### OIL AND GAS DOCKET NO. 03-0271127

THE APPLICATION OF ESCONDIDO PETROLEUM COMPANY, INC. FOR COMMERCIAL DISPOSAL AUTHORITY PURSUANT TO STATEWIDE RULE 46 FOR THE MCCORMICK LEASE, WELL NO. 3, BROOKSHIRE FIELD, WALLER COUNTY, TEXAS

OIL AND GAS DOCKET NO. 03-0271128

THE APPLICATION OF ESCONDIDO PETROLEUM COMPANY, INC. FOR COMMERCIAL DISPOSAL AUTHORITY PURSUANT TO STATEWIDE RULE 9 FOR THE MCCORMICK LEASE, WELL NO. 6, BROOKSHIRE DOME (MIOCENE 5-1C) FIELD, WALLER COUNTY, TEXAS

OIL AND GAS DOCKET NO. 03-0271129

THE APPLICATION OF ESCONDIDO PETROLEUM COMPANY, INC. FOR COMMERCIAL DISPOSAL AUTHORITY PURSUANT TO STATEWIDE RULE 9 FOR THE MCCORMICK LEASE, WELL NO. 13, BROOKSHIRE DOME (MIOCENE 5-1C) FIELD, WALLER COUNTY, TEXAS

OIL AND GAS DOCKET NO. 03-0271130

THE APPLICATION OF ESCONDIDO PETROLEUM COMPANY, INC. FOR COMMERCIAL DISPOSAL AUTHORITY PURSUANT TO STATEWIDE RULE 9 FOR THE MCCORMICK LEASE, WELL NO. 22, BROOKSHIRE FIELD, WALLER COUNTY, TEXAS

**HEARD BY:** Richard D. Atkins, P.E. - Technical Examiner James M. Doherty - Legal Examiner

#### **APPEARANCES:**

**REPRESENTING:** 

APPLICANT:

Guy Grossman Carson Grimes Escondido Petroleum Company, Inc.

### **PROTESTANTS:**

Doug Johnson

David W. Cooney, Jr. RRC Technical Permitting

# **PROCEDURAL HISTORY**

Application Filed: January 28, 2011 Administratively Denied: April 5, 2011 Request for Hearing: April 20, 2011 Notice of Hearing: June 27, 2011 Hearing Held: July 14, 2011 Record Closed: July 27, 2011 Proposal for Decision Issued: September 23, 2011

## **EXAMINERS' REPORT AND PROPOSAL FOR DECISION**

## STATEMENT OF THE CASE

Escondido Petroleum Company, Inc. ("Escondido") requests commercial disposal authority pursuant to Statewide Rules 9 and 46 for the McCormick Lease, Well Nos. 3, 6, 13 and 22, Brookshire and Brookshire Dome (Miocene 5-1C) Fields, Waller County, Texas.

Notices of the subject applications were published in the Waller County News *Citizen*, a newspaper of general circulation in Waller County, on November 18, 2010. Notices of the applications were sent to the Waller County Clerk, offset operators within 1/2 mile, the surface owner of the disposal tract and the surface owners of each tract which adjoins the disposal tract on January 19, 2011.

Commission staff appeared at the hearing to request denial of the commercial disposal applications. The examiners recommend that the applications for a commercial disposal permit be denied.

#### DISCUSSION OF THE EVIDENCE

#### Applicant's Evidence

The McCormick Lease is a 73 acre tract that is located approximately 5 miles southwest of the town of Brookshire, Texas. Well Nos. 3, 6, 13 and 22 were drilled to a total depth of approximately 3,000 feet beginning in September 2000. All of the wells were subsequently converted to lease disposal/injection wells at depths between 2,600 feet and 3,200 feet. The permitted injection rates range from 3,000 BWPD up to 6,000 BWPD with

an average permitted maximum pressure of 675 psig.

All of the wells have 8 5/8" surface casing set at approximately 600 feet and are cemented to the surface. All of the wells have 4 1/2" production casing set at approximately 3,000 feet and are cemented to the surface. The wells are equipped with 2 3/8" tubing and packer set within 100 feet of the permitted injection interval. Each of the wells contain shallow perforations between 950 feet and 2,350 feet where zones were tested or produced oil and were subsequently squeezed with cement to seal the perforations (See attached Escondido Exhibit No. 14 - Wellbore Diagrams).

