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

APPLICATION OF TARGA MIDSTREAM SERVICES LLC'S TO REPOEN CASE TO OFFER PROOF OF WELL COMPLETION, WELL TEST RESULTS, AND EXTENT OF INJECTION RADIUS

CASE NO. 14575
ORDER NO. R-12809-D

ORDER OF THE COMMISSION

THIS MATTER comes before the New Mexico Oil Conservation Commission ("Commission") on the application of Targa Midstream Services LLC to reopen Case No. 14575. The Commission having conducted a hearing on February 23, 2012 in Santa Fe, New Mexico, and having considered the testimony and record in this Case, enters the following findings, conclusions and order.

THE COMMISSION FINDS THAT:

1. Due public notice has been given, and the Commission has jurisdiction of this case and its subject matter.

2. On December 20, 2010, the Commission entered Order No. R-12809-C authorizing Targa Midstream Services LLC, as operator for Versado Gas Processors, LLC (collectively, "Targa") to recomplete the Eunice Gas Plant SWD Well No. 1 (API No. 30-025-21497), which is located 2,580 feet from the south line and 1,200 feet from the west line Unit L of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico as described in that order ("Eunice AGI Well") to permit the injection of oilfield produced water, natural gas processing plant wastewater and compressed acid gas (hydrogen sulfide and carbon dioxide) as comingled or separate streams into the San Andres formation at an open whole depth interval from 4,250 feet to 4,850 feet below the surface.

3. In Paragraph C and D of Order No. R-12809-C, the Commission established requirements for the completion and operation of the well. Paragraph F of Order No. R-12809-C, declared that "within one year of the effective date of this Order, the operator shall move to reopen Case No. 14575 for a hearing to offer proof that it has completed the well and is operating the well in accord with the requirements of this Order, to present the results of pressure transient testing to determine the extent of plume propagation, and to determine the time limit for the permit. If the operator does not file its

motion within one year of the effective date of this Order, its authority to inject under this Order shall terminate automatically."

4. On October 27, 2011, Targa filed a Motion to Reopen Case to Offer Proof of Well Completion, Well Test Results, and Extent of Injection Radius. At the direction of the Commission, the Motion was set for hearing before the Commission pursuant to the provisions of the Commission's Rules.

5. This case was heard on February 23, 2012. The only testimony was presented by Targa and by the Oil Conservation Division ("Division").

6. Targa produced one witness at this hearing, Alberto A. Gutierrez, CPG, a professional petroleum geologist and hydrogeologist from Geolex, Inc. Mr. Gutierrez testified that:

a. The Eunice AGI Well has been completed with a disposal interval above 4,850 and below 4,250 feet;

b. The packer in the Eunice AGI Well has been set within 100 feet above the casing shoe and the open hole interval;

c. Targa has run open hole electric logs on the disposal interval, including porosity and resistivity logs, and has submitted copies of the logs to the Division;

d. Targa has equipped the injection tubing so as to keep the acid gases under pressure and in a less corrosive phase. The injection tubing is coated or constructed to prevent or retard corrosion from a mixture of hydrogen sulfide, wastewater, and carbon dioxide;

e. Targa has installed a one-way safety valve in the tubing below the level of the well head, to prevent backflow of disposed fluids;

f. Targa is maintaining the tubing/casing annulus loaded with diesel or other inhibited fluid, and has installed pressure gauges on the tubing and tubing/casing annulus. The readings from those meters and gauges are being remotely transmitted to Targa's plant site and the data is being recorded and stored for review by Division inspectors;

g. Targa has installed meters to measure the volumes of disposed water and disposed acid gas, and is maintaining records of the volumes of water and acid gas injected;

h. Targa ran a step-rate test (using an inert fluid and not acid gas) after the open hole was completed for disposal and before acid gas disposal was commenced and has provided the results of that test to the Division. The procedure for

this test was approved by the Division prior to the test and Division personnel were given an opportunity to witness the test;

i. Targa ran a tracer and temperature injection survey of the Eunice AGI Well as soon as practicable after the completion of the well and while injecting water (not acid gas) at a representative rate which approximated the disposal rate and has supplied the results of that survey to the Division;

j. After installing the injection tubing, but prior to commencing injection operations, Targa conducted a pressure test of the casing from the surface to the packer-setting depth to assure casing integrity;

k. Before injecting acid gas, Targa obtained approval from the Division's Environmental Bureau for a Hydrogen Sulfide Contingency Plan that complies with 19.15.11 NMAC;

l. Targa has remediated the existing Legacy Reserves Operating, LP Langlie Mattix Penrose Sand Unit Well No. 252 (API No. 30-025-10499) and drilled out existing plugs down to 4,073 feet and has plugged back the well to 3,700 feet using cement retainer squeeze cementing or verified cement plugs, under the direction of the Hobbs District Office of the Division;

m. Targa has provided the Division with corrected reports of disposal volumes and disposal pressures for the Eunice Plant SWD Well #1;

n. Targa has calculated that, injecting into the Eunice AGI well at the maximum daily rate, it will take more than 30 years for the acid gas plume to reach ½ mile from the Eunice AGI Well. Targa calculates that over an injection period of 30 years at the maximum daily rate, the injected fluid will occupy a volume equivalent to approximately 48% of the available pore space within one-half mile of the well. This would encompass approximately 240 acres of footprint, with a radius of 0.35 miles. Targa therefore requests that the authority to inject into the Eunice AGI will extend through and including August 22, 2041;

o. Targa has been injecting at a pressure of no more than 1300 psi. Because the results of the step rate test indicate that a higher pressure is acceptable, Targa is requesting an increased pressure limit of 1600 psi. Targa makes this request in accordance with ordering paragraph D of Order No. R-12809-C which specifically authorizes Targa to "request an increased pressure limit when it re-opens the case for determination on the length of the permit term;"

p. Targa requests authority to perforate the casing from 4,210 to 4,250 feet and to inject into that interval. This would add 40 feet of quality injection reservoir while still providing a buffer of more than 200 feet to the overlying Grayberg Formation. The additional injection interval would reduce the overall radius of injection after 30 years from 0.35 miles to 0.32 miles; and

q. Targa believes that the approval of the 30-year term for injection into the Eunice AGI Well, the increase in the pressure limit from 1300 psig to 1600 psig and the authorization to perforate and inject into the zone from 4,210 to 4,250 feet will be protective of public health, fresh water, and the environment, will protect producing zones and prevent waste.

r. Targa does not oppose increasing the frequency of mechanical integrity tests to annually and does not oppose some form of test every ten years to monitor injection rates within the various zones.

7. The Oil Conservation Division presented one witness at this hearing, Will Jones, a regulatory engineer and hearing examiner within the Division. Mr. Jones testified that:

a. The Division does not oppose the granting of a permit to inject acid gas into the Eunice AGI Well;

b. However, the Division recommends that, at some definitive point after Targa begins injecting into the well and possible every five years thereafter, Targa conduct an appropriate test to determine whether or not a zone or zones are accepting the injection material more quickly than other zones;

c. The Division also recommends that the Commission require Targa to conduct a mechanical integrity test on the Eunice AGI Well every year to monitor pressure and determine if any changes to the allowable pressure are necessary;

d. The Division also recommends that Targa be required to develop a contingency plan which would include mutually acceptable upper and lower limits for operating pressures on the annulus tubing that define normal operating parameters, the exceedance of which would require Targa to notify the Division of a potential mechanical problem with the Eunice AGI Well; and

e. The Division opposes Targa's request for authority to perforate the casing from 4,210 to 4,250 feet and to inject into that interval at this time because an increase in the upper level increases the risk that shallower wells may be impacted sooner and there is not sufficient evidence to support the change.

8. The proposed operation is an environmentally superior means of disposing of wastes generated at the Eunice Gas Plant because it will provide for the sequestration of the greenhouse gases, hydrogen sulfide and carbon dioxide.

9. Due to the probable complexity of this Order and the possibility of adjustments, the Order should include a provision allowing the operator to apply administratively, after proper notice, for amendment – except for amendments changing the injection formation.

THE COMMISSION CONCLUDES THAT:

1. The Commission is empowered to regulate the disposition of nondomestic waste resulting from the treatment of natural gas or the refinement of crude oil to protect public health and the environment. NMSA § 70-2-12(B)22 (1978). The Commission has a statutory duty to prevent waste and protect correlative rights. NMSA 70-2-11(A).

2. Targa has provided evidence that it has met the conditions provided in Order R-12809-C, including recompleting Eunice Gas Plant SWD Well # 1, conducting the required tests and providing data to the Division and Commission and performing remedial work.

3. There is sufficient evidence in the record to support granting Targa an injection permit for the Eunice AGI Well for 30 years subject to the conditions provided in this Order. There is also sufficient evidence to authorize an increase in operating pressure from 1300 psi to 1600 psi, but there is not sufficient evidence to authorize a change in the depth of injection. The evidence supports that these operations can be conducted in a safe and responsible manner, without causing waste, impairing correlative rights or endangering fresh water, public health or the environment.

4. The conditions imposed by this Order on the injection permit are necessary to ensure the prevention of waste and the protection of correlative rights and the protection of fresh water, public health and the environment.

IT IS THEREFORE ORDERED THAT:

1. Targa Midstream Services LLC ("Targa" or "Operator") is hereby authorized to inject, at a maximum rate of 4,075 barrels per day, oilfield produced water, natural gas processing plant wastewater and compressed acid gas (hydrogen sulfide and carbon dioxide) as comingled or separate streams for disposal purposes into its recompleted SWD Well No. 1 which is located 2,580 feet from the South line and 1,200 feet from the West line of Section 27, Township 22 South, Range 37 East, NMPM, in Lea County, New Mexico ("Eunice AGI Well"). Injection is permitted into the San Andres formation through the open hole from approximately 4,250 feet to 4,950 feet below the surface for a period of thirty (30) years from the date of this Order.

2. At least ninety (90) days before both the tenth (10^{th}) and twentieth (20^{th}) anniversary of the date of this Order, Targa shall provide information to the Division to allow for the Division to review the permit. The information shall include the results of a temperature fallback, temperature decay, or other equivalent test approved by the Division and conducted by Targa no more than ninety days prior to the submittal of the results to the Division.

3. Targa's request to increase the maximum operating pressure for the Eunice AGI Well from 1300 psi to 1600 psi is granted. Targa shall inject at a pressure of no more than 1600 psi.

4. Targa's request to perforate the casing from 4,210 to 4,250 feet and to inject into that interval is denied without prejudice to Targa's right to reapply for such authorization at a later time.

5. Targa shall conduct a mechanical integrity test on the Eunice AGI Well once per year throughout the term of this Order and provide the results to the Division.

6. Within one hundred twenty (120) days of the entry of this Order, Targa and the Division shall meet and develop mutually agreeable criteria for a contingency plan which shall include the upper and lower limits for operating pressures on the tubing annulus that define normal operating parameters, the exceedance of which would require Targa to notify the Division of a potential mechanical problem with the Eunice AGI Well, and a backup plan for mechanical failure at the Eunice AGI Well..

7. Targa or any successor operator of the Eunice AGI Well shall take all steps necessary to insure that injected fluids enter the proposed injection interval and do not escape to other formations or onto the surface.

8. Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise; the operator shall immediately notify the District of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

9. Compliance with this Order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

10. At the discretion of the Division Director and after proper notice is provided, any proposed amendments or changes to this Order may be granted administratively; provided however, proposed amendments to change the target injection formation may be granted only after notice and hearing.

11. Jurisdiction is retained by the Commission for the entry of 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 (i) to protect fresh water or (ii) consistent with the requirements in this order, whereupon the Commission may, after notice and hearing, terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on the 28th day of March, 2012.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

ROBERT BALCH, Member

SCOTT DAWSON, Member

JAMI BAILEY, Chair

SEAL