

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

**IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:**

**CASE NO. 14917  
ORDER NO. R-13679**

**APPLICATION OF DWIGHT A. TIPTON FOR APPROVAL OF A PRESSURE  
MAINTENANCE PROJECT IN THE LOWER SAN ANDRES FORMATION,  
LEA COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on November 29, 2012, at Santa Fe, New Mexico before Examiner Richard I. Ezeanyim.

Now, on this 12<sup>th</sup> day of February, 2013, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

**FINDS THAT:**

(1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.

(2) Dwight A. Tipton ("Tipton" or "Applicant"), seeks approval to institute a lease Pressure Maintenance Project into the lower San Andres formation, Lane-San Andres Pool (**Code 37000**) through its Sunray A State Well No. 1 (**API No. 30-025-31000**) located 990 feet from the South line and 1980 feet from the East line, Unit O, of Section 36, Township 9 South, Range 33 East, NMPM, Lea County, New Mexico, at depths of 4630-4650 feet (perforated) and 4750-5000 feet (open hole).

(3) Applicant submitted to the Division in June of 2012 an administrative application for salt water disposal into this well. The Division directed Applicant to set the matter for hearing due to the presence of producing wells within one half mile of the proposed well in the proposed disposal interval.

(4) The proposed project covers portions of the following lands within Lea County, New Mexico: the S/2, S/2 NE/4, and SW/4 NW/4 of Section 36, Township 9

South, Range 33 East, NMPM, and N/2 N/2 of Section 1, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico.

(5) Applicant requests permission to convert the Sunray A State Well No. 1 ("the proposed well") from a depleted, inactive oil well to injection of oil field produced water into the Lower San Andres formations from perforated depths of 4630 feet to 4650 feet to open hole from 4750 feet to 5000 feet, for Pressure Maintenance purposes.

(6) **The State Land Office was notified of this application, and of the existence of an un-leased 40-acre tract of land (the SE/4 NW/4) of Section 36, Township 9 South, Range 33 East, NMPM, Lea County, New Mexico. The State Land Office does not object to the implementation of the lease pressure maintenance project. As a result, the implementation of this project does not constitute trespass. No other parties appeared in this case or otherwise opposed this application.**

(7) Applicant appeared at the hearing through counsel and presented the following testimony.

(a) Applicant operates oil and gas wells within the Sunray State A lease where the disposal costs of produced water have gone up to uneconomic levels considering the amount of oil production from the wells on the lease. Applicant's wells within the lease make approximately 8 barrels of oil per day and approximately 30 barrels of water per day.

(b) The proposed injection well is expected to easily take this volume of produced water, but is also expected to pressure the reservoir and push oil to Applicant's other producing wells from the same zone.

(c) Applicant needs this well primarily for water disposal purposes; however, Applicant expects to see a small positive effect on its producing wells in the project area and expects that water injection into the proposed well may help offsetting production wells.

(d) Applicant has noted by analogy that conditions are favorable for waterflooding in the Lower San Andres formations.

(e) Applicant did not find water wells within one mile of the proposed well. Any possible fresh waters will be protected by surface casing and cement.

(8) The lease acreage listed in this application is scattered over portions of two sections. Applicant has indicated that the proposed well to be located in Unit O of Section 36 is the only well it intends to use for injection purposes, and did not present proposed or prospective waterflood patterns over the extent of this lease. Therefore, the approved Project Area should be limited to the portion of the Sunray A State lease area reasonably expected to be affected by injection which would be the lands contained in Section 36 and Section 1 as described above.

(9) Within one half mile from the proposed injection well, there are six total wells drilled to this depth. One of those is temporarily abandoned. All of these Area of Review wells are cased, cemented, and/or plugged to adequately isolate the intended injection interval within the Lower San Andres formation and to protect any underground fresh waters.

(10) Applicant (**OGRID 006550**) is the operator of this well located on this acreage. Applicant is now in compliance with Division Rule 19.15.5.9 NMAC and therefore eligible for approval of injection permits.

(11) Water from outside the Sunray A State lease should not be injected into this well. The operator should monitor the oil and water production from the producing area of review wells and report these productions to the Division on a quarterly basis.

(12) The proposed project should be called the Sunray A State Lease Pressure Maintenance Project. The Project Area to be affected by this Pressure Maintenance operation should consist of Sunray A State lease area contained in the S/2, S/2 NE/4, and SW/4 NW/4 of Section 36, Township 9 South, Range 33 East, NMPM, and N/2 N/2 of Section 1, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico.

(13) Applicant should be approved to inject into the Sunray A State Well No. 1 (**API 30-025-31000**) located within Unit O of Section 36 into the Lower San Andres formations from perforated depths of 4630 feet to 4650 feet, to open hole from 4750 feet to 5000 feet.

**IT IS THEREFORE ORDERED THAT:**

(1) The Applicant, Dwight A. Tipton, is hereby authorized to implement Lease Pressure Maintenance operations within the project area of its Sunray A State Lease by water injection into the San Andres formations, Lane-San Andres Pool (**Code 37000**).

(2) The project shall be called the **Sunray A State Lease Pressure Maintenance Project** and the Project Area shall consist of the S/2, S/2 NE/4, and SW/4 NW/4 of Section 36, Township 9 South, Range 33 East, NMPM, and N/2 N/2 of Section 1, Township 10 South, Range 33 East, NMPM, Lea County, New Mexico.

(3) Injection is approved within the Sunray A State Well No. 1 (**API No. 30-025-31000**), located 990 feet from the South line and 1980 feet from the East line in Unit O of Section 36, Township 9 South, Range 33 East, NMPM, Lea County, New Mexico. Injections shall be through perforations in that well from 4630 to 4650 feet through lined tubing and a packer set no higher than 100 feet above the approved injection interval, and through open hole from 4750 feet to 5000 feet.

(4) **Water from outside the Sunray A State lease shall not be injected into this well. The operator shall monitor the oil and water production from the**

**producing area of review wells and report these productions to the Division on a quarterly basis.**

(5) The operator shall take all steps necessary to ensure that the injected water enters only the permitted injection intervals and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(6) The casing-tubing annulus shall be filled with an inert fluid, and a gauge or approved leak-detection device shall be attached to the annulus in order to detect any leakage in the casing, tubing or packer.

(7) The injection well or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the maximum surface injection pressure to **926** psi.

(8) The Division Director may administratively authorize a pressure limitation in excess of the above, upon a showing by the operator, supported by approved Step Rate Tests that such higher pressure will not result in the fracturing of the injection formation or confining strata or damage to the reservoir.

(9) In accordance with Division Rule 19.15.26.11A. NMAC, the operator shall test the approved injection well for mechanical integrity prior to commencing injection into that well, and prior to resuming injection each time the packer is unseated. All MIT testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wire-line verification of completion and packer setting depths in this well.

(10) The operator shall provide notice 72 hours in advance, to the supervisor of the Division's district I office of the date and time of the installation of injection equipment, and of any mechanical integrity test so that the same may be inspected and witnessed.

(11) The operator shall provide written notice of the date of commencement of injection to the Division's district I office. In accordance with Division rules, the operator shall submit monthly reports of the injection operations on Division Form C-115.

(12) Without limitation on the duties of the operator as provided in Division rules, or otherwise, the operator shall immediately notify the Division's district I office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from or around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

(13) The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

(14) The Division may revoke this injection permit after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

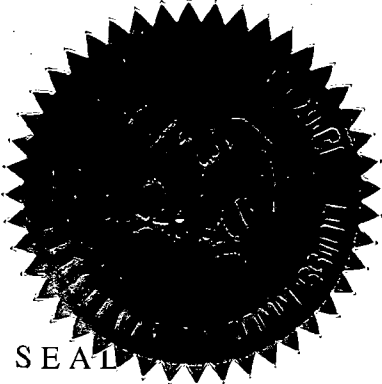
(15) The injection authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the permitted injection well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

(16) One year after all injection into the project area has ceased (or not reported), the Division shall consider the project abandoned, and the authority to inject shall terminate ipso facto. The Division, upon written request mailed by the operator prior to that termination date, may grant an extension thereof for good cause.

(17) Compliance with this order does not relieve the operator of the obligation to comply with other applicable State, local, or Federal rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

(18) Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing (or without prior notice and hearing in case of emergency), terminate the injection authority granted herein.

DONE in Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read "Jami Bailey".

JAMI BAILEY  
Director