



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0292297

**THE APPLICATION OF COG OPERATING LLC FOR AN EXCEPTION TO STATEWIDE
RULE 32 FOR VARIOUS TANK BATTERIES, WOLFBONE (TREND AREA) FIELD,
REEVES COUNTY, TEXAS**

HEARD BY: Paul Dubois – Technical Examiner
Cecile Hanna – Hearings Examiner

HEARING DATE: October 29, 2014

CONFERENCE DATE: January 27, 2015

APPEARANCES:

REPRESENTING:

APPLICANT:

Ana Maria Marsland-Griffith
Terry Pafford
Tami Parker

COG Operating LLC

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

COG Operating LLC (COG) requests one-year exceptions to Statewide Rule 32 to flare gas from five tank batteries in the Wolfbone (Trend Area) Field in Reeves County, Texas: the Big Lub, Cowboy, Dutch State 24, IKE State, and Tycoon tank batteries. All offset operators in the field were notified of the hearing. There were no objections filed, and no protestants appeared at the hearing. The examiners recommend approval of the exception to Statewide Rule 32 to flare casinghead gas as requested by COG.

DISCUSSION OF THE EVIDENCE

Statewide Rule 32 governs the utilization of gas well gas and casinghead gas produced by oil and gas wells under the jurisdiction of the Railroad Commission. In this

application, COG is requesting authority to flare gas produced by various wells and flared at five tank batteries, as provided in Statewide Rule 32(h). The five tank batteries are connected to a sales pipeline owned by Regency Field Services, LLC (Regency). However, due to capacity issues, Regency is not always able to accept all gas produced through the five tank batteries. This situation affects other operators in the field as well. COG now seeks to continue flaring authority for one year for each tank battery, as needed when the sales line is not available due to capacity constraints.

The gas gathering infrastructure in the Wolfbone (Trend Area) Field is a low-pressure system (90 to 100 pounds) of small-diameter lines and insufficient compression; the existing system was developed to gather gas from vertical wells. The current development activity is focused on horizontal wells that produce significantly more gas, and thus the existing infrastructure is not adequate to handle current production levels. The current well development uses 1 to 1.5 mile-long horizontal laterals with 30 to 50 fracture stimulation stages each. The wells initially produce 1,500 to 2,000 barrels of oil per day and 3 MMCFG/D. By contrast, vertical wells typically enter production at about 100 barrels of oil and 100 MCFG per day.

COG manages produced hydrocarbons and waste liquids at centralized lease (or comingled lease) tank batteries to minimize the number of individual facility footprints in the area. When the gathering system capacity cannot handle the whole volume of produced gas, for safety reasons the gas is flared at the tank batteries.

COG is working with Regency and other pipeline operators to resolve the capacity issues. Pipeline loops, additional compression stations, and gas plants are being constructed to improve capacity. In addition, COG is working with another pipeline operator, PennTex, to add backup capacity for periods when the Regency system may not be available. When the currently on-going improvements are complete, COG anticipates that 100 percent of its gas will be sold, eliminating the need to flare. COG estimates that it needs one year of authority until the system is upgraded.

COG's expert engineering witness, Terry Pafford, testified that shutting in the wells until the infrastructure is in place would harm the reservoir. According to Mr. Pafford, leaving the fluids in the formation will change the wettability of the formation, reducing the relative permeability to oil, and thus reducing the ability to produce the oil from the wellbore.

Big Lub Tank Battery (Lease ID 08-44562)

From January through September 2014, about 15% of the produced gas was flared. An administrative flaring permit (No. 16096) was issued on March 1, 2014. The permit was extended for the maximum 180 days and expired on August 31, 2014. For the last term

of the 180 day permit, COG was authorized to flare 165 MCF/D casinghead gas. COG is requesting authority to flare 165 MCFG/D for a period of one year.

Cowboy Battery (Lease ID 08-43836)

From January through September 2014, about 49% of the produced gas was flared. An administrative flaring permit (No. 16055) was issued on March 1, 2014. The permit was extended for the maximum 180 days and expired on August 31, 2014. For the last term of the 180 day permit, COG was authorized to flare 1,868 MCF/D casinghead gas. COG is requesting authority to flare 1,868 MCFG/D for a period of one year.

Dutch State 24 Battery (Lease ID 08-41271)

From January through September 2014, about 41% of the produced gas was flared. An administrative flaring permit (No. 17011) was issued on May 1, 2014. The permit was extended for the maximum 180 days and expired on October 31, 2014. For the last term of the 180 day permit, COG was authorized to flare 133 MCF/D casinghead gas. COG is requesting authority to flare 133 MCFG/D for a period of one year.

