

THE APPLICATION OF BIG C GATHERING, LLC TO CONSTRUCT AND OPERATE A HYDROGEN SULFIDE GAS GATHERING PIPELINE, WAYMOBETTA NO. 43-1 SYSTEM, WHEELER COUNTY, TEXAS

REVIEWED BY: Richard D. Atkins, P.E. - Technical Examiner

DATE APPLICATION FILED: November 20, 2009

DATE REVIEWED: April 12, 2010

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Big C Gathering, LLC ("Big C") requests Commission authority pursuant to Statewide Rules 106, 70 and 36, to construct and operate a hydrogen sulfide (H₂S) gas gathering pipeline in Wheeler County. The proposed sour gas pipeline will transport gas from the Waymobetta 43 Lease, Well No. 1, to the Mobeetie Central Facility Plant Site.

The Commission's Field Operations section has reviewed the application and has determined that the application complies with the applicable provisions of Rule 36. In addition, the Commission's Safety Division and Gas Services Division have reviewed the application and recommend approval. The examiner has also reviewed the application and recommends approval.

DISCUSSION OF THE EVIDENCE

Big C proposes construction of a high pressure sour gas gathering pipeline which will transport gas from the Waymobetta 43 Lease, Well No. 1, to the Mobeetie Central Facility Plant Site. The line will be 6 ⁵/₈ inches in diameter and will be approximately 4,731 feet long. The line is located approximately 2 miles southeast of Mobeetie, Texas, and crosses Texas State Highway 152.

The calculated 100 ppm radius of exposure is 520 feet and the calculated 500 ppm radius of exposure is 135 feet. These calculations are based on a H₂S concentration of 13,500 ppm and a maximum escape volume of 12 MMCFGPD. The maximum operating pressure is 1,500 psig. The 500 ppm radius of exposure contains portions of Texas State Highway 152. The 100 ppm radius of exposure does not include any occupied dwellings. Applicant has submitted a contingency plan in accordance with the provisions of Rule 36(c)(9).

To comply with Statewide Rule 36(c)(8), Big C will use safety control and automatic devices. The line will be protected by high and low pressure sensors and hydrogen sulfide monitors on both ends of the pipeline that will activate Emergency Shutdown Valves (ESDVs). If the monitors sense a high or low pressure condition or an unsafe level of hydrogen sulfide, then the Waymobeteta 43 Lease, Well No. 1, will be shut-in by the ESDVs, which will trigger audible, visual and dial-out alarms. The pipeline will be monitored 24/7.

All materials will satisfy the requirements described in the latest edition of the NACE Standard MR0175-2003. The pipe will be API 5L-X42 grade steel pipe and all welds will be x-rayed. H₂S warning signs compliant with Rule 36(c)(6)(A) and (c)(6)(B) will be posted at all public road crossings as well as intervals along the pipeline frequent enough as to provide warning to avoid accidental rupture of the line by excavation. The signs will indicate poison gas, company name and emergency phone numbers. The line will be buried more than 5 feet below ground level at road crossings and more than 3 feet below ground level along the rest of the right-of-way.

Big C published notice of the application in a newspaper of general circulation in Wheeler County. The notice was published in the *County Star-News* on March 4, 2010. The application was filed with the Wheeler County Clerk on December 28, 2009.

FINDINGS OF FACT

1. On January 11, 2010, Big C Gathering, LLC filed an application for a permit to construct a hydrogen sulfide gas gathering pipeline in Wheeler County.
2. Big C published notice of the application in a newspaper of general circulation in Wheeler County. The notice was published in the *County Star-News* on March 4, 2010. The application was filed with the Wheeler County Clerk on December 28, 2009.
3. No protest to the application was filed with the Commission and no hearing was held.
4. Big C proposes construction of a H₂S gas gathering pipeline in Wheeler County approximately 2 miles southeast of Mobeetie, Texas.
 - a. The 6 ⁵/₈ inch pipeline will transport gas from the Waymobeteta 43 Lease, Well No. 1, to the Mobeetie Central Facility Plant Site in Wheeler County.
 - b. The line will be approximately 4,731 feet long.
5. Pipeline materials and construction will meet the NACE standards as required by Statewide Rule 36 for hydrogen sulfide service.

6. The line will be operated at a maximum pressure of 1,500 psig.
7. The maximum volume delivery design is 12 MMCFGPD. The hydrogen sulfide concentration of the gas to be transported is 13,500 parts per million.
8. The calculated 100 ppm radius of exposure is 520 feet and the calculated 500 ppm radius of exposure is 135 feet.
 - a. The 500 ppm radius of exposure contains portions of Texas State Highway 152.
 - b. The 100 ppm radius of exposure does not include any occupied dwellings.
9. Applicant submitted a contingency plan in accordance with the provisions of Rule 36(c)(9).
10. The pipeline will be constructed subject to Commission inspections for compliance with the appropriate Commission Rules.
11. The Commission's Deputy Director of Field Operations and the Commission's Gas Services Division have reviewed the application and recommend approval.

CONCLUSIONS OF LAW

1. Proper notice was timely given to all parties entitled to notice pursuant to applicable statutes and rules.
2. All things have occurred and have been accomplished to give the Commission jurisdiction in this case.
3. The application complies with Statewide Rules 36, 70 and 106.
4. Approving the application for a permit to construct and operate the proposed gas pipeline is consistent with the rules and safety standards adopted by the Commission.

EXAMINER'S RECOMMENDATION

The examiner recommends that the application of Big C Gathering, LLC to construct and operate the proposed H₂S gas gathering pipeline be approved as set out in the attached Final Order.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner