



October 13, 2009

**HAND-DELIVERED**

Mark E. Fesmire, P.E.  
Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

*Case 14401*

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Re: Application of Chevron U.S.A. Inc. for amendment of Division Order No. R-5530-E to revise the injection well completion requirements and to change the basis for the calculation of the authorized injection pressure for carbon dioxide from surface pressure to the average reservoir pressure in its previously approved tertiary recovery project in the Central Vacuum Unit EOR Project Area, Lea County, New Mexico.

Dear Mr. Fesmire:

Enclosed in triplicate is the Application of Chevron U.S.A. Inc. in the above-referenced case as well as a copy of a legal advertisement. Chevron requests that this matter be set for hearing before a Division Examiner on November 13, 2009.

Very truly yours,

William F. Carr

Enclosures

cc: Gail MacQuesten, Esq.

Mr. Scott Ingram (w/enclosures)  
Chevron U.S.A. Inc.

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

**IN THE MATTER OF THE APPLICATION OF CHEVRON U.S.A., INC. FOR AMENDMENT OF DIVISION ORDER NO. R-5530-E TO REVISE THE INJECTION WELL COMPLETION REQUIREMENTS AND TO CHANGE THE BASIS FOR THE CALCULATION OF THE AUTHORIZED INJECTION PRESSURE FROM SURFACE PRESSURE TO THE AVERAGE RESERVOIR PRESSURE IN ITS PREVIOUSLY APPROVED TERTIARY RECOVERY PROJECT IN THE CENTRAL VACUUM UNIT EOR PROJECT AREA, LEA COUNTY, NEW MEXICO.**

CASE NO. 14401

**APPLICATION**

CHEVRON U.S.A. INC. ("Chevron") through its attorneys, Holland & Hart LLP makes application for an order amending Oil Conservation Division Order No. R-5530-E to revise the injection well completion requirements and change the basis for the calculation of the authorized injection pressure from surface pressure to the average reservoir pressure in its previously approved tertiary recovery project in the Central Vacuum Unit EOR Project Area, and in support of its application states:

1. By Order No. R-5496, dated August 9, 1977, the Division granted the application of Texaco, Inc. ("Texaco") for approval of the Central Vacuum Unit. This unit currently comprises approximately 3,046 acres, more or less, of State and fee lands. The unit boundaries include the following acreage in Lea County, New Mexico:

**TOWNSHIP 17 SOUTH, RANGE 34 EAST, N.M.P.M.**

Section 25:	S/2, SE/4 NE/4
Section 36:	All

**TOWNSHIP 17 SOUTH, RANGE 35 EAST, N.M.P.M.**

Section 30:	All
Section 31:	N/2, SW/4, SW/4 SE/4

**TOWNSHIP 18 SOUTH, RANGE 34 EAST, N.M.P.M.**

Section 12:	N/2 NE/4
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**TOWNSHIP 18 SOUTH, RANGE 35 EAST, N.M.P.M.**

Section 6:	All
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Section 7: NW/4, NW/4 NE/4

2. Pursuant to the provisions of Division Order No. R-5530, dated September 20, 1977, as amended, Chevron, as successor to Texaco Inc., was authorized to operate a pressure maintenance project within the Central Vacuum Unit by the injection of water into the Grayburg and San Andres formations, Vacuum Grayburg-San Andres Pool (62180).

3. Division Order No. R-5530-E, entered on April 30, 1997 authorized Texaco to institute an EOR recovery project by means of combined water, carbon dioxide and produced gas injection (WAG injection) in the following 1,550 acres, more or less ("EOR Project Area") within the Central Vacuum Unit Area:

**TOWNSHIP 17 SOUTH, RANGE 34 EAST, N.M.P.M.**

Section 25: S/2 S/2 SE/4, S/2 SE/4 SW/4,  
SE/4 SW/4 SW/4

Section 36: S/2, NE/4, E/2 NW/4, SW/4  
NW/4, S/2 NW/4 NW/4, NE/4  
NW/4 NW/4

**TOWNSHIP 17 SOUTH, RANGE 35 EAST, N.M.P.M.**

Section 30: S/2 S/2 SW/4, S/2 SW/4 SE/4,  
SW/4 SE/4 SE/4

Section 31: W/2, SW/4 SE/4, W/2 NE/4,  
SE/4 NE/4, S/2 NE/4  
NE/4, NW/4 NE/4 NE/4

**TOWNSHIP 18 SOUTH, RANGE 35 EAST, N.M.P.M.**

Section 6: N/2 NW/4, NW/4 NE/4, SW/4  
NW/4, N/2 NE/4 NE/4, SW/4  
NE/4 NE/4, NW/4 SE/4 NE/4,  
N/2 SW/4 NE/4, N/2 SE/4  
NW/4, SW/4 SE/4 NW/4, N/2  
NW/4 SW/4, NW/4 NE/4 SW/4

4. Order No. R-5530-E authorizes tertiary recovery operations within the Central Vacuum Unit and specifically provides:

WAG injection operations shall be accomplished through internally coated tubing installed in a packer set within approximately 100 feet of the uppermost injection perforations or casing shoe; 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 determine leakage in the casing; tubing or packer. (Order Paragraph 3, Order No. R-5530-E)