Escondido requests commercial disposal authority for each well to dispose of a maximum of 10,000 barrels of saltwater and RCRA exempt oil and gas wastes per day with a maximum injection pressure of 1,300 psig. The Texas Commission on Environmental Quality ("TCEQ") recommends that usable-quality ground water be protected down to a depth of 2,150 feet below the land surface.

Escondido submitted a letter from a saltwater hauler, D & D Vacuum Service, which stated that D & D and others in the community would use the proposed commercial disposal wells. In addition, the letter indicated that D & D believed the disposal wells would lower fuel and tire replacement costs and cut down on county road repairs. Escondido's expert witness opined that the disposal wells would reduce hauling distances and provide saltwater haulers in the area a more cost effective disposal alternative in Waller County.

Escondido has a current Commission approved Form P-5 (Organization Report), a posted \$50,000 financial assurance bond and no pending Commission enforcement actions.

#### **Commission Staff's Evidence**

Commission staff appeared at the hearing to request denial of the commercial disposal applications. The staff stated that a new policy had been implemented in July 2010 to administratively deny any commercial disposal permit when the subject well had received a Statewide Rule 13(b)(2) exception and did not have surface casing set through the base of the usable quality groundwater (See RRC Staff Exhibit No. 1 - Notice to Oil and Gas Operators). The staff believes that commercial disposal wells that have received a Statewide Rule 13(b)(2) exception pose a greater risk to the usable quality groundwater, even though the long string is required to be cemented to the surface. Staff also felt that this area was especially vulnerable, as most of the wells only had approximately 600 feet of surface casing set and cemented and many wells had squeeze cemented perforations in numerous productive or water bearing zones above the base of usable quality groundwater.

#### **EXAMINERS' OPINION**

The examiners recommend denial of Escondido's applications for commercial disposal authority. There are over 150 wells within a 1/2 mile radius of the proposed commercial disposal Well Nos. 3, 6, 13 and 22. All of the wells appear to have short surface casing set and no area of review analysis was submitted at the hearing. The only information contained in the files are a tabulation of the wells with a well status (i.e. producing, plugged, shut-in, etc.). There is no information on total depth, casing strings set or cement used. On many of the wells within 1/2 mile, the tabulation indicates that there is no drilling or plugging information on record. With so little information about potential conduits for fluid migration, there is insufficient basis for a finding that injected fluids will be confined to the permitted injection intervals.

TCEQ recommends that usable-quality groundwater be protected down to a depth of 2,150 feet below the land surface. Since the wells only have 600 feet of surface casing set and cemented, the examiners believe that the proposed commercial disposal wells pose a risk to the usable-quality groundwater in this area. In addition, many wells within 1/2 mile have squeeze cemented perforations in productive or water bearing zones above the base of the usable-quality groundwater. Likewise, four commercial disposal wells in close proximity with a combined injection rate of 40,000 BWPD and a 100% increased injection pressure of 1,300 psig, magnifies the risk of over pressuring the disposal interval and losing confinement of the injected fluids. Clusters of injection wells in close proximity can result in over-pressuring of the disposal zone and escape of injected fluids into usable-quality groundwater zones and even to the surface. Based on these facts, the examiners feel that an area of review analysis is of the utmost importance, as any pressure front calculations submitted to secure the original injection permits would now be completely invalid.

The burden of proof to establish that a proposed commercial disposal facility is in the "public interest" as required under Texas Water Code §27.051(b)(1) is placed on the applicant for the permit. "Public interest" is typically established by showing that: 1) the safe and proper disposal of saltwater serves the public interest; and, 2) the economic disposal of produced saltwater due to the proximity to the new disposal facility serves the public interest as it allows for the recovery of additional reserves that would otherwise be uneconomical to produce.

