

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

**IN THE MATTER OF THE APPLICATION
OF DKD, LLC FOR AN ORDER DIRECTING
GANDY CORPORATION TO SHOW CAUSE,
LEA COUNTY, NEW MEXICO**

Case 13686

APPLICATION

DKD, LLC ("DKD") through its undersigned counsel, Miller Stratvert P.A. (J. Scott Hall), requests the Division enter its order directing Gandy Corporation to show cause why its authority to utilize its State "T" Well No. 2 for the injection of produced water for disposal purposes should not be immediately and permanently revoked. In support of its application, DKD states:

1. Gandy Corporation is the owner and operator of the State "T" Well No. 2 (API No. 30-025-03735) located 4,290' FSL and 500' FWL, Lot 12, Section 6, T16S, R36E, NMPM in Lea County, New Mexico. Gandy utilizes the State "T" Well No. 2 to dispose of produced water into the San Andres and Glorieta formations (SWD-836).

2. DKD is the owner and operator of the Watson "6" No. 1 Well (API No. 30-025-34197) located 2857' FSL and 1417' FWL in Unit N, Section 6, T16S, R36E, NMPM in Lea County, New Mexico. DKD utilizes the Watson "6" No. 1 Well for the disposal of produced water by injection into the Cisco and Canyon formations (SWD-834). DKD also owns and operates the Snyder "A" No. 1 Well (API No. 30-025-03727) located 2319' FSL and 330' FWL in Unit L of said Section 6. The Snyder "A" No. 1 Well was originally drilled to and produced from the Strawn formation.

3. Energen Resources Corporation operates the Snyder "B" No. 2 Well (API No. 30-025-03729) located 3656' FNL and 2310' FEL in Unit J drilled to the Pennsylvanian formation in the NE/4 of Section 6 (Unit J) and the Snyder "A" Com 1-6 Well (API No. 30-025-34073) located 990' FSL and 874' FWL (Unit M) and drilled to and completed in the Strawn formation in the SW/4 of Section 6.

4. Pursuant to the Administrative Application filed by Pronghorn Management Corporation, the State "T" Well No. 2 was authorized by the Division to be utilized for the injection of salt water for disposal purposes into the San Andres and Glorieta formations from a depth of 6000' to 6200' (SWD-836). Under the Division's permit, Pronghorn was directed to plug the well back to 6500' and then squeeze cement from the existing cement top to the surface. Consequently, on July 9, 2002, the Division suspended Pronghorn's injection authority due to Pronghorn's failure to provide notice to area surface owners. Pronghorn's application was subsequently set for Examiner hearing in Case No. 12905 and on October 28, 2002 the Division issued Order R-11855 rescinding Pronghorn's injection authorization. Pursuant to an Application for Hearing De Novo filed by Pronghorn, on May 15, 2003, the Oil Conservation Commission issued Order No. R-11855-B reinstating SWD-836 and permitting Pronghorn to inject produced water into those intervals from 6000' to 6400'.

5. In June 2003, the State "T" Well No. 2 was transferred from Pronghorn to Gandy Corporation. On approximately August 19, 2003, Gandy Corporation perforated the State "T" Well No. 2 from 4810' to 6880', 1390' above and 680' below the depths authorized by the Division. In addition, Gandy set a packer at 4750, some 1200' higher than the Division specified. Because these additional perforated intervals and packer placement depth were not authorized by Order No. R-11855-B, on May 3, 2004, the Department Secretary and Acting Division Director

issued an Emergency Shut-In Order directing Gandy Corporation to immediately cease injection operations into the well.

6. Subsequently, Gandy made application to the Division in Case No. 13293 for authorization to inject into the expanded perforation intervals. During the course of the investigation in that case, it was determined that Gandy had installed a cast iron bridge plug and cemented the well at 10,288'. A cement plug was set at 7690' instead of at 6500' as the Division prescribed. Further, holes were found in the casing from 7650' to 7700' and from 4750' to 4815'. Cement was placed over the lower holes and over the upper holes without obtaining adequate squeeze operations on either one. The casing was then perforated at 4320' and from 4810' to 6880'. An injection packer was set somewhere between 4720' and 4740' instead of at 5950' as the Division had directed.