5. The following approved injection wells in the Central Vacuum Unit located in failed mechanical integrity surveys:

CVU Well No. 6 (**API No. 30-25-25809**), Section 30-17S-35E  
CVU Well No. 16 (**API No. 30-25-25793**) Section 30-17S-35E  
CVU Well No. 27 (**API No. 30-25-25815**) Section 25-17S-34E  
CVU Well No. 57 (**API No. 30-25-25732**) Section 36-17S-34E  
CVU Well No. 58 (**API No. 30-25-25724**) Section 36-17S-34E  
CVU Well No. 71 (**API No. 30-25-25727**) Section 36-17S-34E

6. The first three of these failures, on the CVU Wells 71, 57, and 58, occurred in late 2002. Thereafter Chevron representatives contacted the Oil Conservation Division, District I, to determine what corrective action was required to address the problems with these wells and return them to injection. Following meetings with the Division's District Office, Chevron was authorized to correct the problems in these wells by cementing the casing-tubing annulus and injecting down the tubing. Subsequently, the Division approved a Form C-103 (Sundry Notice and Report on Wells) for each of these wells. Since establishing this remedial protocol, similar remedial steps were taken in the CVU Wells 6, 16 and 27 to address casing problems and subsequent C-103 reports were approved.

7. On June 5, 2009, Chevron filed a Subsequent Report providing the Division with additional information accidentally omitted from a Sundry Notice dated July, 22, 2008 filed on

the VGSAU Well No. 47 in which it had been authorized by the Division I District Office to cement the casing-tubing annulus.

8. This Sundry Notice was denied by the Division on June 23, 2009 and on August 4, 2009, the Oil Conservation Division's Santa Fe Office through its Compliance and Enforcement Manager, wrote Chevron and instructed Chevron to "comply with the existing orders as written, or it may seek to amend the orders through the hearing process."

9. Chevron ceased injection in the VGSU #47 on May 22, 2009 following the verbal request of the Division's District I Office. On July 15, 2009, via telephone conversation, Mr. Will Jones of the Division's Santa Fe Office instructed Scott Ingram of Chevron that the other subject wells could remain active pending a hearing.

10. Since this time, Chevron has reviewed its New Mexico properties and located all wells that use this configuration. Chevron has identified these wells to the Division and has also conducted blanking plug tests of the tubing in each well to confirm its current integrity. These tests were coordinated with the Division. The first test was witnessed by Division I field representatives and the same process was followed in conducting all subsequent tests.

11. Chevron seeks amendment of Order No. R-5530-E to authorize the injection of fluids in this pressure maintenance project by cementing the casing-tubing annulus and injecting through the tubing.

12. Chevron further seeks amendment of the provisions in Order No. R-5530-E to base the authorized injection pressure in this tertiary project on average reservoir pressure, like other tertiary recovery units in these formations, instead of the currently authorized surface pressure.

13. While reviewing its records, Chevron recognized that over time it had requested and received District I Office verbal approval to set the injection packer in certain wells in this unit more than 100 feet above the uppermost injection perforations or casing shoe.

14. In each case, prior to setting packers at these depths, Chevron reviewed the setting depth with the Division's District I office and received the District Offices' approval of the setting depth on a Division Sundry Notice Form.

15. Chevron seeks an exception to the provisions of Order No. R-5530-E, as amended, for the setting depths of these packers.

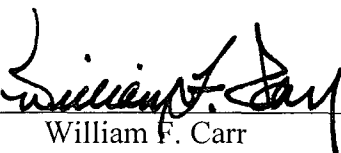
16. Chevron will provide notice of this application pursuant to Oil Conservation Division rules and regulations.

17. Approval of this application will afford Chevron the opportunity to produce its just and equitable share of the remaining reserves in the Central Vacuum Unit and will otherwise be in the best interest of the conservation, the protection of correlative rights and the prevention of waste.

WHEREFORE, Chevron U.S.A. Inc. requests that this matter be set for hearing before a duly appointed Examiner of the Oil Conservation Division on November 13, 2009 and after notice and hearing as required by law, the Division enters its Order granting this application.

Respectfully submitted,

HOLLAND & HART LLP

By: 

William F. Carr  
Post Office Box 2208  
Santa Fe, New Mexico 87504  
Telephone: (505) 988-4421

ATTORNEYS FOR CHEVRON U.S.A. INC.

CASE 14401 :

Application of Chevron U.S.A. Inc. for amendment of Division Order No. R-5530-E to revise the injection well completion requirements and to change the basis for the calculation of the authorized injection pressure for carbon dioxide from surface pressure to the average reservoir pressure in its previously approved tertiary recovery project in the Central Vacuum Unit EOR Project Area, Lea County, New Mexico. The Central Vacuum Unit EOR Project Area encompasses portions of Sections 25 and 36 of Township 17 South, Range 34 East, Sections 30 and 31 of Township 17 South, Range 35 East, and portions of Section 6 of Township 18 South Range 35 East, N.M.P.M. Said unit is located approximately 22 miles northwest of Hobbs, New Mexico.