New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



Administrative Order WFX-835 April 14, 2008

APPLICATION OF CHEVRON USA, INC. TO EXPAND ITS TERTIARY RECOVERY PROJECT IN THE VACUUM; GRAYBURG SAN ANDRES POOL IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order R-5530-E, Chevron USA, Inc. (OGRID No. 4323) has made application to the Division for permission to add more injection wells to its Central Vacuum Unit Tertiary Recovery Project located within the Vacuum; Grayburg San Andres Pool (Pool No. 62180) in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

The application was filed in due form. No objections have been filed within the waiting period prescribed by Division Rule 701(C). The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.

The proposed expansion of the above-referenced tertiary recovery project will not cause waste nor impair correlative rights and should be approved.

IT IS THEREFORE ORDERED THAT:

Chevron USA, Inc. is hereby authorized to inject water, CO2, and produced gases into the unitized interval of the Central Vacuum Unit Tertiary Recovery Project, through plastic-lined tubing set in packers located within 100 feet of the top of the injection intervals in the following-described wells for purposes of tertiary recovery:



Central Vacuum Unit Unit Well No. 238 (API No. 30-025-38849):

SHL: 10' FSL, 420' FEL, Unit P, Sec 36, T17S, R34E, NMPM BHL: 10' FSL, 10' FEL, Unit P, Sec 36, T17S, R34E, NMPM Permitted Vertical Injection Interval (Perforated): 3902 - 5000 Maximum Surface Injection Pressure: 1500 PSIG Water, 1850 PSIG CO2

Central Vacuum Unit Unit Well No. 455 (API No. 30-025-38637)

1310' FNL, 660' FWL, Unit D, Sec 36, T17S, R34E, NMPM Permitted Vertical Injection Interval (Perforated): 4300 - 4800 Maximum Surface Injection Pressure: 1500 PSIG Water, 1850 PSIG CO2

Central Vacuum Unit Unit Well No. 456 (API No. 30-025-38638) 1360' FNL, 1980' FWL, Unit F, Sec 36, T17S, R34E, NMPM Permitted Vertical Injection Interval (Perforated): 4300 - 4800 Maximum Surface Injection Pressure: 1500 PSIG Water, 1850 PSIG CO2

Central Vacuum Unit Unit Well No. 457 (API No. 30-025-38639)

SHL: 1593' FNL, 1912' FEL, Unit G, Sec 36, T17S, R34E, NMPM BHL: 1310' FNL, 1980' FEL, Unit B, Sec 36, T17S, R34E, NMPM Permitted Vertical Injection Interval (Perforated): 4300 - 4800 Maximum Surface Injection Pressure: 1500 PSIG Water, 1850 PSIG CO2

Central Vacuum Unit Unit Well No. 458 (API No. 30-025-38640) SHL: 1153' FNL, 848' FEL, Unit A, Sec 36, T17S, R34E, NMPM BHL: 1310' FNL, 660' FEL, Unit A, Sec 36, T17S, R34E, NMPM

Permitted Vertical Injection Interval (Perforated): 4300 - 4800 Maximum Surface Injection Pressure: 1500 PSIG Water, 1850 PSIG CO2

Central Vacuum Unit Unit Well No. 459 (API No. 30-025-38641)

SHL: 1050' FNL, 566' FWL, Unit D, Sec 31, T17S, R34E, NMPM BHL: 1310' FNL, 660' FWL, Unit D, Sec 31, T17S, R34E, NMPM Permitted Vertical Injection Interval (Perforated): 4300 - 4800 Maximum Surface Injection Pressure: 1500 PSIG Water, 1850 PSIG CO2

IT IS FURTHER ORDERED THAT:

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.

Prior to commencing injection operations into the wells, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection wells or systems shall be equipped with pressure limiting devices which will limit the wellhead pressure to the maximum surface injection pressure described above.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the permitted injection interval. Such proper showing shall consist of valid step-rate tests run in accordance with and acceptable to this office.

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The operator shall notify the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of all mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-5530-E, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

<u>PROVIDED FURTHER THAT</u>, 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 water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator received prior to the one year deadline, may grant an extension thereof for good cause shown.

MARK E. FESMIRE, P.E. Director

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cc:

Oil Conservation Division – Hobbs State Land Office – Oil, Gas, and Minerals Division