THE APPLICATION OF CHESAPEAKE MIDSTREAM DEVELOPMENT, LP TO CONSTRUCT AND OPERATE A HYDROGEN SULFIDE GAS PIPELINE, THE WESTWIND LATERAL PIPELINE, DILLEY GAS GATHERING SYSTEM, ZAVALA COUNTY, TEXAS

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

**DATE APPLICATION FILED:** February 15, 2012

**DATE REVIEWED:** March 15, 2012

# **EXAMINER'S REPORT AND RECOMMENDATION**

# STATEMENT OF THE CASE

This is the unprotested application of Chesapeake Midstream Development, LP ("Chesapeake") for Commission authority to construct and operate a hydrogen sulfide (H2S) gas pipeline in Zavala County, pursuant to Statewide Rules 36, 70 and 106.

Chesapeake published notice of the application in a newspaper of general circulation in Zavala County. The notice was published in the *Zavala County Sentinel* on January 26, 2012. The application was filed with the Zavala County Clerk on January 16, 2012.

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. The examiner recommends approval of the application.

### **DISCUSSION OF THE EVIDENCE**

Chesapeake proposes construction of a gas gathering pipeline to transport produced gas from the Westwind area to the Dilley Compression Facility in the Dilley Gas Gathering System. The line will be 8 5/8 inches in diameter and approximately 7 miles in length. The line will carry a maximum of 5 MMCFGPD containing up to 1,000 parts per million (ppm) of H2S. The maximum operating pressure will be 720 psig.

The 100 ppm radius of exposure ("ROE") is 276 feet and the 500 ppm ROE is 126 feet. The pipeline is located in a rural area of Zavala County, approximately 8 miles east of the town of Crystal City, Texas (See attached area map). There are portions of FM 582 and CR 2010 located within the ROEs. The submitted contingency plan for the gathering

line complies with the provisions of Statewide Rule 36(c)(9).

All materials will satisfy the requirements described in the latest editions of NACE Standard MR-0175-2003. The gathering line is constructed of API-5L-X52 FBE grade steel pipe. The line will be equipped with cathodic protection to prevent external corrosion. The line will be chemically treated as needed for internal corrosion and monitored with corrosion coupons. The line will be buried a minimum of 4 feet.

H2S warning signs compliant with Rule 36(c)(6)(A) and (c)(6)(B) will be posted at all 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 proposed pipeline will comply with Statewide Rule 36(c)(8). The pipeline will be equipped with emergency shutdown systems, including low-high pressure shutdown at the wellheads, H2S monitors set at 10 and 50 ppm with audio and visual alarms, flares to incinerate gas that may require venting and all pipelines and compressor station operations will be monitored 24/7 through a SCADA monitoring system.

### FINDINGS OF FACT

- 1. On February 15, 2012, Chesapeake filed an application for a permit to construct a hydrogen sulfide gas gathering pipeline in Zavala County.
- 2. Chesapeake published notice of the application in a newspaper of general circulation in Zavala County. The notice was published in the *Zavala County Sentinel* on January 26, 2012. The application was filed with the Zavala County Clerk on January 16, 2012.
- 3. Chesapeake proposes construction of a gas gathering pipeline to transport produced gas from the Westwind area to the Dilley Compression Facility in the Dilley Gas Gathering System.
  - a. The line will be 8 5/8 inches in diameter and approximately 7 miles in length.
  - b. The line will carry a maximum of 5 MMCFGPD containing up to 1,000 ppm of H2S.
  - c. The maximum operating pressure will be 720 psig.
  - d. The 100 ppm ROE is 276 feet and the 500 ppm ROE is 126 feet.
  - e. The pipeline is located in a rural area of Zavala County, approximately 8 miles east of the town of Crystal City, Texas.

- f. There are portions of FM 582 and CR 2010 located within the ROEs.
- 4. Pipeline materials and construction meet the NACE and API standards as required by Statewide Rule 36 for hydrogen sulfide 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 Field Operations Section, Pipeline Safety Division and 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 hydrogen sulfide gas pipeline is consistent with the rules and safety standards adopted by the Commission.

#### **EXAMINER'S RECOMMENDATION**

The examiner recommends that the application of Chesapeake Midstream Development, LP for Commission authority pursuant to Statewide Rules 36, 70 and 106, to construct and operate the proposed hydrogen sulfide gas pipeline in Zavala County, be approved.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner