



# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

OIL AND GAS DOCKET NO. 01-0283977

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THE APPLICATION OF SPARKMAN ENERGY, LLC FOR COMMERCIAL DISPOSAL  
AUTHORITY PURSUANT TO STATEWIDE RULE 9 FOR THE EDWARDS SWD LEASE,  
WELL NO. 1H, A.W.P. (OLMOS) FIELD, MCMULLEN COUNTY, TEXAS

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HEARD BY: Richard D. Atkins, P.E. - Technical Examiner  
Marshall F. Enquist - Legal Examiner

**APPEARANCES:**

**REPRESENTING:**

**APPLICANT:**

David B. Gross  
Dale E. Miller

Sparkman Energy, LLC

**PROTESTANT:**

Dwain N. Coquat

Edna Holt

### PROCEDURAL HISTORY

Application Filed:	March 26, 2013
Protest Received:	April 17, 2013
Request for Hearing:	July 23, 2013
Notice of Hearing:	August 27, 2013
Hearing Held:	September 25, 2013
Transcript Received:	October 8, 2013
Proposal for Decision Issued:	November 7, 2013

### EXAMINERS' REPORT AND PROPOSAL FOR DECISION

#### STATEMENT OF THE CASE

Sparkman Energy, LLC ("Sparkman") requests commercial disposal authority pursuant to Statewide Rule 9 for the Edwards SWD Lease, Well No. 1H, A.W.P. (Olmos) Field, McMullen County, Texas.

Notice of the application was published in the *Progress*, a newspaper of general circulation in McMullen County, on March 13, 2013. Notice of the application was sent to the McMullen County Clerk, offset operators within ½ mile and to the surface owners of the disposal tract and each tract which adjoins the disposal tract on March 26, 2013.

The application was determined to be administratively complete by Commission staff, but is protested by a surface owner adjacent to the tract on which the proposed disposal well is located.

### **DISCUSSION OF THE EVIDENCE**

#### **Applicant's Evidence**

The proposed disposal well is located on a 17.96 acre tract adjacent to and east of State Highway 99 and north of County Road 305. The tract is located in a rural area approximately seven miles east of the town of Tilden, Texas. Sparkman plans to drill a new horizontal drainhole disposal well down to 13,000 feet (TVD). The well will have 16" surface casing set at 400 feet that will be cemented to the surface with 568 sacks of cement and 10 3/4" intermediate casing set at 5,700 feet that will be cemented to the surface with 2,469 sacks of cement. Sparkman proposes to run 7 5/8" production casing to 12,275 feet (TVD) that will be cemented to 8,675 feet with 512 sacks of cement with a DV Tool set at 8,675 feet that will be cemented up to 5,400 feet with 450 sacks of cement. The well will be equipped with 5 1/2" tubing and packer set at 12,000 feet (See attached Sparkman Exhibit No. 10 - Wellbore Diagram).

The proposed disposal interval is located in the Lower Edwards formation between 12,100 (TVD) feet and 13,000 feet (TVD). The disposal well will have a 3,600 foot horizontal openhole lateral and the disposal interval is continuous and suitable for injection. There is over 250 feet of dense limestone and impermeable shale above the proposed disposal interval and between it and the productive Eagle Ford formation, which will serve to prevent the migration of injected fluids out of the disposal interval. Sparkman requests authority to dispose of a maximum of 35,000 barrels of saltwater and RCRA<sup>1</sup> exempt waste per day with a maximum surface injection pressure of 6,050 psig.

The Commission Groundwater Advisory Unit ("GAU") recommends that usable-quality groundwater be protected down to a depth of 5,700 feet below the land surface. The base of the underground source of drinking water ("USDW") is 6,500 feet. Sparkman submitted a GAU letter dated March 11, 2013, which stated that injection into the proposed injection interval will not harm usable-quality groundwater. There are 14 wells located within the 1/4 mile radius of review and none of the wells penetrated the proposed disposal

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<sup>1</sup> Resource Conservation and Recovery Act: Examples of RCRA exempt oil and gas waste includes produced water, drilling fluids, frac flowback fluids, rigwash and workover wastes.

interval. There are 37 wells located within the 1/2 mile radius of review and only one dry hole penetrated the proposed disposal interval. The dry hole is cased and cemented to protect usable-quality groundwater and is properly plugged with cement plugs to isolate the proposed disposal interval from any formations occurring above the Edwards formation.

The proposed Sparkman disposal facility is located in the northeastern portion of McMullen County. The Eagle Ford formation development core area encompasses most of McMullen County and the adjoining counties of La Salle and Live Oak. Sparkman compared the production statistics in McMullen County for the years of 2009 and 2012. In 2009, McMullen County produced 1.1 MMBO and 20.8 BCFG. In 2012, McMullen County produced 12.2 MMBO and 63.7 BCFG.

Sparkman also analyzed the drilling permit activity in McMullen County from 1977 to the present day. Prior to 2010, there were approximately 100 drilling permits issued per year. In 2010, the drilling permits increased to 288 and, in 2012, the drilling permits increased to 487. Through September 13, 2013, there have been 406 drilling permits issued and, if that same rate of permitting continues, the drilling permits will exceed 500 permits for the year.

Sparkman felt that the Eagle Ford formation trend wells will produce significant volumes of frac and produced water and believes that additional disposal facilities are necessary to accommodate the Eagle Ford formation development that is ongoing in McMullen County. Although there are twelve permitted disposal wells in McMullen County, there are only two active disposal facilities, both located over 20 miles from the proposed disposal facility. Sparkman contends that the use of the proposed disposal well will reduce miles traveled and wait and travel times by waste hauling trucks, resulting in reduced costs to operators.

### **The Facility**

The area surrounding the proposed injection facility is rural farm and ranch land. Access to the disposal facility will be off of State Highway 99, which is a paved two lane public highway. At an average injection rate of 20,000 BWPD, there will be approximately 150 trucks per day accessing the facility. The facility will have a circular driveway and will be of sufficient size to allow trucks access without having to wait on the highway. The surface facility will be manned 24 hours per day. A firewall will be constructed around the entire facility to contain any spilled fluids and the tanks will be equipped with high water level switches to prevent overflows. Additionally, the facility will comply with all of the permit conditions required by Commission staff.

Sparkman has a current approved Form P-5 (Organization Report), but has not posted a financial assurance bond, since it does not currently operate any wells. Sparkman is planning to post a financial assurance bond with the Commission prior to applying for the disposal well drilling permit and commencing operations.

**Protestants' Evidence**

The protestant is a surface owner west of State Highway 99 and adjacent to the proposed disposal tract. The protestant's statement fell into several general categories: 1) potential of pollution to groundwater and surface waters; 2) noise, dust and odor nuisances which would result from the operation of the facility; and 3) increased heavy truck traffic on State Highway 99 and County Road 305, causing road deterioration and public safety issues. The statement in opposition to the facility asserted that the proposed commercial disposal facility will have adverse effects on traffic safety, property values and the quality of life in and around the area.

**EXAMINERS' OPINION**

The examiners recommend that the application for commercial disposal authority be approved. Sparkman has established:

1. The water resources (surface and sub-surface) are adequately protected from pollution;
2. The proposed injection well will not endanger or injure any oil, gas, or mineral formations;
3. The proposed injection well is in the public interest;
4. A satisfactory showing of financial responsibility, as required under Texas Statutes and Commission Rules.

The well will be completed in a manner which will protect usable-quality groundwater resources and injected fluids will be confined to the injection interval. The proposed disposal well will have cement behind the production casing up into the intermediate casing to 5,400 feet and there is over 250 feet of dense limestone and impermeable shale above the proposed disposal interval and between it and the productive Eagle Ford formation. Injection will be through tubing set on a packer to confine injected fluids to the Edwards formation. Finally, there are 14 wells located within the 1/4 mile radius of review and none of the wells penetrated the proposed disposal interval. There are 37 wells located within the 1/2 mile radius of review and only one dry hole penetrated the proposed disposal interval. The dry hole is cased and cemented to protect usable-quality groundwater and is properly plugged with cement plugs to isolate the proposed disposal interval from any formations occurring above the Edwards formation.

Approval of the application is in the public interest. The proposed Sparkman disposal facility is located in the northeastern portion of McMullen County. The Eagle Ford formation development core area encompasses most of McMullen County and the adjoining counties of La Salle and Live Oak. Prior to 2010, there were approximately 100

drilling permits issued per year in McMullen County. In 2010, the drilling permits increased to 288 and, in 2012, the drilling permits increased to 487. Through September 13, 2013, there have been 406 drilling permits issued and, if that same rate of permitting continues, the drilling permits would exceed 500 permits for the year.

The Eagle Ford formation trend wells will produce significant volumes of frac and produced water and additional disposal facilities are necessary to accommodate the Eagle Ford formation development that is ongoing in McMullen County. Although there are twelve permitted disposal wells in McMullen County, there are only two active disposal facilities, both located over 20 miles from the proposed disposal facility. The use of the proposed disposal well will reduce miles traveled and wait and travel times by waste hauling trucks, resulting in reduced costs to operators.

The surface facility will be newly constructed and is of sufficient size to accommodate trucks hauling water to the facility. The facility will have a circular driveway and will allow trucks access without having to wait on the highway. The surface facility will be manned 24 hours per day. A firewall will be constructed around the entire facility to contain any spilled fluids and the tanks will be equipped with high water level switches to prevent overflows. Additionally, the facility will comply with all of the permit conditions required by Commission staff. The Commission does not have direct jurisdiction over issues regarding site selection, traffic patterns, or noise abatement.

#### **FINDINGS OF FACT**

1. Notice of the application was published in the *Progress*, a newspaper of general circulation in McMullen County, on March 13, 2013.
2. Notice of the application was sent to the McMullen County Clerk, offset operators within ½ mile and to the surface owners of the disposal tract and each tract which adjoins the disposal tract on March 26, 2013.
3. The proposed injection into the Edwards SWD Lease, Well No. 1H, will not endanger useable quality water.
  - a. The Commission Groundwater Advisory Unit ("GAU") recommends that usable-quality groundwater be protected down to a depth of 5,700 feet below the land surface.
  - b. The base of the Useable Source of Drinking Water is at 6,500 feet.
  - c. The well will have 16" surface casing set at 400 feet that will be cemented to the surface with 568 sacks of cement and 10 3/4" intermediate casing set at 5,700 feet that will be cemented to the surface with 2,469 sacks of cement.

4. The proposed injection into the Edwards SWD Lease, Well No. 1H, will not endanger production from other oil, gas or mineral bearing formations.
  - a. Sparkman Energy, LLC ("Sparkman") plans to drill a new injection well down to 13,000 feet (TVD).
  - b. Sparkman proposes to run 7 5/8" production casing to 12,275 feet (TVD) that will be cemented to 8,675 feet with 512 sacks of cement with a DV Tool set at 8,675 feet that will be cemented up to 5,400 feet with 450 sacks of cement.
  - c. The well will be equipped with 5 1/2" tubing and packer set at 12,000 feet.
  - d. There are 14 wells located within the 1/4 mile radius of review and none of the wells penetrated the proposed disposal interval. There are 37 wells located within the 1/2 mile radius of review and only one dry hole penetrated the proposed disposal interval. The dry hole is cased and cemented to protect usable-quality groundwater and is properly plugged with cement plugs to isolate the proposed disposal interval from any formations occurring above the Edwards formation.
  - e. There is over 250 feet of dense limestone and impermeable shale above the proposed disposal interval and between it and the productive Eagle Ford formation, which will serve to prevent the migration of injected fluids out of the disposal interval.
5. Use of the Edwards SWD Lease, Well No. 1H, as a commercial disposal well is in the public interest because it will reduce hauling distances and will provide needed commercial disposal capacity for wells to be drilled, completed and produced in the area of the proposed facility.
  - a. The Eagle Ford formation development core area encompasses most of McMullen County and the adjoining counties of La Salle and Live Oak.
  - b. In 2009, McMullen County produced 1.1 MMBO and 20.8 BCFG. In 2012, McMullen County produced 12.2 MMBO and 63.7 BCFG.
  - c. Prior to 2010, there were approximately 100 drilling permits issued per year in McMullen County. In 2010, the drilling permits increased to 288 and, in 2012, the drilling permits increased to 487. Through September 13, 2013, there have been 406 drilling permits issued and, if that same rate of permitting continues, the drilling permits will exceed 500 permits for the year.

- d. The Eagle Ford formation trend wells will produce significant volumes of frac and produced water and additional disposal facilities are necessary to accommodate the Eagle Ford formation development that is ongoing in McMullen County.
  - e. Although there are twelve permitted disposal wells in McMullen County, there are only two active disposal facilities, both located over 20 miles from the proposed disposal facility.
  - f. The use of the proposed disposal well will reduce miles traveled and wait and travel times by waste hauling trucks, resulting in reduced costs to operators.
6. Sparkman has a current approved Form P-5 (Organization Report), but has not posted a financial assurance bond, since it does not currently operate any wells.

**CONCLUSIONS OF LAW**

- 1. Proper notice was issued in accordance with the applicable statutory and regulatory requirements.
- 2. All things necessary to give the Railroad Commission jurisdiction to consider this matter have occurred.
- 3. Approval of the application will not harm useable-quality water resources, will not endanger oil, gas, or geothermal resources, will promote further development in this area of McMullen County and is in the public interest pursuant to Sec. 27.051 of the Texas Water Code.
- 4. Sparkman Energy, LLC has met its burden of proof and its application satisfies the requirements of Chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rule 9.

**EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission approve the application of Sparkman Energy, LLC for commercial disposal authority pursuant to Statewide Rule 9 for the Edwards SWD Lease, Well No. 1H, as set out in the attached Final Order.

Respectfully submitted,



Richard D. Atkins, P.E.  
Technical Examiner

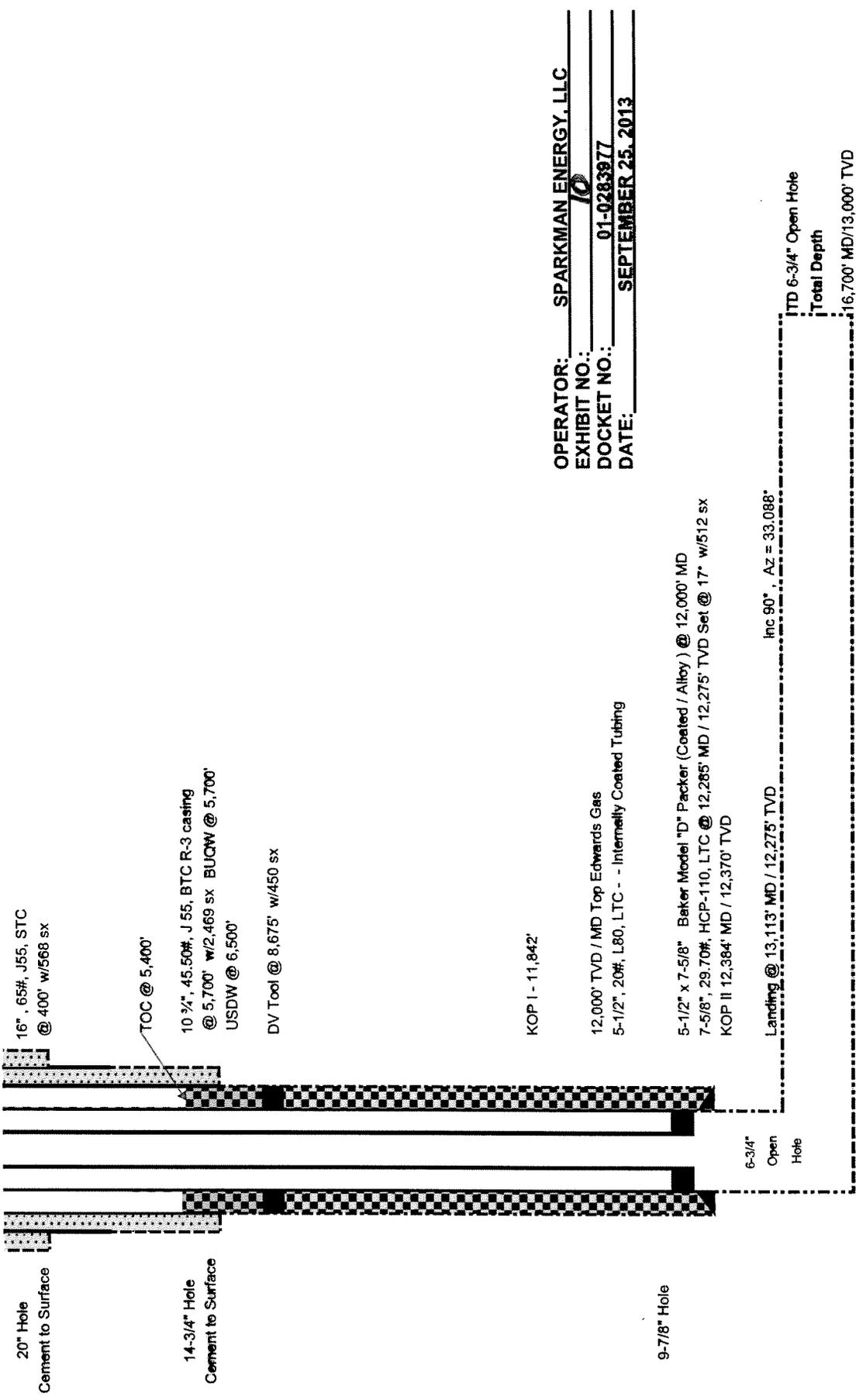


Marshall F. Enquist  
Legal Examiner

**Proposed Wellbore Schematic**

John Pat Boyd, PE  
 dba Boyd Engineering for  
**Sparkman Energy**  
 Edwards SWD 1H

GL Surveyed @ 319.2'  
 McMullen County, Texas



OPERATOR: **SPARKMAN ENERGY, LLC**  
 EXHIBIT NO.: **10**  
 DOCKET NO.: **01-0283977**  
 DATE: **SEPTEMBER 25, 2013**