THE APPLICATION OF DCP MIDSTREAM, LP TO CONSTRUCT AND OPERATE A HYDROGEN SULFIDE GAS GATHERING PIPELINE, FULLERTON 8" BLOCK 7 TO MEANS DISCHARGE, ANDREWS COUNTY, TEXAS

**REVIEWED BY:** Andres J. Trevino, P.E. - Technical Examiner

**DATE APPLICATION FILED:** May 23, 2011

**DATE REVIEWED:** August 4, 2011

### **EXAMINER'S REPORT AND RECOMMENDATION**

### STATEMENT OF THE CASE

DCP Midstream, LP ("DCP") requests Commission authority pursuant to Statewide Rules 106, 70 and 36, to construct and operate a hydrogen sulfide (H<sub>2</sub>S) gas gathering pipeline in Andrews County, Texas. The proposed sour gas pipeline will transport gas from an existing sour gas compressor station located Martin County to the existing sour gas pipeline in Andrews County.

The Commission's Field Operations section has reviewed the application and has determined that the application complies with the applicable provisions of Statewide 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**

DCP proposes construction of a high pressure sour gas gathering pipeline which will transport gas from an existing sour gas compressor station located Martin County to the existing sour gas pipeline in Andrews County. The line will be 8 inches in diameter and will be approximately 21.4 miles in length. The line is located just east of Andrews, Texas, and crosses Texas State Highway 115, NE 8201 (Plant Road) and RR 1788 (Telephone Road).

The calculated 100 ppm radius of exposure is 506 feet and the calculated 500 ppm radius of exposure is 231 feet. These calculations are based on a  $\rm H_2S$  concentration of 600 ppm and a maximum escape volume of 22 MMCFGPD. The maximum operating pressure is 1,358 psi. The normal operating pressure will be 450 psig. The pipeline is located in a rural non-populated area of Andrews County. The 100 and 500 ppm radius of exposure will encompass portions of Texas State Highway 115, NE 8201 (Plant Road) and RR 1788 (Telephone Road). The 100 and 500 ppm radius of exposure will not encompass any

public areas (See Attached ROE Map). The applicant has submitted a contingency plan in accordance with the provisions of Rule 36(c)(9).

To comply with Statewide Rule 36(c)(8), DCP will use safety control and automatic devices. The line will be protected by high and low pressure sensors that will activate an Emergency Shutdown Valve (ESDV). If the monitors sense a high or low pressure condition, 850 psi and 150 psi respectively, then the pipeline will be shut-in by the ESDV, which will trigger an alarm at the DCP Fullerton Gas Plant. The pipeline will be monitored 24/7.

All materials will satisfy the requirements described in the latest edition of the NACE Standard MR0175 and API Rp-14E. The pipe will be API 5L-X42/52 grade steel pipe and all welds will be x-rayed.  $H_2S$  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 line will be buried a minimum of 4 feet below ground level.

DCP published notice of the application in a newspaper of general circulation in Andrews County. The notice was published in the *Andrews County News* on June 5, 2011. The application was filed with the Andrews County Clerk on June 2, 2011.

## FINDINGS OF FACT

- 1. On May 23, 2011, DCP Midstream, LP filed an application for a permit to construct a hydrogen sulfide gas gathering pipeline in Andrews County.
- 2. DCP published notice of the application in a newspaper of general circulation in Andrews County. The notice was published in the *Andrews County News* on June 5, 2011. The application was filed with the Andrews County Clerk on June 2, 2011.
- 3. No protest to the application was filed with the Commission and no hearing was held.
- 4. DCP proposes construction of a H<sub>2</sub>S gas gathering pipeline in Andrews County and Martin County just east of Andrews, Texas.
  - a. The 8 inch pipeline will transport gas from an existing sour gas compressor station located Martin County to the existing sour gas pipeline in Andrews County.
  - b. The line will be approximately 21.4 miles in length.
- 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 1,358 psig.
- 7. The maximum volume delivery design is 22 MMCFGPD. The hydrogen sulfide concentration of the gas to be transported is 600 parts per million.
- 8. The calculated 100 ppm radius of exposure is 506 feet and the calculated 500 ppm radius of exposure is 231 feet.
  - a. The 100 ppm and 500 ppm radius of exposure will not encompass any public areas.
  - b. The 100 ppm and 500 ppm radius of exposure will encompass portions of Texas State Highway 115, NE 8201 (Plant Road) and RR 1788 (Telephone Road).
- 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 DCP Midstream, LP to construct and operate the proposed  $H_2S$  gas gathering pipeline be approved as set out in the attached Final Order.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Examiner