

**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. 14403  
ORDER NO. R-13183-A**

**APPLICATION OF ARMSTRONG ENERGY  
CORPORATION FOR AMENDMENT OF  
DIVISION ORDER NO. R-13183 TO REMOVE  
THE REQUIREMENT FOR THE PLUGGING  
AND ABANDONMENT OF THE FEDERAL A  
WELL NO. 1, CHAVES COUNTY, NEW  
MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on December 3, 2009, at Santa Fe, New Mexico, before Examiner David K. Brooks.

NOW, on this 12<sup>th</sup> day of January, 2010, the Division Director, having considered the testimony, the record and the recommendations of the Examiners,

**FINDS THAT:**

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

(2) By Order No. R-13183, issued in Case No. 14342 on October 19, 2009, the Division authorized Armstrong Energy Corporation ("Applicant") to institute waterflood operations in the Round Tank Queen Waterflood Unit by injecting water into its Rock Tank Queen Unit Well No. 7 (API No. 30-005-64112) ("the injection well") located 715 feet from the North line and 825 feet from the East line (Unit A) of Section 30, Township 15 South, Range 29 East, NMPM, in Chaves County, New Mexico.

(3) Ordering Paragraph (9) of Order No. R-13183 requires Applicant, as a condition precedent to exercising the injection authority granted by that Order, to properly re-plug the Federal A Well No. 1 (API No. 30-005-60336), located 2310 feet

from the South line and 330 feet from the West line (Unit L) of Section 29, Township 15 South, Range 29 East.

(4) By this application, Applicant seeks relief from the requirement of Ordering Paragraph (9) of Order No. R-13183.

(5) At the hearing, Applicant appeared through counsel and offered engineering evidence as follows:

(a) The Federal A Well No. 1 is a plugged and abandoned well located 2533 feet southeast of the injection well. It was drilled through the Queen formation at 1624-1638 feet below surface.

(b) The Federal A Well No. 1 was plugged with 35 sacks of cement at 2000 to 2100 feet below surface, and with 100 sacks of cement at the base of the surface casing at 375 feet. The hole between these plugs is not cased, but is filled with heavy mud.

(c) There is a porosity pinch-out that runs in a North-South direction between the injection well and the Federal A Well No. 1. East of the porosity pinch-out, the Queen sands are interlaced with anhydrite, and have very low porosity and permeability.

(d) The low porosity and permeability of the Queen interval in the Federal A Well No. 1 is confirmed by the logs of that well which indicate a porosity in the range of 3% to 4%.

(e) Due to the low porosity and permeability of the Queen interval in the Federal A Well No. 1, fluids injected into the Queen formation through the injected well will not be transmitted to the wellbore of the Federal A Well No. 1. Accordingly, that well will not provide a conduit for such fluids to flow to the surface or invade any other formation.

(f) The District Supervisor of the Division's Artesia District Office and the Assistant Field Manager of the United States Bureau of Land Management's Roswell Field Office concur that re-plugging the Federal A Well No. 1 is unnecessary.

The Division concludes that:

(6) Re-plugging of the Federal A Well No. 1 prior to injection of fluids into the Queen formation through the injection well is not necessary for the protection of underground sources of drinking water, public health or the environment.

(7) Accordingly, this Application should be granted.

**IT IS THEREFORE ORDERED THAT:**

(1) Ordering Paragraph (9) of Order No. R-13183, issued in Case No. 14342 on October 19, 2009, is hereby deleted.


(2) In all other respects, except as expressly modified hereby, Order No. R-13183 shall remain in full force and effect.

(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