

June 24, 2005

OIL & GAS DOCKET NO. 05-0243021

THE APPLICATION OF XTO ENERGY INC. TO CONSTRUCT AND OPERATE A HYDROGEN SULPHIDE GAS PIPELINE, AN EXTENSION OF THE OAKS SOUR GAS GATHERING SYSTEM, THE H.D. THOMAS #4 TO HUDSON B #10, 10-INCH LINE, LIMESTONE COUNTY, TEXAS

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

DATE APPLICATION FILED: May 23, 2005

DATE REVIEWED: June 24, 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 Limestone 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 10" low pressure line is an extension of the 10" line connecting the Eubanks Compressor Station (formerly the Fails-Eubanks Compressor Station) with the H.D. Thomas #4 (Oil & Gas Docket No. 05-0240713 approved January 18, 2005). The line will gather produced gas from wells between the H.D. Thomas Lease Well No. 4 and the Hudson B Lease Well No. 10. The examiner recommends approval of the application.

DISCUSSION OF THE EVIDENCE

The Oaks Sour Gas Gathering System (T-4 Permit No. 06885) gathers full well stream gas from area wells that produce gas containing hydrogen sulphide. The gathering system delivers produced gas to the Eubanks Compressor Station. Gas will be separated from liquids, compressed and either sent to the Teague Townsite Plant for sweetening and dehydration or sent to the Paques Plant, an H₂S removal plant, before being routed to an amine plant. The gathering system, the compressor stations and the gas plant have their own H₂S contingency plans. The proposed 10" line will be approximately 6,110 feet in length. The low pressure line will be operated below 100 psig and the maximum allowed operating pressure is 1100 psig. Overpressure relief valves are set at 575

psig at the compressor station. If the pressure on the line reaches 575 psig the, the high /low valves on the wells will shut-in the wells, the compressor will shut down and default to the flare at the compressor station. If the line pressure at a station decreases to 15 psig or less, the compressor will shut down on low suction pressure. The maximum through put of the line will not exceed 16 MMCFD.

The H₂S concentration is 700 parts per million (ppm). The 100 ppm and 500 ppm radius of exposure (ROE) is based on the Statewide Rule 36 Pasquill-Gifford equation that estimates the 100 ppm ROE is 460 feet and the 500 ppm ROE is 209 feet [Section (c)(2)]. The line extension does not cross any public roads or encompasses any residential dwellings.

A contingency plan was not necessary for this extension but is incorporated with the previously approved gathering line in accordance 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 line will be buried 3 feet below ground level along the 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 Limestone County. The notice was published in *The Groesbeck Journal* on May 19, 2005. The application was filed with the Limestone County Clerk on May 19, 2005.

FINDINGS OF FACT

1. On May 23, 2005, 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 Limestone County. The notice was published in *The Groesbeck Journal* on May 19, 2005. The application was filed with the Limestone County Clerk on May 19, 2005.
3. The Oaks Sour Gas Gathering System (T-4 Permit No. 06885) gathers full well stream gas

from area wells that produce gas containing hydrogen sulphide. The gathering system delivers produced gas to the Eubanks Compressor Station. Gas will be separated from liquids, compressed and either sent to the Teague Townsite Plant for sweetening and dehydration or sent to the Paques Plant, an H₂S removal plant, before being routed to an amine plant. The gathering system, the compressor stations and the gas plant have their own H₂S contingency plans.

4. The proposed 10" low pressure line is an extension of the 10" line connecting the Eubanks Compressor Station (formerly the Fails-Eubanks Compressor Station) with the H.D. Thomas #4 (Oil & Gas Docket No. 05-0240713 approved January 18, 2005). The line will gather produced gas from wells between the H.D. Thomas Lease Well No. 4 and the Hudson B Lease Well No. 10.
 - a. The low pressure line will be operated below 100 psig and the maximum allowed operating pressure is 1100 psig. Overpressure relief valves are set at 575 psig at the compressor station. If the pressure on the line reaches 575 psig the, the high /low valves on the wells will shut-in the wells, the compressor will shut down and default to the flare at the compressor station. If the line pressure at a station decreases to 15 psig or less, the compressor 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 16 MMCFD.
 - d. The hydrogen sulphide (H₂S) concentration is 700 parts per million (ppm).
 - e. Statewide Rule 36's authorized Pasquill-Gifford equation estimates the 100 ppm ROE is 460 feet and the 500 ppm ROE is 209 feet [Section (c)(2)].
 - f. The line extension does not cross any public roads or encompasses any residential dwellings.
5. Pipeline materials and construction meet the NACE standards as required by Statewide Rule 36 for hydrogen sulphide service.
6. A contingency plan was not necessary for this extension but is incorporated with the previously approved gathering line in accordance with the provisions of Rule 36(c)(9).
7. 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).
8. 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 Limestone County be approved.

Respectfully submitted,

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