

State of New Mexico  
Energy, Minerals and Natural Resources Department

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Governor

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Cabinet Secretary-Designate

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Deputy Cabinet Secretary

**Jami Bailey, Division Director**  
Oil Conservation Division



Administrative Order WFX-917  
November 8, 2013

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order R-5530, as amended, Chevron USA, Incorporated, (OGRID No. 4323) has made application to the Division for permission to add six additional injection wells to its tertiary recovery project in the Central Vacuum Pressure Maintenance Project located within the Vacuum; Grayburg-San Andres Pool (Pool Code 62180) in Lea County, New Mexico. These injection wells are either currently injecting or being proposed for injection into the Unitized formation, the Grayburg and San Andres formations as described in Division Orders R-5530 and R-5530-E.

**THE DIVISION DIRECTOR FINDS THAT:**

The application has been duly filed under the provisions of 19.15.26.8B NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections remain outstanding. The two proposed wells are eligible for conversion to injection under the terms of that rule.

Additionally, the applicant gave notice to modify the operation of four existing injections wells to include carbon dioxide as part of the injection stream (Water Alternating Gas (WAG) Injection). These four wells have injection authority approved under Division Order R-5530, but were not included in Division Order R-5530-E that established the tertiary recovery project utilizing carbon dioxide and produced gases. There are no major modifications to these existing wells.

The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

**IT IS THEREFORE ORDERED THAT:**

Chevron USA, Inc., as operator, is hereby authorized to inject water and carbon dioxide or produced gas into the following **new wells** for the purpose of secondary recovery through plastic or fiberglass lined tubing set into a packer:

API	Well No.	Unit	Sec	Twp	N/S	Rng	W/E	Feet	N/S	Ft	E/W
30-025-41343	Central Vacuum Unit 170	L	36	17	S	34	E	2490	S	500	W
30-025-41344	Central Vacuum Unit 181	L	36	17	S	34	E	1420	S	730	W

Chevron USA, Inc. has approval through existing Division Orders and with notification to Division's district I office to inject water and carbon dioxide or produced gases into the following **existing injection wells** for the purpose of secondary recovery:

API	Well No.	Unit	Sec	Twp	N/S	Rng	W/E	Feet	N/S	Ft	E/W
30-025-25813	Central Vacuum Unit 25	K	25	17	S	34	E	1330	S	1504	W
30-025-25814	Central Vacuum Unit 26	J	25	17	S	34	E	1330	S	2577	E
30-025-25815	Central Vacuum Unit 27	J	25	17	S	34	E	1330	S	1425	E
30-025-2816	Central Vacuum Unit 28	P	25	17	S	34	E	1230	S	159	E

The approved injection interval (Unitized formation) for these wells, as provided in Ordering Paragraph (1) of Division Order R-5530-E, is the Grayburg and San Andres formations between the depths of 3858 feet and a depth 4858 feet based on the Welx Acoustic Velocity Log for the State of New Mexico "O" State NCT-1 Well No. 23 (API 30-025-20237; currently the Vacuum Glorieta Unit Well No. 101). As provided in Division Order R-5530-F, the approved maximum surface tubing injection pressure shall be **1500 psi for water and 2200 psi for carbon dioxide and produced gases**. The operator shall set the injection packer no more than 100 feet above the top permitted injection interval.

**IT IS FURTHER ORDERED THAT:**

The operator shall take all steps necessary to ensure that the injected fluids enter only the approved injection interval and are not permitted to escape to other formations or onto the surface. The applicant shall conduct the monitoring procedures for these six wells following the "acid gas" injection operations as approved in Division Order R-5530-F. These requirements include:

- (a) the inclusion of these wells in the hydrogen sulfide (H<sub>2</sub>S) contingency plan for this project;
- (b) the installation of automatic shutoff equipment at the wellhead to prevent the outflow of gas due to mechanical failure at the well;
- (c) inclusion of these wells in applicant's Supervisory Control and Data Acquisition (SCADA) system; and
- (d) annual testing using a blanking plug mechanical integrity test ("MIT") for each well.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to

the packer setting depth to assure casing integrity.

The new wells shall pass an initial MIT prior to initially commencing injection and prior to resuming injection each time any injection 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 wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on this well shall be limited as listed above. In addition, the injection well or header system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressures to the maximum allowable pressures for this well.

Subject to the limitations within the hearing order permitting this project, the Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluids from the approved injection interval. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's district I office of the date and time of the installation of injection equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of injection to the Division's district office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the approved injection well, or of any leakage or release of water, oil or gas from 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.

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.

The division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

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

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, terminate the disposal authority granted herein.



JAMI BAILEY  
Director

JB/prg

cc: Oil Conservation Division – Hobbs District Office  
State Land Office – Oil, Gas and Minerals Division  
Case No. 11650