (“EMSU” or “Unit”). In its Order, the Commission denied Goodnight’s applications for additional salt water disposal (“SWD”) wells because, among other reasons, “the injection of hundreds of thousands of barrels a day conflicts with Empire’s exclusive rights to extract oil in the EMSU.”¹ This decision was correct, supported by the evidence, and consistent with the Division’s prior order denying Goodnight’s application for authorization to inject into its proposed Piazza SWD.²

Empire only seeks rehearing regarding the Commission’s decision to deny Empire’s request to permanently revoke Goodnight’s authorization to inject into Goodnight’s four existing SWD wells – the Dawson, Banks, Sosa, and Ryno –on the grounds that Empire did not adduce evidence of present impairment of correlative rights or waste in the EMSU or that the residual oil zone (“ROZ”) is recoverable.³ Empire respectfully disagrees with the Commission’s assessment of the evidence on this limited issue. Through this motion, Empire will identify the evidence

¹ Order at ¶ 41.

² Order at ¶ 42; Goodnight Ex. A-3.

³ Order at ¶¶ 43-60.

adduced at hearing demonstrating present impairment of correlative rights and waste, as well as recoverability of the ROZ. As demonstrated below, Empire's Motion for Rehearing should be granted and the Commission's Order amended accordingly.

ARGUMENT

The New Mexico Oil and Gas Act requires the Commission to prevent "waste" of hydrocarbons and protect "correlative rights."⁴ The Act broadly defines both "underground waste" and "correlative rights" to preclude any injection operations that "*tend to reduce* the total quantity of oil ultimately recovered from any pool," or to prevent an interest owner from producing without waste his just and equitable share of oil in the pool.⁵ Because this matter involves a unitized interval, the EMSU, the Commission must also apply the Statutory Unitization Act,⁶ which provides "for the unitized management, operation and further development of . . . oil and gas properties . . . to the end that greater ultimate recovery may be had therefrom, waste prevented, and correlative rights protected of all owners and mineral interests in each unitized area."⁷ Accordingly, the oil reserves underlying the EMSU must be protected under New Mexico law.

At hearing, Empire demonstrated, by a preponderance of the evidence, that Goodnight's current and proposed injection of wastewater into the EMSU is causing waste and impairing Empire's correlative rights. While the Commission barred Goodnight's efforts to expand its SWD operations within the EMSU, Goodnight appears to argue that the Commission nonetheless left the door open for it to continue operating existing wells on the grounds that Empire did not demonstrate "current" waste or impairment of correlative rights or demonstrate that the residual

⁴ NMSA 1978, §§ 70-2-6 and 70-2-11; *see also Continental Oil Co. v. Oil Conservation Comm'n*, 1962-NMSC-062, ¶ 27, 373 P.2d 809 ("Our legislature has explicitly defined both 'waste' and 'correlative rights' and placed upon the commission the duty of preventing one and protecting the other.")

⁵ §§ 70-2-3(A), -33(H).

⁶ NMSA 1978, §§ 70-7-1 to -21 (1975, as amended through 2024).

⁷ § 70-7-1.

oil zone (“ROZ”) is recoverable. As demonstrated below, Empire presented overwhelming evidence of both, and the Commission’s Order should be modified to permanently revoke Goodnight’s existing SWD permits.

I. Empire demonstrated that Goodnight’s injection into the San Andres formation is causing, and will continue to cause, waste in the EMSU.

“Underground waste” is defined in Section 70-2-3(A) as follows:

“underground waste” as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive or improper, use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating or producing, of any well or wells in a manner *to reduce or tend to reduce* the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas.

(emphasis added). In order to demonstrate waste, Empire was not required to demonstrate a “current,” quantifiable reduction in the total quantity of oil, but met its evidentiary burden by showing that the wastewater injection operations will *tend*⁸ to reduce the total quantity of oil in the unitized interval.

By denying Goodnight’s applications for new SWD wells within the EMSU, the Commission has already recognized that Goodnight’s intended operations in the EMSU will cause waste. The evidence presented at hearing further confirms that Goodnight’s current SWD operations are causing wastewater to migrate, which is reducing, and will tend to reduce, the total recoverable hydrocarbons. At hearing, Empire demonstrated that a ROZ exists within the San

⁸ Cf. *State v. James*, 1990-NMCA-135, ¶ 15, 111 N.M. 473, 806 P.2d 1063 (finding that the word “tend” means that the conduct at issue need not result in an actual harm, but merely the potential to cause harm); *State v. Hogue*, 454 N.W.2d 501, 503 (N.D. 1990) (“‘[T]ends’ indicates tendency, not certainty.”); *Chandler v. State*, 232 S.W. 318, 318 (Tex. 1921), *aff’d sub nom. Chandler v. State of Texas*, 260 U.S. 708, 43 S. Ct. 247, 67 L. Ed. 474 (1923) (“When we look to the dictionary for a definition of the word ‘tend,’ we find it means: ‘To move in a certain direction;’ ‘to have a leaning;’ ‘to contribute to.’”).

Andres—a fact recognized by the Commission and not disputed by Goodnight.⁹ Goodnight’s own evidence adduced at hearing confirmed that oil saturation exists throughout the San Andres.¹⁰ Empire has also shown that the wastewater Goodnight is injecting into the Lower San Andres is migrating into the Upper San Andres and Grayburg.¹¹

As part of its obligation to prevent waste, the Commission has authority “to prevent the drowning by water of any stratum or part thereof capable of producing oil or gas or both oil and gas in paying quantities *and to prevent the premature and irregular encroachment of water or any other kind of water encroachment that reduces or tends to reduce the total ultimate recovery of crude petroleum oil or gas or both oil and gas from any pool.*”¹² New Mexico law is clear that precise proof of a specific volume or hydrocarbons is not required to establish waste,¹³ and evidence demonstrating that wastewater operations will *tend to reduce* recovery meets the definition of waste.¹⁴

Empire’s evidence at hearing demonstrated that Goodnight’s injection to date and proposed injection into the future adversely impacts Empire’s ability to recover hydrocarbons by:

- Washing out and reducing secondary recovery of oil in the Grayburg Formation;¹⁵
- Washing out and reducing future tertiary development of oil in the Grayburg Formation;¹⁶ and
- Washing out and reducing future tertiary recovery of oil in the San Andres Formation.¹⁷

⁹ See, e.g., 04/25 Tr. 104:22-25 (Commissioner Ampomah recognizing that “Empire’s experts and also even Goodnight’s experts, they’ve all – they’ve all presented to the Commission, at least based on the evidence, there is a ROZ.”).

¹⁰ 04/21 Tr. 242:17-243:14.

¹¹ Empire FOF #85(a)-(r), 86, 88(a)-(d).

¹² § 70-2-12(B)(4) (emphasis added).

¹³ § 70-2-17(A); *Grace v. Oil Conservation Comm’n*, 1975-NMSC-001, ¶ 27, 87 N.M. 205, 531 P.2d 939.

¹⁴ § 70-2-3(A).

¹⁵ Empire Ex. B at 8-9, 13; Empire Ex. C at 6; *id.* at 8, ¶ 15; Empire Ex. G at 5, ¶ 15; Empire Ex. I at 15.

¹⁶ Empire Ex. B at 8-9, 13; Empire Ex. I at 12-13.

¹⁷ Empire Ex. B at 12; Empire Ex. C at 6; *id.* at 8, ¶ 15; Empire Ex. I at 12-13, 15; Empire Ex. I-2.

The evidence adduced at hearing shows that these negative impacts within the Grayburg and San Andres Formations are occurring, and will continue to occur, because Goodnight's injection of commercial volumes pressurizes the San Andres and forces wastewater to migrate upwards through vertical plumes into the Upper San Andres and Grayburg formations.¹⁸ The evidence established that Goodnight's wastewater is communicating out of the permitted formation and into the Grayburg through fractures,¹⁹ and via the waterflood that is currently being conducted by Empire to produce the Grayburg.²⁰ Grayburg producers have extracted more water than expected, and the additional unanticipated volumes are unquestionably coming from the San Andres as evidenced by Chevron's water chemistry work and modeling and studies done by Empire witnesses.²¹ The wastewater disposal rates create higher pressures in the ROZ and increase the potential for hydraulic fracturing and vertical communication, which have a negative impact on current field operations in the traditional Grayburg producing zone as well as future ROZ operations.²²

Moreover, there are significant water chemistry differences between the Delaware Basin water that Goodnight is injecting and water within the San Andres and Grayburg formations.²³ As a result, the injection is causing scale and damaging the formations.²⁴ The off-lease produced water has high saline content that creates scale when it reacts with the sulfates in the unitized formations, which will irreparably "block off" and "cement up" the ROZ and Grayburg and reduce both

¹⁸ Empire Ex. N-23; 04/10 Tr. 156:21-158:5; 04/11 Tr. 62:25-64:25.

¹⁹ Empire Exs. N-23; N-24; *see* 02/24 Tr. 29:22-30:3, 34:18-21, 154:11-13; 04/09 Tr. 163:5- 167:4; 04/11 Tr. 79:2-82:25.

²⁰ 04/09 Tr. 161:8 – 162:22, 196:24-198:20.

²¹ 02/24 Tr. 28:16-30:13, 34:12-21; 02/27 Tr. 766:6-11; 04/09 Tr. 163:14-16; 04/24 Tr. 160:7-23.

²² Empire FOF #60

²³ 04/09 Tr. 160:7-17, 180:20-188:18.

²⁴ *Id.*; *see also* 02/24 Tr. 38:13-39:15.

reservoirs' potential.²⁵ Additionally, scale and corrosion (caused by iron in the injected wastewater) has damaged Goodnight's own wells and will damage Empire's wells and equipment.²⁶

Goodnight's operations not only threaten the very existence of the ROZ but also increase the costs to operate a field by causing equipment wear and tear, requiring Empire to operate its CO₂ tertiary recovery at a higher pressure than necessary, and requiring Empire to inject the produced water into another zone to make room for the CO₂ to avoid fracturing the formation.²⁷

As summarized above, the evidence is overwhelming that Goodnight's continued injection of wastewater hinders, and *tends to* hinder, Empire's ability to recover hydrocarbons from the Grayburg and the ROZ within the EMSU, which is precisely the type of "underground waste" the Commission is tasked with preventing. Rice and Goodnight's attempts to impose artificial constraints on the Commission's analysis of waste, *i.e.*, that Empire prove actual recoverability rather than impairment to recoverability, misstates the statutory definition of waste and should not be adopted by the Commission. Rather, the question is whether Goodnight's operation of its SWD wells will "reduce or tend to reduce" the total quantity of oil ultimately recovered.²⁸ Empire's showing of a present and future threat to the recoverability of the Grayburg and ROZ demonstrates the existence of "underground waste" by a preponderance of the evidence.

For these reasons, the Commission should modify its Order and permanently revoke Goodnight's existing SWD permits.

²⁵ 02/24 Tr. 38:13-39:15; 04/09 Tr. 160:7-17, 180:20-188:18; 04/09 Tr. 184:8-185:12.

²⁶ 4/09 Tr. 186:17-23, 190:15-191:17.

²⁷ Empire FOF #89(d), 90(f), (l).

²⁸ § 70-2-3(A).

II. Empire demonstrated that Goodnight's injection operations are presently impairing Empire's correlative rights.

Section 70-2-33(H) defines correlative rights as:

[T]he opportunity afforded, so far as it is practicable to do so, to the owner of each property in a pool to produce without waste the owner's just and equitable share of the oil or gas or both in the pool, being an amount, so far as can be practicably determined and so far as can be practicably obtained without waste, substantially in the proportion that the quantity of recoverable oil or gas or both under the property bears to the total recoverable oil or gas or both in the pool and, for such purpose, to use the owner's just and equitable share of the reservoir energy.

The Commission has “recognized that the protection of the correlative rights . . . weighs equally with the obligation to prevent waste.”²⁹

Goodnight's wastewater, which is indisputably being pumped into the Grayburg as part of Empire's current waterflood operations, is also migrating into the Upper San Andres and Grayburg formations, is infringing on Empire's correlative rights throughout the San Andres and the Grayburg formations within the EMSU. Indeed, Goodnight's commercial disposal has already increased the expense of, and lowered production from, Empire's Grayburg producers.³⁰ Because Empire is the Unit Operator of the EMSU, it must be afforded the opportunity to produce its unitized interval without waste.

“The damage has already been done.”³¹ As established at hearing, and outlined in the prior section, Goodnight's SWD operations are increasing costs and threatening recoverability. Indeed, its continued operations will eventually close off the ROZ—making it inaccessible to any producer and leaving more than a billion dollars in royalties and taxes to the State of New Mexico,

²⁹ *Jalapeno Corp. v. N.M. Conservation Comm'n*, No. A-1-CA-37449, 2020 WL 5743659, at *6 (N.M. Ct. App. Sept. 23, 2020).

³⁰ 04/11 Tr. 43:7-25.

³¹ *Id.*

effectively sealed underground.³² For these reasons, the Commission should modify its Order to put an immediate and permanent stop to Goodnight's destructive and improper wastewater operations in the EMSU.

III. Empire does not need to prove production in paying quantities to meet its evidentiary burden in this matter.

In its Order, the Commission declined to permanently revoke Goodnight's existing SWD permits on the grounds that there was insufficient evidence presented at hearing to prove whether the ROZ is recoverable.³³ Empire respectfully submits that this is not a proper basis to deny its application, where, as here, both waste and impact to correlative rights have been demonstrated by a preponderance of the evidence.

The Commission has already recognized that unitized operations in the EMSU will lead to the recovery of oil and gas at a profitable level in its prior decision approving the unitization of the EMSU, and the Division recognized the same in its order denying Goodnight's application for the proposed Piazza Well.³⁴ By denying Goodnight's applications for additional wells (plus expansion of an existing SWD well) in this matter, the Commission has reaffirmed those prior findings. Despite this, the Commission seems persuaded by arguments from Rice and Goodnight that Empire's tertiary recovery project must be recoverable in paying quantities to revoke Goodnight's existing permits. Such arguments are not supported or required by New Mexico law.

As previously discussed, the Commission has jurisdiction to issue orders "to prevent the drowning by water of any stratum or part thereof capable of producing oil or gas or both oil and gas in paying quantities and to prevent the premature and irregular encroachment of water or any

³² 02/24 Tr. 38:13-39:15; 04/09 Tr. 160:7-17, 180:20-188:18; 04/09 Tr. 154:3-7, 184:8-185:12.

³³ Order at ¶¶ 28-38, 57-60.

³⁴ See Order No. R-7765; Order No. R-22869-A at 8, ¶ 11.

other kind of water encroachment that reduces or tends to reduce the total ultimate recovery of crude petroleum oil...from any pool.”³⁵ The Commission also has jurisdiction “to require wells to be drilled, operated and produced in such a manner as to prevent injury to neighboring leases or properties.”³⁶ The Commission may appropriately deny injection on the grounds that the SWD operations are causing waste by “reduc[ing] or tend[ing] to reduce the total ultimate recovery” of hydrocarbons and is not required to also find that the injection reduces production in paying quantities.³⁷

The Division has defined “production in paying quantities” as “the production of a quantity of oil and gas that yields revenue in excess of operating expenses.”³⁸ It is well established that whether a well has produced in paying quantities is determined in hindsight, by considering whether the well “pays a profit, even small, over operating expenses . . . though it may never repay its costs, and the enterprise as a whole may be unprofitable.”³⁹ Assuming for the sake of argument that Goodnight and Rice correctly argue that Empire must prove the economics of its tertiary recovery to prevail on its application (a dubious proposition as demonstrated above), Empire has nonetheless presented evidence that the ROZ is sufficiently oil saturated to be recoverable through CO₂ flooding, and that a CO₂ flooding project in the EMSU should yield 18% and may be closer to 30% recovery of the ROZ.⁴⁰ Empire’s witnesses further established that revenue of \$5.5 billion

³⁵ § 70-2-12(B)(4)

³⁶ § 70-2-12(B)(7)

³⁷ § 70-2-3(A); *see also* § 70-2-2 (prohibiting the products of oil or gas from being handled “in such manner or under such conditions or in such amounts as to constitute or result in waste”).

³⁸ 19.15.27.7(Q) NMAC.

³⁹ *Clifton v. Koontz*, 325 S.W.2d 684, 691 (Tex. 1959); *see Maralex Res., Inc. v. Gilbreath*, 2003-NMSC-023, ¶ 9, 134 N.M. 308, 76 P.3d 626.

⁴⁰ *See* 02/27 Tr. 862:20-864:6; 02/28 Tr. 1164:2-19; 04/09 Tr. 154:17-156:18; Empire Exs. I at ¶¶ 30-33, I-26 through I-29.

dollars can be expected from the San Andres ROZ, with \$1.6 billion in royalties and taxes going to the State of New Mexico.⁴¹

The Commission's factual findings on this issue rely on a questionable "dimensionless curve" critique by Goodnight's witness, Dr. Lake,⁴² Rice's desire for oil-in-place comparator calculations,⁴³ and the Commission's rejection of comparator EOR recovery project evidence presented by Empire on grounds unsupported by an evidentiary citation.⁴⁴ These findings fail to dispute the evidentiary showing made by Empire at hearing and are internally inconsistent. To on one hand find that the Seminole and Tall Cotton fields are not useful comparators but on the other hand fault Empire for not presenting additional oil in place data regarding such comparators does not support a determination that Empire failed to demonstrate that the ROZ is recoverable.

While Empire appreciates the Commission's willingness to afford it an opportunity to commence a pilot project to obtain additional data regarding ROZ recoverability, Empire respectfully submits that the suspension of Goodnight's permits should not be contingent on such a project. Because Empire has demonstrated waste and impairment of correlative rights, the Commission may appropriately revoke Goodnight's existing permits without an additional showing of "production in paying quantities." Further, even if the Commission determines that such a showing is also required, Empire met that standard by a preponderance of the evidence. Accordingly, the Commission should modify its Order to permanently revoke the permits for Goodnight's existing SWD wells.

⁴¹ 04/09 Tr. 154:3-7.

⁴² Order at ¶ 60; *see* 04/24 Tr. 202:25 – 207:4 (cross examination of Dr. Lake).

⁴³ Order at ¶ 59.

⁴⁴ Order at ¶ 58.

IV. The Order should be revised to identify the applicable burden of proof.

Throughout the Order, the Commission references “substantial evidence.” While Empire agrees that it has presented “substantial evidence” in support of the Commission’s findings, Empire would request that the Order be modified to make clear that the substantial evidence presented was sufficient to meet the applicable burden of proof, being a preponderance of the evidence.⁴⁵ Empire does not believe or argue that the Commission applied an incorrect burden of proof but recommends that the Order be amended to clarify that the proper burden of proof was applied by either changing all references to “substantial evidence” to “sufficient evidence” or a “preponderance of the evidence” or otherwise making a clear statement that the “substantial evidence” adduced by Empire was sufficient to (1) meet the preponderance of evidence burden applicable to Empire as the moving party and (2) establish that Goodnight failed to prove its case by a preponderance of evidence for the applications where it was the moving party.

CONCLUSION

As established at hearing and further demonstrated through its Closing Brief, Findings of Fact and Conclusions of Law, and this Motion for Rehearing, Empire has met its evidentiary burden to show that Goodnight’s current and proposed injection into the EMSU unitized interval is resulting in waste and impairment of correlative rights and therefore must not be allowed. Empire therefore respectfully requests that the Commission modify its Order to permanently revoke Goodnight’s existing SWD permits.

⁴⁵ § 70-2-11(A).

Respectfully submitted,

By: /s/ Dana S. Hardy

Dana S. Hardy
Jaclyn M. McLean
Timothy B. Rode
Jaime R. Kennedy
HARDY MCLEAN LLC
125 Lincoln Ave., Suite
223 Santa Fe, NM 87505
(505) 230-4410
dhardy@hardymclean.com
jmclean@hardymclean.com
trode@hardymclean.com
jkennedy@hardymclean.com

Sharon T. Shaheen
SPENCER FANE LLP
P.O. Box 2307
Santa Fe, NM 87504-2307
(505) 986-2678
sshhaheen@spencerfane.com

Ernest L. Padilla
PADILLA LAW FIRM, P.A.
P.O. Box 2523
Santa Fe, NM 87504
(505) 988-7577
padillalawnm@outlook.com

Corey F. Wehmeyer
SANTOYO WEHMEYER, P.C.
IBC Highway 281 N. Centre
Bldg. 12400 San Pedro
Avenue, Suite 300 San
Antonio, Texas 78216
(210) 998-4190
cwehmeyer@swenergylaw.com

Attorneys for Empire New Mexico, LLC

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served upon the following counsel of record by electronic mail on October 2, 2025.

Michael H. Feldewert
Adam G. Rankin
Nathan R. Jurgensen
Julia Broggi
Paula M. Vance
Holland & Hart LLP
P.O. Box 2208
Santa Fe, New Mexico 87504-2208
Telephone: (505) 986-2678
mfeldewert@hollandhart.com
agrarkin@hollandhart.com
nrjurgensen@hollandhart.com
jbroggi@hollandhart.com
pmvance@hollandhart.com
***Attorneys for Goodnight Midstream
Permian, LLC***

Matthew M. Beck
PEIFER, HANSON, MULLINS & BAKER,
P.A.
P.O. Box 25245
Albuquerque, NM 87125-5245
Tel: (505) 247-4800
mbeck@peiferlaw.com
***Attorneys for Rice Operating Company and
Permian Line Service, LLC***

Miguel A. Suazo
BEATTY & WOZNIAK, P.C.
500 Don Gaspar Ave.
Santa Fe, NM 87505
Tel: (505) 946-2090
msuazo@bwenergylaw.com
sgraham@bwenergylaw.com
kluck@bwenergylaw.com
***Attorneys for Pilot Water Solutions SWD,
LLC***

/s/ Dana S. Hardy
Dana S. Hardy