

June 9, 2005

OIL & GAS DOCKET NO. 05-0242975

THE APPLICATION OF XTO ENERGY INC. TO CONSTRUCT AND OPERATE A HYDROGEN SULPHIDE GAS PIPELINE, AN EXTENSION OF THE TEAGUE SOUR GAS GATHERING SYSTEM, THE N.E. TEAGUE 8" LOOP LINE, FREESTONE COUNTY, TEXAS

APPLICATION REVIEWED BY: Thomas H. Richter, P.E.

DATE APPLICATION FILED: May 18, 2005

DATE REVIEWED: June 9, 2005

EXAMINER'S REPORT AND RECOMMENDATION
STATEMENT OF THE CASE

This is the unprotested application of XTO Energy Inc. for Commission authority pursuant to Statewide Rules 106, 70 and 36 for approval to construct and operate a hydrogen sulphide (H₂S) gas pipeline in Freestone County.

The Commission's Field Operations Section, Gas Services Division and Safety Division have reviewed the application and have determined that the application complies with the applicable provisions of the Commission's Rules. The proposed 8" loop line will be laid along side (same right-a-way) as the low pressure 12" pipeline loop extension connecting the Teague Townsite Plant and nearby Teague Townsite Compressor Station with the N.E. Teague Compressor Station (Oil and Gas Docket No. 05-0241045 approved May 24, 2005). The proposed pipeline will be the discharge line from the N.E. Teague Compressor Station and will send gas to either the Teague Townsite Amine Plant or the Fails-Eubanks Paques Plant for sweetening. The examiner recommends approval of the application.

DISCUSSION OF THE EVIDENCE

The Teague Sour Gas Gathering System (T-4 Permits No. 06595 and 01840) gathers full well stream gas from area wells that produce gas containing hydrogen sulphide. The gathering system delivers produced gas to either the Teague Townsite Gas Plant or the Enbridge Pipeline delivery point. The gathering system, the compressor stations and the gas plant have their own H₂S contingency plans. The proposed 8" loop line will be approximately 29,091 feet in length and will loop around the south portion of the City of Teague to the east and then northward. The high pressure line will be operated at below 1200 psig and the maximum allowed operating pressure is

1440 psig. Overpressure relief valves are set at 1200 psig at the compressor stations. If the pressure on the line reaches 1200 psig the compressors will shut down and default to the flare at the compressor stations. If the line pressure at a station decreases to 15 psig or less, the compressors will shut down on low suction pressure. The maximum through put of the line will not exceed 40 MMCFD.

The H₂S concentration is 1300 parts per million (ppm). The 100 ppm and 500 ppm radius of exposure (ROE) is identical to the existing line and thus the same dwellings and roadways are affected and covered under the existing contingency plan. Statewide Rule 36's authorized Pasquill-Gifford equation estimates the 100 ppm ROE is 1195 feet and the 500 ppm ROE is 546 feet [Section (c)(2)]. The 100 ppm ROE and portions of the 500 ppm ROE includes residential dwellings, city streets, county roads and a state highway.

The submitted contingency plan for the gathering line is in accordance and complies with the provisions of Rule 36(c)(9).

All materials will satisfy the requirements described in the latest editions of NACE Standard MR-01-75-2003. The handling and installation of materials and equipment used in hydrogen sulphide service are to be performed in such a manner so as not to induce susceptibility to Sulphide stress cracking. The gathering line will be new API 5L X-42 Grade steel pipe equipped with a cathodic protection system for external corrosion control. All welds will be x-rayed. The lines will be chemically treated as needed for internal corrosion and monitored with corrosion coupons. 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 lines will be buried more than 5 feet below ground level at road crossings and 3 feet along the rest of the right-of-way.

The proposed line will comply with Statewide Rule 36(c)(8). This is an area that has had H₂S gas production and transmission for many years.

XTO Energy Inc. published notice of the application in a newspaper of general circulation in Freestone County. The notice was published in *The Teague Chronicle* on March 10, 2005. The application was filed with the Freestone County Clerk on March 9, 2005.

FINDINGS OF FACT

1. On December 12, 2004, XTO Energy, Inc. filed an application for a permit to construct hydrogen sulphide gas gathering pipeline extensions in Freestone County.
2. XTO Energy Inc. published notice of the application in a newspaper of general circulation in Freestone County. The notice was published in *The Teague Chronicle* on March 10, 2005. The application was filed with the Freestone County Clerk on March 9, 2005.

3. The Teague Sour Gas Gathering System (T-4 Permit No. 06595) gathers full well stream gas from area wells that produce gas containing hydrogen sulphide and deliver gas from the compressor facility to either the Teague Townsite Gas Plant or the Enbridge Pipeline delivery point. The gathering system, the compressor stations and the gas plant have their own H₂S contingency plans.
4. The proposed 8" loop line will be approximately 29,091 feet in length and will loop around the south portion of the City of Teague to the east and then northward.
 - a. The high pressure line will be operated at below 1200 psig and the maximum allowed operating pressure is 1440 psig. Overpressure relief valves are set at 1200 psig at the compressor stations. If the line pressure at a station decreases to 15 psig or less, the compressors will shut down on low suction pressure.
 - b. The line is designed to go to flare in case of an incident.
 - c. The line is designed to carry a maximum of 40 MMCFD.
 - d. The hydrogen sulphide (H₂S) concentration is 1300 parts per million (ppm).
 - e. Statewide Rule 36's authorized Pasquill-Gifford equation estimates the 100 ppm ROE is 1195 feet and the 500 ppm ROE is 546 feet [Section (c)(2)].
 - f. The 100 ppm ROE and portions of the 500 ppm ROE includes residential dwellings, city streets, county roads and a state highway.
4. Pipeline materials and construction meet the NACE standards as required by Statewide Rule 36 for hydrogen sulphide service.
5. The submitted contingency plan for the line is in accordance and complies with the provisions of Rule 36(c)(9).
6. The pipeline will be constructed subject to Commission inspections for compliance with the appropriate Commission Rules pursuant to Statewide Rule 36(c)(6)(7)(8) and (13).
7. The Commission's Deputy Director of Field Operations, Gas Services Division and Safety 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 XTO Energy Inc. for Commission authority pursuant to Statewide Rules 106, 70 and 36 for approval to construct and operate the proposed hydrogen sulphide gas pipeline extension in Freestone County be approved.

Respectfully submitted,

Thomas H. Richter, P.E.
Technical Examiner
Office of General Counsel