

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Tony Delfin
Acting Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



Administrative Order SWD-1654
November 10, 2016

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, Targa Midstream Services, LLC (the "operator") seeks an administrative order for its Monument AGI D Well No. 2 with a surface location 770 feet from the South line and 2268 feet from the West line, Unit letter N of Section 36, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico, for the purpose of treated acid gas (TAG) disposal from the Monument Gas Processing facility. This administrative order is being issued for replacement of the acid gas injection well approved under Commission Order No. R-13052 (as amended), dated November 18, 2008.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8(B) NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objection was received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

The administrative approval of this order by the Director without hearing before the New Mexico Oil Conservation Commission is to prevent waste resulting from the lost processing capacity of the facility. For approval without hearing, the Commission has recommended that the order incorporate comparable standards and conditions for construction, operation, and reporting contained in Commission Order No. R-14207, dated September 6, 2016.

IT IS THEREFORE ORDERED THAT:

The applicant, Targa Midstream Services LLC (OGRID 24650), is hereby authorized to utilize its Monument AGI D Well No. 2 (API 30-025-Pending) with a surface location 770 feet from the South line and 2268 feet from the West line, Unit letter N of Section 36, Township 19 South, Range 36 East, NMPM, Lea County, for disposal of TAG only in the Devonian and Silurian formations through open hole from 8350 feet below surface to 9210 feet below surface. Injection will occur through specifically designed, 3½-inch tubing and a packer set within 100 feet of the top of the open-hole interval.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the TAG enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the completion and construction of the well as proposed in the application and, if necessary, as modified by the District Supervisor.

As a requirement of this order, the operator shall be responsible for fulfilling the proposed well construction, well testing, operation and monitoring as described in the Form C-108 application dated October 19, 2016, and submitted by Geolex, Inc. on behalf of the operator. Exhibit "A" of this administrative order provides a summary of these conditions.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11(A) NMAC, except for the MIT schedule requirement under Rule 19.15.26.11(A)(2) NMAC which is reduced from every five-years to each year (an annual MIT). The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 3000 psi (TAG only) and a maximum rate of 2.5 million standard cubic feet per day of TAG.** This wellhead injection pressure is based on an acceptable Step-Rate Test (SRT) conducted in support of Administrative Order IPI-416, dated June 14, 2012. To verify the pressure approved in this section, the operator shall be required to submit, to the Engineering Bureau in Santa Fe, the results of the SRT proposed in Section 3.3 Reservoir Testing and Pressure Monitoring of the C-108 application. The Director of the Division may authorize a modification of the wellhead injection pressure following review of the SRT results. The disposal well shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well. Additionally, the operator shall incorporate temperature controls to govern the temperature of injected TAG within parameters set by the operator and provide an alarm system for those controls should the parameters be exceeded.

The Director may authorize an additional increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the TAG from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable SRT.

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal

to the Division's District I office.

The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC. Additionally, the operator shall provide summary data on the monitored injection parameters as required by this order in quarterly reports. After one year following commencement of injection and at the request of the operator, the Division may approve the submission of such reports annually. The operator shall provide a report at the completion of every tenth year of injection summarizing the wells performance and potential calibration of models due to the information collected during the prior ten-year cycle.

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 Division's District I office 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.

Thirty (30) days prior to commencing injection, the operator shall coordinate with the Division to establish immediate notification parameters for annular pressure and tubing and casing differential pressure at a set injection pressure. Ninety (90) days after commencing injection, the operator shall review the pre-injection notification parameters with the Division. If the Division determines that the parameters requires modification, new immediate notification parameters shall be developed and implemented in coordination with Division. The operator shall review jointly with the Division the immediate notification parameters periodically, but not less frequently than once a year.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection order after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

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.

Jurisdiction is retained by the Division for the entry of such 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 (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



DAVID R. CATANACH
Director

DRC/prg

Attachment: Exhibit "A"; Conditions of Approval: SWD-1654; Monument AGI D Well No. 2

cc: Oil Conservation Division – Hobbs District Office

EXHIBIT "A"
Conditions of Approval: SWD-1654; Monument AGI D Well No. 2

(1) Section 3.2 Well Design

[Pages 5 to 7, and Figure 3 of the Form C-108 application]

The operator shall incorporate all specifications as proposed in the application including the installation of a subsurface safety valve in the tubing at a depth of approximately 250 feet below surface. Additionally, the operator shall include a biocide component in the inert annular fluid of the well.

The operator shall provide proper notice (Division Form C-103) of any changes or modifications to the District for approval by the District Supervisor prior to initiating the described changes or modifications.

(2) Section 3.3 Reservoir Testing and Pressure Monitoring

[Pages 7 and 8 of the Form C-108 application]

The operator shall conduct the testing and monitoring as proposed including the following specific items:

1. Obtain initial bottom hole pressure and temperature after drilling (during logging).
2. Perform detailed step-rate test (SRT) and falloff test to provide baseline reservoir data prior to injection.
3. Monitor surface parameters (injection pressure, temperature and rate, and annular pressure) to provide early warning system for any potential mechanical issues in the well. As part of this monitoring parameters, the operator shall also maintain a record documenting the replacement activities of annular fluid.
4. Monitor bottom-hole pressure/temperature with a device to provide real time reservoir condition data for analysis of reservoir performance.
5. Use bottom hole reservoir and surface pressure/temperature (P/T) data to develop well-specific empirical relationship between observed surface and bottom hole data.
6. Use TAG/wellbore models to predict bottom hole P/T conditions based on surface data and test with empirical relationships observed in Item 5 (above) to calibrate models.
7. Use surface data along with tools in Items 5 and 6 (above) to fill in missing bottom hole data when data drops or sensor failure occurs.
8. In the event of an extended period of bottom-hole pressure/temperature sensor failure, perform periodic bottom hole pressure monitoring using slickline pressure bombs only if data from such temporary device is necessary to fill in data for relevant analyses. After approximately 10 years of operation, perform another detailed SRT and falloff test to compare with baseline prior to injection.
9. Use all data collected along with test results from Items 2 and 9 (above) to produce the required analysis of reservoir performance and comparison with predicted reservoir performance discussed above in Section 3.2. This would be the basis of the required 10-year evaluation of actual reservoir performance vs. predicted performance.