In Escondido's case, the risk of pollution of usable-quality groundwater presented by four commercial disposal wells in the same limited area is not counter-balanced by any persuasive evidence that additional disposal capacity is needed in the area. The Commission traditionally has considered that proposed disposal wells are in the "public interest" when they will provide needed additional disposal capacity and an economical means of disposing of produced salt water from area wells, thereby increasing ultimate

recovery from these wells and preventing waste.<sup>1</sup> Extending the economic life of producing wells and increasing ultimate recovery are benefits of additional disposal wells only if the additional capacity provided by such disposal wells is needed in the area of interest.

The examiners conclude that the proposed commercial disposal wells pose a threat to usable quality groundwater. With short surface casing in the proposed injection and nearby wells, no area of review analysis, no pressure front calculations and no evidence to support an industry need, the examiners believe that the proposed commercial disposal wells would not adequately protect fresh water, are not in the public interest and Escondido's applications should be denied.

# FINDINGS OF FACT

- 1. Notices of the subject applications were published in the *Waller County News Citizen*, a newspaper of general circulation in Waller County, on November 18, 2010.
- 2. Notices of the applications were sent to the Waller County Clerk, offset operators within 1/2 mile, the surface owner of the disposal tract and the surface owners of each tract which adjoins the disposal tract on January 19, 2011.
- 3. The proposed injection into the McCormick Lease, Well Nos. 3, 6, 13 and 22, will endanger usable-quality groundwater.
  - a. The TCEQ recommends that usable-quality ground water be protected to a depth of 2,150 feet below the land surface.
  - b. All of the proposed injection wells have 8 5/8" surface casing set at an approximate depth of only 600 feet.
  - c. There are over 150 wells within a 1/2 mile radius of the proposed commercial disposal Well Nos. 3, 6, 13 and 22, and most of the wells

<sup>&</sup>lt;sup>1</sup> In Railroad Commission of Texas Et Al. v. Texas Citizens for A Safe Future and Clean Water Et Al., 336 S.W.3d 619,622 (Tex. 2011), the Texas Supreme Court held that the Commission's construction of "public interest" as a narrow term that does not include traffic safety considerations is reasonable and in alignment with the meaning of §27.051(b)(1) of the Texas Water Code. The Commission's "public interest" finding which the Court upheld found that ". . .use of the proposed disposal well is in the public interest because it will provide needed additional disposal capacity and an economical means of disposing of produced salt water from completed wells in the rapidly expanding Barnett Shale Field Area, thereby increasing ultimate recovery from these wells and preventing waste. The safe and proper disposal of produced saltwater serves the public interest."

have only about 600 feet of surface casing set and cemented. Many wells have squeeze cemented perforations in numerous zones above the base of usable quality groundwater.

- d. No area of review analysis was presented at the hearing. The lack of information as to well depth, casing strings set and cement data for wells within 1/2 mile, precludes a determination that injected fluids will be confined to the permitted disposal intervals.
- e. Four commercial disposal wells in close proximity with a combined injection rate of 40,000 BWPD and a 100% increased injection pressure of 1,300 psig, will magnify the risk of over pressuring the disposal interval and losing confinement of the injected fluids. Any pressure front calculations submitted to secure the original injection permits for injection of lessor volumes of lease produced saltwater only at lower injection pressures would not be valid to assess the risk of pollution associated with the present applications.
- 4. Escondido did not prove that use of the McCormick Lease, Well Nos. 3, 6, 13 and 22, as commercial disposal wells, is in the public interest.
- 5. Applicant's evidence does not establish that the proposed disposal wells will serve the public interest by extending the economic life of producing wells and allowing for the recovery of additional reserves, because it does not establish an industry need for the disposal wells or establish that such wells would be utilized if approved..
- 6. Escondido has a current approved Form P-5 (Organization Report) and has posted a \$50,000 financial assurance bond.

## 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. Applicant did not establish that the approval of the application is in the public interest as required by Sec. 27.051 of the Texas Water Code.
- 4. Escondido Petroleum Company, Inc. has not met its burden of proof and its application does not satisfy the requirements of Chapter 27 of the Texas Water Code and the Railroad Commission's Statewide Rules 9 and 46.

# EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the applications of Escondido Petroleum Company, Inc. for commercial disposal authority pursuant to Statewide Rules 9 and 46 for the McCormick Lease, Well Nos. 3, 6, 13 and 22 be denied.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner James M. Doherty Legal Examiner