OIL & GAS DOCKET NO. 05-0249904

THE APPLICATION OF TREND GATHERING & TREATING, LP TO CONSTRUCT AND OPERATE HYDROGEN SULPHIDE GAS PIPELINES, EXTENSIONS OF THE TEAGUE SOUR GAS GATHERING SYSTEM, THE DUNLAP TO DAY EXTENSIONS, FREESTONE COUNTY, TEXAS

APPLICATION REVIEWED BY: Thomas H. Richter, P.E. **DATE APPLICATION FILED:** December 12, 2006

DATE APPLICATION RECEIVED BY EXAMINER: February 5, 2007

DATE REVIEWED: February 7, 2007

EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of Trend Gathering & Treating, LP (an indirectly owned subsidiary 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 recommends approval. The Commission's Pipeline Safety and Gas Services Sections have reviewed the application. The examiner recommends approval of the application.

DISCUSSION OF THE EVIDENCE

The Teague Sour Gas Gathering System (T-4 Permits No. 06595) gathers full well stream gas from area wells that produce gas containing hydrogen sulphide. This particular section of the gathering system delivers gas to the Northeast Teague Compressor Station which delivers gas to the Teague Townsite Gas Plant. The gathering system, the compressor stations and the gas plant have their own H₂S contingency plans. Trend proposes two lines: a 12" low pressure suction line and an 8" high pressure gathering line. The proposed lines will be approximately 7,100 feet in length, laid in the same right-of-way, connecting the Dunlap Well No. 1-5 to the W.H. Day Well No. 1-1. The extension will be approximately 1 mile west of Fairfield. The lines will tie in at the compressor station. The 8" line will deliver gas either to the Teague Sour Station for sweetening and dehydration or sent to an H₂S removal plant prior to being sent to an amine plant. The 12" low pressure line will deliver gas, water and minuscule amounts of condensate to the NE Teague Compressor Station where gas will be separated from liquids, compressed and either sent to the Teague Townsite Plant for sweetening and dehydration or sent south to the Teague Gas Plant. The 8" line will have a normal operating pressure of up to 1200 psig and the maximum allowed operating pressure is 1440 psig. The over pressure relief valve at the Teague Sour Station and the Teague Townsite Plant are set at 1200 psig. The 12" line will operate between 30 and 75 psig and the

maximum allowed operating pressure will be 800 psig. If the pressure on the line reaches 800 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 lines will not exceed 20 MMCFD per line.

The $\rm H_2S$ concentration is 1000 parts per million (ppm). The 100 ppm ROE is 657 feet and the 500 ppm ROE is 300 feet. The 100 ppm ROE includes the crossing of US Hwy 84 and County Roads 610 and 940 and one occupied dwelling. The 500 ppm ROE includes US Hwy 84 and County Road 610.

The submitted contingency plan for the gathering lines are 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. 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-52 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. H_2S 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 H_2S gas production and transmission for many years.

Trend Gathering & Treating published notice of the application in a newspaper of general circulation in Freestone County. The notice was published in *The Teague Chronicle* on December 14, 2006. The application was filed with the Freestone County Clerk on November 28, 2006.

FINDINGS OF FACT

- 1. On December 12, 2006, Trend Gathering & Treating, LP filed an application for a permit to construct hydrogen sulphide gas gathering pipeline extensions in Freestone County.
- 2. Trend Gathering & Treating published notice of the application in a newspaper of general circulation in Freestone County. The notice was published in *The Teague Chronicle* on December 14, 2006. The application was filed with the Freestone County Clerk on November 28, 2006.
- 3. The Teague Sour Gas Gathering System (T-4 Permits No. 06595) gathers full well stream

gas from area wells that produce gas containing hydrogen sulphide. This particular section of the gathering system delivers gas to the Northeast Teague Compressor Station which delivers gas to the Teague Townsite Gas Plant or Teague Sour Station. The gathering system, the compressor stations and the gas plant have their own H₂S contingency plans.

- 4. Trend proposes two lines: a 12" low pressure suction line and an 8" high pressure gathering line. The proposed lines will be approximately 7,100 feet in length, laid in the same right-of-way, connecting the Dunlap Well No. 1-5 to the W.H. Day Well No. 1-1.
 - a. The 8" line will deliver gas either to the Teague Sour Station for sweetening and dehydration or sent to an H₂S removal plant prior to being sent to an amine plant.
 - b. The 12" low pressure line will deliver gas, water and minuscule amounts of condensate to the NE Teague Compressor Station where gas will be separated from liquids, compressed and either sent to the Teague Townsite Plant for sweetening and dehydration or sent south to the Teague Gas Plant.
 - c. The 8" line will have a normal operating pressure of up to 1200 psig and the maximum allowed operating pressure is 1440 psig. The over pressure relief valve at the Teague Sour Station and the Teague Townsite Plant are set at 1200 psig.
 - d. The 12" line will operate between 30 and 75 psig and the maximum allowed operating pressure will be 800 psig. If the pressure on the line reaches 800 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.
 - e. The maximum through put of the lines will not exceed 20 MMCFD per line
 - d. The hydrogen sulphide (H_2S) concentration is 1000 parts per million (ppm).
 - e. The 100 ppm ROE is 657 feet and the 500 ppm ROE is 300 feet.
 - f. The 100 ppm ROE includes the crossing of US Hwy 84 and County Roads 610 and 940 and one occupied dwelling. The 500 ppm ROE includes US Hwy 84 and County Road 610.
- 5. Pipeline materials and construction meet the NACE standards as required by Statewide Rule 36 for hydrogen sulphide service.
- 6. The submitted contingency plan for the line is in accordance and complies 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 Field Operations Section recommends approval. The Commission's Pipeline Safety Division and Gas Services Division have reviewed the application.

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 Trend Gathering & Treating, LP for Commission authority pursuant to Statewide Rules 106, 70 and 36 for approval to construct and operate the proposed hydrogen sulphide gas pipeline extensions in Freestone County be approved.

Respectfully submitted,

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