RAILROAD COMMISSION OF TEXAS
HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7C-0280238

THE APPLICATION OF PROBITY OPERATING, LLC FOR COMMERCIAL DISPOSAL AUTHORITY PURSUANT TO STATEWIDE RULE 9 FOR THE PRO-SELECT SWD LEASE, WELL NO. 1, PRICE (GRAYBURG) FIELD, REAGAN COUNTY, TEXAS

HEARD BY: Brian Fancher - Technical Examiner
Marshall F. Enquist - Legal Examiner

PFD PREPARED BY: Richard D. Atkins; P.E. - Technical Examiner

APPEARANCES:

APPLICANT:
Paul Tough
Rick Johnston
Benjamin Warden

PROTESTANTS:
David Gross
Dale E. Miller
George C. Neale
Carter Davis
Wayne Smith

REPRESENTING:
Probity Operating, LLC
Alice Environmental Services, LP
DLB Oil & Gas, Inc.

PROCEDURAL HISTORY

Application Filed: September 13, 2012
Protest Received: September 19, 2012
Request for Hearing: October 30, 2012
Notice of Hearing: January 25, 2013
Hearing Held: February 19, 2013
Transcript Received: March 4, 2013
Proposal for Decision Issued: May 9, 2013
STATEMENT OF THE CASE

Probity Operating, LLC ("Probity") requests commercial disposal authority pursuant to Statewide Rule 9 for the Pro-Select SWD Lease, Well No. 1, in the Price (Grayburg) Field, Reagan County, Texas.

Notice of the application was published in The Big Lake Wildcat, a newspaper of general circulation in Reagan County, on September 6, 2012. Notice of the application was sent to the Reagan 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 September 26, 2012.

The application was determined to be administratively complete by Commission staff, but is protested by Alice Environmental Services, LP ("Alice") and DLB Oil & Gas, Inc. ("DLB"). Alice operates a private disposal facility located over one mile to the southeast of the proposed disposal well. DLB operates six producing oil wells in the Price (Grayburg) Field located three quarters of a mile to the south and southeast of the proposed disposal well.

DISCUSSION OF THE EVIDENCE

Applicant's Evidence

The subject well has not yet been drilled, but will be located on a 160 acre tract adjacent to and north of U.S. Highway 67. The tract is located in a rural area approximately three miles southeast of the town of Big Lake, Texas. Probity plans to drill a new injection well down to 3,500 feet. The well will have 9 5/8" surface casing set at 900 feet that will be cemented to the surface with 400 sacks of cement. Probity proposes to run 7" production casing to 2,660 feet that will be cemented up to 200 feet with 500 sacks of cement. The well will be equipped with 4" tubing and packer set no higher than 100 feet above the proposed disposal interval (See attached Probity Exhibit No. 3 - Wellbore Diagram).

At the hearing, to mitigate concerns of the protestors, Probity amended its request to lower the top of the injection interval into the San Andres formation and to decrease the maximum daily injection volume. The proposed injection interval is the open hole portion of the San Andres formation between 2,650 feet and 3,500 feet. The interval is suitable for disposal and is used for disposal in other area wells. Probity requests authority to dispose of a maximum of 12,500 barrels of saltwater and RCRA\(^1\) exempt waste per day.

\(^1\) 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.
with a maximum surface injection pressure of 1,325 psig.

The Commission Groundwater Advisory Unit ("GAU") recommends that usable-quality groundwater be protected down to a depth of 800 feet below the land surface. The base of the USDW is 1,250 feet and geological isolation occurs at a depth of 2,000 feet. Probity submitted a GAU letter dated November 15, 2012, which stated that injection into the proposed disposal interval will not endanger the freshwater strata in the area.

Probity requests commercial authority to allow disposal of saltwater produced by wells in the area most of which are west, east and south of the proposed disposal well. There is no San Andres production within a 2 and one-half mile radius. The San Andres formation is a blanket formation across Reagan county and, using an infinite unbounded reservoir assumption, the fluids will dissipate out in all directions over time. The nearest production is from the shallower Grayburg formation at an average depth of 2,350 feet in the Price (Grayburg) Field. There are no wells located within the 1/4 mile or 1/2 mile radius of review for the proposed disposal well.

Although there are currently 12 active commercial disposal wells contained within a ten mile radius, only two of the wells are public commercial disposal wells. Probity operates 20 saltwater disposal trucks out of its facility in Big Lake, Texas, and many times its trucks experience wait times at the two existing facilities. As a result, Probity has to divert some of the saltwater to other facilities and make a 90 mile round trip haul, which increases the operator's costs. Probity believes that a disposal well at the proposed site would allow Probity to be competitive in the area market, make a shorter haul and, thereby, greatly reduce well operating expenses and increase the ultimate recovery from the local producing wells.

There are 1,916 active producing wells in this area of the county and, within the last 90 days, 329 drilling permits have been issued by the Commission. In addition to the Spraberry formation development, there is ongoing development in the Cline and Wolfcamp shale formations. This activity has resulted in 42 rigs operating within a 35 mile radius of the proposed disposal well and saltwater disposal volumes have picked up within the last year, as a direct result of increased drilling activity. Probity plans to use the proposed facility for its own disposal needs, but it will be available for use by other saltwater disposal haulers.

Access to the disposal facility will be off of U.S. Highway 67, which is a paved two lane public highway. At an average injection rate of 10,000 BWPD, there will be approximately 75 trucks per day accessing the facility. The facility can accommodate many trucks at any one time and is of sufficient size to allow trucks access without having to wait on the highway. The surface facility will comply with all of the permit conditions requested by the Commission staff. In addition, the facility will be manned 24 hours per

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2 Geologic isolation indicates the depth at which the freshwater zones above are isolated from the injection interval below by an impervious interval.
day, have a firewall built around the entire facility and have high water level switches to prevent the tanks from overflowing onto the ground.

