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

APPLICATION OF DCP OPERATING COMPANY, LP FOR AUTHORITY TO INJECT TREATED ACID GAS INTO THE LOWER CHERRY CANYON AND UPPER BRUSHY CANYON FORMATIONS THROUGH ITS PROPOSED ZIA AGI #1 AND ZIA AGI #2, LEA COUNTY, NEW MEXICO.

CASE NO. 15073 (Re-opened) ORDER NO. R-13809-B

ORDER OF THE COMMISSION

THIS MATTER came before the Oil Conservation Commission ("Commission") on the application of DCP Operating Company, LP (formerly DCP Midstream, LP) ("DCP") to amend Order No. R-13809 to modify the requirement to conduct remedial work on four wells identified in Paragraph 33 of the Order. The Commission, having conducted a public hearing on September 13, 2018, and having considered the testimony, the record, and the arguments of the Applicant, and being otherwise fully advised, enters the following findings, conclusions and modifications to Order No. R-13809.

THE COMMISSION FINDS THAT:

- 1. Notice has been given of the application and the hearing of this matter, and the Commission has jurisdiction of the parties and the subject matter herein.
- 2. On August 1, 2018, DCP filed an application for hearing with the Commission to re-open Case No. 15073, seeking to amend Order No. R-13809 to modify Paragraph 33 to remove the requirement to potentially conduct remedial work on four wells identified by the Division.
- 3. DCP presented one technical witness, Alberto Gutierrez, RG, who testified on behalf of DCP.
 - 4. No other parties entered an appearance in the case.
- 5. Order No. R-13809 was issued by the Commission on March 13, 2014. It approved DCP's Form C-108 application and authorized DCP to drill, operate, and inject treated acid gas into two deviated acid gas injection wells, Zia AGI No. 1 and No. 2, pursuant to certain conditions and modifications. *See* Order R-13809, Ordering ¶¶ 1-2.

- 6. Among the conditions imposed in Order No. R-13809 is the requirement that "DCP agrees to undertake good faith efforts at remedial actions addressing the requirements of the Division with respect to each of the four wells identified in the findings of this Order that penetrate the injection zone." *Id.*, Ordering ¶3.
- 7. Finding Paragraph 33 of Order No. R-13809 identifies the four wells, as follows:
 - a. Delhi Federal-001 well (API No. 30-025-20025);
 - b. Lusk Deep Unit A-005 well (API No. 30-025-20122);
 - c. Gulf Federal-003 well (API No. 30-025-20876); and
 - d. Lusk Deep Unit-008 well (API No. 30-015-10382).
- 8. After Order No. R-13809 was issued, DCP proceeded to drill, test, and complete the Zia AGI No. 1 (API No. 30-025-42208). The well was spudded on December 23, 2014, at the approved location in Section 19, Township 19 South, Range 32 East, NMPM, Lea County, New Mexico, and completed at a bottom hole location 2090 feet from the North line and 826 feet from the West line in the same Section.
- 9. DCP began injecting into the Zia AGI No. 1 well in September 2015, targeting the Permian Cherry Canyon and Brushy Canyon formations in the Delaware zone at depths of approximately 5,500 to 6,200 feet.
- 10. Through February 2017, DCP operated the Zia AGI No. 1 well for a total of 553 days with an average injection rate of 2.6 MMSCFD. The total amount of treated acid gas injected into the Zia AGI No. 1 well was 1,449.8 MMSCF, or about 1.4 BSCF.
- 11. DCP did not drill the Zia AGI No. 2 well and does not intend to drill or inject into the Zia AGI No. 2 well.
- 12. Following injection into the Zia AGI No. 1 well, DCP determined that injection capacity within the target Cherry Canyon and Brushy Canyon formations in this location is suboptimal.
- 13. Subsequently, DCP identified a deeper target injection zone within the Devonian and Upper Silurian and Wristen and Fusselman formations. In Case No. 15528, DCP filed an application seeking authorization to inject treated acid gas into these formations for disposal through a new proposed Zia AGI No. 2D well (API No. 30-025-42207). The Commission approved DCP's application in Order No. R-14207 and authorized injection through the proposed Zia AGI No. 2D well.
- 14. The AGI No. 2D well was spudded on November 2, 2016. Following testing and evaluation, the well began injecting treated acid gas in February 2017.