IKE State Battery (Commingle Permit No. 08-6787)

From January through September 2014, about 29% of the produced gas was flared. An administrative flaring permit (No. 14860) was issued on November 9, 2013. The permit was extended for the maximum 180 days and expired on May 10, 2014. For the last term of the 180 day permit, COG was authorized to flare 1,011 MCF/D casinghead gas. COG is requesting authority to flare 1,011 MCFG/D for a period of one year.

Tycoon Tank Battery (Commingle Permit No. 08-6876)

From January through September 2014, about 21% of the produced gas was flared. An administrative flaring permit (No. 15247) was issued on January 9, 2014. The permit was extended for the maximum 180 days and expired on July 9, 2014. For the last term of the 180 day permit, COG was authorized to flare 1,000 MCF/D casinghead gas. COG is requesting authority to flare 1,000 MCFG/D for a period of one year.

For all of these facilities, COG only flares when necessary based on pressure in the sales line. At any time a portion of the volume being flared may, in fact, be produced by wells within their first 10-days following completion, a time in which all wells in the State have an exception to flare under Statewide Rule 32. In many cases, the individual wells contributing gas to a tank battery facility would qualify for a permanent exception to Rule 32 because, individually, they would need to flare less than 50 MCFG/D. COG believes

that, once complete, the infrastructure improvements will eliminate the need to flare going forward.

On September 12, 2014, COG requested a hearing to extend the flaring authority for all five tank batteries. By that date, the administrative permits for four of the tank batteries had expired: Big Lub, Cowboy, IKE State, and Tycoon. Statewide Rule 32 requires an application for a permit extension or hearing be submitted 21 days prior to the expiration of the existing permit. At the hearing, the Examiners informed COG that the flaring authority under this docket would be dated the later of (1) the expiration date of the administrative permit, or (2) the date a hearing was requested (September 12, 2014).

FINDINGS OF FACT

1. Proper notice of this hearing was given to all parties entitled to notice at least 10 days prior to the hearing. There were no protests to the application.
2. The existing gas gathering infrastructure in the Wolfbone (Trend Area) Field was developed to gather gas from vertical wells and does not have the capacity to accept all of the casinghead gas produced in the field.
3. COG's recent horizontal wells initially produce 1,500 to 2,000 barrels of oil per day and 3 MMCFG/D. By contrast, vertical wells typically enter production at about 100 barrels of oil and 100 MCFG per day.
4. COG is working with Regency and other pipeline operators to resolve the capacity issues. Completion of the currently on-going improvements will eliminate the continued need to flare casinghead gas.
5. For the Big Lub Tank Battery an administrative flaring permit (No. 16096) was issued on March 1, 2014.
 - a. The permit was extended for the maximum 180 days and expired on August 31, 2014.
 - b. For the last term of the 180 day permit, COG was authorized to flare 165 MCF/D casinghead gas.
 - c. COG is requesting authority to flare 165 MCFG/D for a period of one year.
6. For the Cowboy Tank Battery an administrative flaring permit (No. 16055) was issued on March 1, 2014.

- a. The permit was extended for the maximum 180 days and expired on August 31, 2014.
 - b. For the last term of the 180 day permit, COG was authorized to flare 1,868 MCF/D casinghead gas.
 - c. COG is requesting authority to flare 1,868 MCFG/D for a period of one year.
7. For the Dutch State 24 Tank Battery an administrative flaring permit (No. 17011) was issued on May 1, 2014.
 - a. The permit was extended for the maximum 180 days and expired on October 31, 2014.
 - b. For the last term of the 180 day permit, COG was authorized to flare 133 MCF/D casinghead gas.
 - c. COG is requesting authority to flare 133 MCFG/D for a period of one year.
8. For the IKE State Tank Battery an administrative flaring permit (No. 14860) was issued on November 9, 2013.
 - a. The permit was extended for the maximum 180 days and expired on May 10, 2014.
 - b. For the last term of the 180 day permit, COG was authorized to flare 1,011 MCF/D casinghead gas.
 - c. COG is requesting authority to flare 1,011 MCFG/D for a period of one year.
9. For the Tycoon Tank Battery an administrative flaring permit (No. 15247) was issued on January 9, 2014.
 - a. The permit was extended for the maximum 180 days and expired on July 9, 2014.
 - b. For the last term of the 180 day permit, COG was authorized to flare 1,000 MCF/D casinghead gas.
 - c. COG is requesting authority to flare 1,000 MCFG/D for a period of one year.

10. Shutting in the wells until the infrastructure is in place may harm the reservoir and result in waste of oil.

CONCLUSIONS OF LAW

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051
2. The requested exception to flare 75 MCF/D casinghead gas for the subject well for a period of one year meets the requirements of Statewide Rule 32. 16 Tex. Admin. Code § 3.32(h)

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission grant an exception to Statewide Rule 32 for the subject tank batteries, as requested by COG.

Respectfully submitted,



Paul Dubois
Technical Examiner



Cecile Hanna
Hearings Examiner