



December 22, 2010

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| Mr. Mark E. Fesmire | | |
| Oil Conservation Division | N | |
| New Mexico Department of Energy, | N | property on p |
| Minerals and Natural Resources | T | - mare |
| 1220 South Saint Francis Drive | description of | |
| Santa Fe, New Mexico 87505 | | الرود ميدا و مدسسينيم |
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Re: <u>Case No. 14329/Order No. R-13201</u>: Application of Anadarko Petroleum Corporation for Approval of an Acid Gas Injection Well, San Juan County, New Mexico.

Dear Mr. Fesmire:

VIA HAND-DELIVERY

Anadarko Petroleum Corporation ("Anadarko") requests an amendment of Order No. R-13201 which was issued in Case No. 14329 granting Anadarko's application to inject acid gas into the Entrada formation through its Pathfinder AGI Well No. 1 located in Section 1, Township 29 North, Range 15 West, NMPM, San Juan County, New Mexico. Ordering Paragraph 22 of Order No. R-13201 allows the Division Director to amend the order administratively after proper notice and in the absence of protest. Anadarko requests the following amendments to the order:

- 1. Authorized Injection Zone (Page 4, paragraph 1): The order currently authorizes "disposal into the Entrada formation at a depth of 6,500 feet to 6,700 feet below the surface, through 2 7/8-inch tubing set in a packer located approximately 6,480 feet below the surface." Anadarko testified during the hearing that the specified depth interval was "approximate" due to the nearest control well being approximately 5 miles away. Upon drilling of the AGI well, the Entrada formation actually occurs at approximately 6350-6490 feet below the surface. As a result we request that the language in the last sentence of paragraph 1 be amended to read as follows:
 - (1) ... "disposal into the Entrada formation at an approximate depth of 6350-6490 feet below the surface and that the packer be located approximately 6285 feet below the surface."



2. Well construction (Page 4, paragraph 6, last sentence): The order currently requires:

"The surface casing shall be set at 1,100 feet and there shall be a total of three casing strings, all with cement circulated to the surface." Anadarko was able to achieve the circulation of cement to the surface on two of the three strings; however, on the production casing we were able to achieve cementing to 660' below the surface, which is 440' above the base of the surface casing after a cement squeeze job approved by NMOCD's Aztec office. This is well within acceptable completion specifications. As a result we request that the language in the last sentence of paragraph 6 be amended to read as follows:

(6)... The surface casing shall be set at 1,100 feet and there shall be a total of threes casing strings, and the cement must be circulated to at least 1000 feet below the surface or 100 feet above the base of the surface casing.

At your direction, Anadarko has notified parties within a one mile Area of Review and a copy of the notice is also enclosed for your reference.

Also, attached please find a proposed order for your consideration.

Very truly yours,

Ocean Munds-1Dry
Ocean Munds-Dry

Attorney for Anadarko Petroleum COrporation

cc: Linda Kuhn, Esq. (Anadarko) Mikal Altamore, Esq. (OCD) Enclosures





December 22, 2010

VIA CERTIFIED MAIL-RETURN RECEIPT REQUESTED

TO AFFECTED LANDOWNERS

Re: <u>Case No. 14329/Order No. R-13201</u>: Application of Anadarko Petroleum Corporation for Approval of an Acid Gas Injection Well, San Juan County, New Mexico.

Ladies and Gentlemen:

Anadarko Petroleum Corporation ("Anadarko") has filed the enclosed application for an amendment of Order No. R-13201 which was issued in Case No. 14329 granting Anadarko's application to inject acid gas into the Entrada formation through its Pathfinder AGI Well No. 1 located in Section 1, Township 29 North, Range 15 West, NMPM, San Juan County, New Mexico. Ordering Paragraph 22 of Order No. R-13201 allows the Division Director to amend the order administratively after proper notice and in the absence of protest.

If you have any questions regarding this application, you may contact Mr. Alberto Gutierrez at 500 Marquette Avenue NW, Suite 1350, Albuquerque, NM 87102 or (505)842-8000.

Objections to this application or requests for hearing must be filed with the New Mexico Oil Conservation, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 within fifteen days of the date of this letter. If no objection is received within fifteen (15) days after the Division Director receives this application, the application will be approved.

Sincerely

Ocean Munds-Dry

Attorney for Anadarko Petroleum Corporation



Ocean Munds-Dry omundsdry@hollandhart.com

December 22, 2010

VIA CERTIFIED MAIL-RETURN RECEIPT REQUESTED

TO OFFSET LEASEHOLD OPERATORS

Re: <u>Case No. 14329/Order No. R-13201</u>: Application of Anadarko Petroleum Corporation for Approval of an Acid Gas Injection Well, San Juan County, New Mexico.

Ladies and Gentlemen:

Anadarko Petroleum Corporation ("Anadarko") has filed the enclosed application for an amendment of Order No. R-13201 which was issued in Case No. 14329 granting Anadarko's application to inject acid gas into the Entrada formation through its Pathfinder AGI Well No. 1 located in Section 1, Township 29 North, Range 15 West, NMPM, San Juan County, New Mexico. Ordering Paragraph 22 of Order No. R-13201 allows the Division Director to amend the order administratively after proper notice and in the absence of protest.

If you have any questions regarding this application, you may contact Mr. Alberto Gutierrez at 500 Marquette Avenue NW, Suite 1350, Albuquerque, NM 87102 or (505)842-8000.

Objections to this application or requests for hearing must be filed with the New Mexico Oil Conservation, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 within fifteen days of the date of this letter. If no objection is received within fifteen (15) days after the Division Director receives this application, the application will be approved.

Sincerely

Ocean Munds-Dry

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Attorney for Anadarko Petroleum Corporation

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:

APPLICATION OF ANADARKO PETROLEUM CORPORATION FOR APPROVAL OF AN ACID GAS INJECTION WELL, LEA COUNTY, NEW MEXICO.

CASE NO. 14329 ORDER NO. R-13201-A

ORDER OF THE DIVISION

BY THE DIVISION:

THIS MATTER came before the Oil Conservation Division for hearing on October 15, 2009 and on December 16, 2009, the Division entered Order No. R-13201, which granted the application of Anadarko Petroleum Corporation to inject acid gas into the Entrada formation through a well to be drilled 1650 feet from the North line and 2310 feet from the West line (Unit F) of Section 1, Township 29 North, Range 15 West, NMPM, San Juan County, New Mexico.

| NOW, on this day of, 2010, the Division Direct | day of, 2010, the Division Div | rector |
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FINDS THAT:

- (1) In Order No. R-13201, the Division Director may amend the order administratively, after proper notice, and in the absence of protest.
- (2) Anadarko has requested certain amendments to Order No. R-13201 in order to correct information that has changed since the drilling of the well.
- (3) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.
- (4) Anadarko has requested that the provision in Ordering paragraph 1 be amended to state that injection is authorized in the Entrada formation at a depth approximately 6350-6490 feet below the surface and that the packer be located approximately 6285 feet below the surface. The order authorized disposal at a depth of 6,500 feet to 6,700 feet below the surface. After drilling the well, the Entrada formation is at 6350 feet to 6490 feet.
- (5) Anadarko has requested that the provision in Ordering paragraph 6 be amended to state that during construction of the well, cement must be circulated to at least 1000 feet or 100 feet above the base of the surface casing. This requirement has been reviewed and approved by

| Case No. 14329 | |
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| Order No. R | · |
| Page 2 of | |
| the Division's Aztec | office and the Engineering Bureau. |

(7) Anadarko's amendment requests are well-taken and should be granted.

IT IS THEREFORE ORDERED:

(1) Ordering paragraph 1 of Order No. R-13201 is amended as follows:

"Anadarko Petroleum Corporation is hereby authorized to drill and complete its AGI Well which it proposes to drill at a location 1650 feet from the North line and 2310 feet from the West line (Unit F) of Section 1, Township 29 North, Range 15 West, NMPM, San Juan County, New Mexico in such a manner as to permit the injection of acid gas, consisting principally of hydrogen sulfide and carbon dioxide from its San Juan River Gas Plant, for disposal into the Entrada formation at a depth of approximately 6350 feet to 6490 feet below the surface, through 2 7/8-inch tubing set in a packer located approximately 6285 feet below the surface."

(2) Ordering paragraph 6 of Order No. R-13201 is amended as follows:

"The well shall be constructed substantially in accordance with the description in the Injection Well Data Sheet attached to Form C-108 filed by the applicant in this case. The surface casing shall be set at 1,100 feet and there shall be a total of three casing strings, all with cement circulated to at least 1000 feet or 100 feet above the base of the surface casing."

(3) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E. DIRECTOR