- 15. DCP intends to maintain and operate both the Zia AGI No. 1 well and the Zia AGI No. 2D well to handle treated acid gas disposal from the Zia Gas Plant at a combined maximum rate of 15.0 MMSCF per day. DCP will operate the Zia AGI No. 2D well as the primary injection well. The Zia AGI No. 2D well can inject the entire volume of 15.0 MMSCFD of treated acid gas.
- 16. DCP will maintain the Zia AGI No. 1 well in operational status but will use it as needed to maintain operational status by injecting only relatively small volumes of treated acid gas intermittently, such as during routine maintenance of the Zia AGI No. 2D well.
- 17. The calculated plume radius in the Cherry Canyon and Brushy Canyon formations for the 1.4 BSFC of treated acid gas injected in the Zia AGI No. 1 well after 553 days of injection at an average rate of 2.6 MMSCFD is approximately 186 feet from the bottom hole location.
- 18. The nearest of the four wells identified in Paragraph 33 of Order No. R-13809 is the Gulf Federal 003 well, which is approximately 950 feet northeast from the bottom hole injection point of the Zia AGI No. 1 well.
- 19. Ten BCF of treated acid gas would need to be injected into the Zia AGI No. 1 well for the calculated plume radius to reach half the distance, or 475 feet, to the Gulf Federal 003 well.
- 20. The need to evaluate and potentially remediate the four wells identified in Paragraph 33 of Order No. R-13809 is potentially necessary only if injection of treated acid gas through the Zia AGI No. 1 well approaches 10 BCF, and only if the conditions of the subject wells and circumstances at such time warrant evaluation or remediation.
- 21. The volumes of treated acid gas expected to be injected into the Zia AGI No. 1 well are not anticipated to reach 10 BCF. It is unlikely therefore that injection into the Zia AGI No. 1 well will affect any of the four wells identified for potential remedial work in Paragraph 33 of Order No. R-13809.
- 22. DCP agrees to notify the Division if the cumulative injection volumes of treated acid gas into the Zia AGI No. 1 well ever reaches 9 BCF.
- 23. DCP conferred with the Division and the Division does not oppose the application.

THE COMMISSION CONCLUDES THAT:

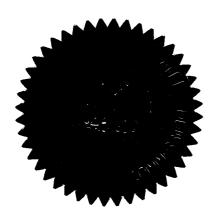
24. The Commission has jurisdiction over the parties and the subject matter of this case.

- 25. Proper public notice has been given. Proper individual notice has been given to all operators, surface owners, and lessees within a one-mile radius of the Zia AGI No. 1 well.
- 26. The application is supported by substantial evidence in the record and should be granted.
- 27. Under the conditions approved in this Order, DCP's injection of treated acid gas can be conducted in a safe manner without causing waste, impairing correlative rights, negatively impacting oil and gas producing zones, or endangering fresh water, public health, or the environment.
- 28. The specific conditions imposed are necessary to ensure protection of public health, the environment, and correlative rights.

IT IS THEREFORE ORDERED THAT:

- 1. Order Nos. R-13809 and R-14207 are modified to provide that the maximum daily injection rate of 15 MMSCF (R-14207, Ordering ¶1) is applied to the combined daily injection at wells Zia AGI No. 1 and Zia AGI No. 2D.
 - 2. Ordering Paragraph 3 in Order No. R-13809 is modified as follows:
 - 3. DCP agrees to undertake good faith efforts at remedial actions addressing the requirements of the Division with respect to each of the four wells identified in the findings of this Order that penetrate the injection zone if the cumulative volume of treated acid gas injected into the Zia AGI No. 1 well ever reaches 9 BCF.
- 3. Because DCP no longer intends to drill, operate, or inject treated acid gas into the proposed Zia AGI No. 2 well, which was approved under Order No. R-13809, authorization to inject into the Zia AGI No. 2 well is hereby terminated.
- 4. All other provisions in Order Nos. R-13809, R-13809-A, and R-14207 shall remain in full force and in effect.

DONE at Santa Fe, New Mexico, on this 11th day of October, 2018.



SEAL

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

POBEAT BALCH, MEMBER

ED MARTIN, MEMBER

HEATHER F. RILEY, CHAIR