7. During the pendency of Case No. 13293, it was discovered that Gandy Corporation had resumed injection operations in violation of the Secretary's May 3, 2004 emergency shut-in order. Consequently, on June 29, 2004, Division counsel directed Gandy Corporation to cease injection into the State "T" Well No. 2 until all perforation depths not permitted under the order were squeezed off or until Gandy obtained an approved permit to inject into the depths previously perforated.

8. On July 9, 2004, following Examiner hearing, the Division issued Order No. R-12171 in Case No. 13293. At paragraph 12 of the Order, the Division found, *inter alia*:

(e) Additional well work is needed to ensure injected fluid remains in the proposed injection interval from 4810' to 6880'.

9. Order No. R-12171 granted Gandy Corporation's application for authorization to inject produced water into the San Andres and Glorieta formations from 4810' to 6880' through 3-1/2" plastic line tubing set in a packer located within 100' above the top of the perforation.

Gandy's injection authorization was also made subject to the following express conditions in Order No. R-12171:

(3) The wellhead injection pressure on the well shall be limited to no more than 962 psi. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all time, limit surface injection pressure to the maximum allowable pressure for this well. (emphasis added.)

(4) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in migration of fluids out of the injection formation or the fracturing of the injection formation or confining strata.

(5) The operator shall notify in advance the supervisor of the Hobbs district office of the Division of the date and time of changes in packer, tubing, mechanical integrity tests, or any other work to be performed on this well.

(6) The operator shall immediately notify the Supervisor of the Division's Hobbs district office of the failure of the tubing, casing or packer in the disposal well or the leakage of water, oil or gas from or around this well or any producing or plugged and abandoned well within the area, and shall take all steps as may be timely and necessary to correct such failure or leakage.

(7) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface using any conduit such as fractures or wells.

10. On April 25, 2005, Gandy Corporation made application to the Division on Form C-103 to perforate the State "T" Well No. 2 with 1220 additional holes at specified zones between 4810' to 6880'. The Division approved the proposed work-over on April 25, 2005 and the work was performed on or about that same date.

11. Following the issuance of Order No. R-12171 in July 2004, Gandy Corporation began to increase the volumes of water injected through the State "T" No. 2 Well while simultaneously increasing injection pressures. By approximately February 2005, Gandy was

injecting at pressures in excess of the 962 psi limitation specified in Order No. R-12171. By April of 2005, observed surface pressures indicated that Gandy was injecting at approximately 1450 psi.

12. Following the resumption of injection operations on the State "T" Well No. 2 in July of 2004, DKD began to record consistently increasing casing pressures at the Snyder "A" No. 1 Well. On October 1, 2004, casing pressures on the well were approximately 30 pounds. By April 22, 2005, the casing pressure at the Snyder "A" No. 1 was approximately 870 pounds.

13. On April 21, 2005, Energen Resources Corporation experienced a water blowout at its Snyder "B" No. 2 Well located to the east of the Gandy Corporation State "T" No. 2 injection well. On April 22, 2005, the Division's Hobbs district office ordered Gandy Corporation to shut down injection operations at the State "T" No. 2 Well.

14. On May 6, 2005, Energen experienced a casing leak at the Snyder "A" Com No. 1 Well with water flows from the casing and tubing. On approximately May 17, 2005, it was determined that the Snyder "A" Com Well No. 1 had experienced a casing collapse at approximately 8825'. The well has since been plugged and abandoned.

15. On approximately September 15, 2005, Energen experienced water flows through the tubing of the Snyder "B" Well No. 2. It was subsequently determined that the well had experienced a casing collapse at 6365'.

16. Following the April 2005 suspension of injection operations, Gandy continued to operate the State "T" Well No. 2 at various pressures but below the 962 psi limitation under Order No. R-12171. At various times following the completion of a number of work-over operations on the State "T" Well No. 2, DKD experienced widely fluctuating casing pressures at

the Snyder "A" Well No. 1 that correlated to Gandy's pumping and injection operations. Similar pressure fluctuations were experienced at the Energen Snyder "B" Well No. 2.

17. In the last few days immediately preceding the filing of this Application, it has been discovered that Gandy Corporation was again violating the 962 psi pressure limitation and was injecting fluids at pressures in excess of 1320 psi.

18. Gandy Corporation has failed to conduct injection operations to ensure injected fluids remain in the authorized injection intervals from 4810' to 6880'.

19. Gandy Corporation has failed to operate the State "T" Well No. 2 within the 962 psi pressure limitation specified in Order No. R-12171. Further, Gandy has failed to install a workable pressure limitation device which limits surface injection pressures to the maximum allowable pressure for the well.

20. Gandy Corporation has failed to submit monthly reports of disposal operations and disposition of produced water in accordance with Rules 706 and 1120.

21. Gandy Corporation has failed to operate the State "T" Well No. 2 in a manner to insure that injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

22. It appears that Gandy Corporation's State "T" Well No. 2 has a defective casing program or faulty cemented or corroded casing in violation of Division Rule 108.

23. Gandy Corporation has failed to notify the Division of the failure of the tubing, casing or packer in the disposal well or of the leakage of water, oil or gas from or around the State "T" Well No. 2 or from any producing, plugged or abandoned well within the area.

24. As a consequence of Gandy Corporation's operations of the State "T" Well No. 2, the waste of hydrocarbon reserves has occurred and there is a reasonable likelihood that the

contamination of fresh waters may occur. Gandy's operations have caused the plugging and abandonment of wells that were otherwise capable of producing hydrocarbons, thereby causing waste. There also exists the reasonable likelihood that the continued injection operations will cause the damage or loss of additional producing wells in the area.

25. Gandy Corporation's operations of the State "T" Well No. 2 have resulted in the violation of NMSA § 70-2-12(2) (escape of water from strata into other strata); 70-2-12(4) (drowning by water of any stratum or part thereof capable of producing oil or gas); and 70-2-12(15) (disposition of water produced ... in a manner that will afford reasonable protection against contamination of fresh water supplies).

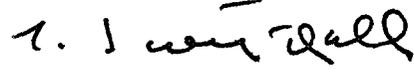
WHEREFORE, after notice and hearing, Applicant requests the Division enter its order:

1. Immediately suspending Gandy Corporation's authorization to conduct injection operations through the State "T" Well No. 2;
2. Directing Gandy Corporation to take such actions as may be necessary to immediately reduce pressures in the injection formation and other formations so as to prevent further waste and to avoid further damage to other property;
3. Directing Gandy Corporation to show cause why its injection authority should not be permanently revoked and the State "T" Well No. 2 immediately plugged and permanently abandoned.
4. Requiring Gandy to remediate, repair or plug any wells determined to have been damaged by Gandy's operations.
5. Providing for such additional relief the Division determines appropriate.

Respectfully submitted,

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By:



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CASE 13686 : Application of DKD, LLC for an Order Directing Gandy Corporation to Show Cause, Lea County, New Mexico.

Applicant seeks an order directing Gandy Corporation to show cause why its authority to utilize its State "T" Well No. 2 for the injection of produced water for disposal purposes should not be immediately and permanently revoked. The State "T" Well No. 2 (API No. 30-025-03735) is located 4,290' FSL and 500' FWL, Lot 12, Section 6, T16S, R36E, NMPM in Lea County, New Mexico. Gandy utilizes the State "T" Well No. 2 to dispose of produced water into the San Andres and Glorieta formations pursuant to SWD-836 and Order No. R-12171. Applicant is the owner and operator of the Watson "6" No. 1 Well (API No. 30-025-34197) located 2857' FSL and 1417' FWL in Unit N, of said Section 6 utilized for the disposal of produced water by injection into the Cisco and Canyon formations (SWD-834). Applicant also owns and operates the Snyder "A" No. 1 Well (API No. 30-025-03727) located 2319' FSL and 330' FWL in Unit L of said Section 6. The Snyder "A" No. 1 Well was originally drilled to and produced from the Strawn formation. The subject lands and wells are located approximately three miles west of Lovington, New Mexico.

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