Probity submits that it has the expertise to build and manage the proposed facility. Probity has a current approved Form P-5 (Organization Report), a $25,000 letter of credit for financial assurance and no pending Commission enforcement actions.

Protestants' Evidence

The application is protested by a private disposal well operator and an offset operator of six producing oil wells in the Price (Grayburg) Field. The protestants are located over one mile to the southeast and three quarters of a mile to the south and southeast, respectively, of the proposed disposal well. The protestants believe that the application for the proposed commercial disposal well and facility should be denied. Protestants' concerns fell into two general categories; 1) the potential to over-pressure the San Andres disposal interval; and, 2) the potential negative consequences to the existing production in the Price (Grayburg) Field.

DLB's Case

DLB operates six wells in the Price (Grayburg) Field, which are approximately 50 feet up-dip from the proposed disposal well. The wells are completed in the Grayburg formation and produce a total of two to five barrels of oil per day from a depth between 2,350 feet and 2,575 feet. DLB is primarily concerned that the addition of another disposal well into the San Andres disposal interval in the area will create a large pressure increase in the vicinity that would adversely affect the production from the shallower producing wells.

The closest disposal well offset to the proposed disposal well is the private commercial SWD, the Basic Energy Services, LP - TXL Lease, Well No. 12, which has a permitted disposal interval in the San Andres formation from 2,600 feet to 3,050 feet. DLB felt that the total effect would be additive and result in a pressure buildup in the vicinity around the two wells far in excess of what just one well would cause. This effect would increase the likelihood of cross flow out of the disposal interval up into the producing horizon and reduce the effective life of the two disposal wells.

Alice's Case

Alice is the operator of the Ponderosa Lease, Well No. 1, private commercial SWD, which is located over one mile to the southeast of the proposed disposal well. The permitted disposal interval is the San Andres formation from 2,600 feet to 3,500 feet. Alice is afraid that a new disposal well will interfere with their disposal well injection pressure and shorten the life of their well.
EXAMINERS' OPINION

The examiners recommend that the application for commercial disposal authority pursuant to Statewide Rule 9 for the Pro-Select SWD Lease, Well No. 1, be approved. Probity 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 proposed disposal well will be completed in a manner which will protect useable-quality water resources and will confine the injected fluids to the disposal interval. The proposed disposal well will have cement behind the production casing up to 200 feet and injection will be through tubing set on a packer to confine injected fluids to the San Andres formation. Since the proposed disposal well is three quarters of a mile from the nearest existing private commercial disposal well, the location should greatly reduce any potential interference effects between the proposed and existing disposal wells. Finally, there are no wells located within the 1/4 mile or 1/2 mile radius of review for the proposed disposal well.

Although there are currently 12 active commercial disposal wells contained within a ten mile radius, only two of the wells are public commercial disposal wells. Probity operates 20 saltwater disposal trucks out of its facility in Big Lake, Texas, and many times its trucks experience wait times at the two existing facilities. As a result, Probity has to divert some of the saltwater to other facilities and make a 90 mile round trip haul, which increases the operator's costs. A disposal well at the proposed site would allow Probity to be competitive in the area market, make a shorter haul and thereby greatly reduce well operating expenses and increase the ultimate recovery from the local producing wells. Shorter hauls decrease truck time on the public roadways, thereby decreasing public risk from the truck traffic.

The TXL Lease, Well No. 1, private commercial SWD has a permitted injection interval in the San Andres formation from 2,600 feet to 3,050 feet. Likewise, the Ponderosa Lease, Well No. 1, private commercial SWD, is permitted to dispose into the San Andres formation from 2,600 feet to 3,500 feet. Local Grayburg formation wells produce from a depth between 2,350 feet and 2,575 feet. Since the proposed disposal interval is 2,650 feet to 3,500 feet, it is doubtful that any adverse effects would be seen in any of the shallow offset Grayburg formation producing wells.
The area surrounding the proposed disposal facility is rural ranching land. Access to the proposed disposal facility will be from a paved public highway. The surface facility is newly constructed and is of sufficient size to accommodate trucks hauling water to the facility. Access to the disposal facility will be off of U.S. Highway 67, which is a paved two lane public highway. Compliance with permit conditions will minimize the risk of spills at the facility and will prevent the migration of any spills that occur, thereby protecting both ground and surface water.

FINDINGS OF FACT

1. Notice of the application and hearing was provided to all persons entitled to notice. Notice of the application was published in The Big Lake Wildcat, a newspaper of general circulation in Reagan County, on September 6, 2012.

2. Notice of the application was sent to the Reagan 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 September 26, 2012.

3. The proposed injection into the Pro-Select SWD Lease, Well No. 1, will not endanger usable quality water.
   a. The Commission Groundwater Advisory Unit ("GAU") recommends that usable-quality groundwater be protected down to a depth of 800 feet below the land surface.
   b. The base of the USDW is 1,250 feet and geological isolation occurs at a depth of 2,000 feet.
   c. The well will have 9 5/8" surface casing set at 900 feet that will be cemented to the surface with 400 sacks of cement.

4. The proposed injection into the Pro-Select SWD Lease, Well No. 1, will not endanger production from other oil, gas or mineral bearing formations.
   a. Probity Operating, LLC ("Probity") plans to drill a new disposal well down to 3,500 feet.
   b. Probity proposes to run 7" production casing to 2,660 feet that will be cemented up to 200 feet with 500 sacks of cement.
   c. The well will be equipped with 4" tubing and packer set no higher than 100 feet above the proposed disposal interval
   d. There are no wells located within the 1/4 mile or 1/2 mile radius of review for the proposed disposal well.
e. There is no San Andres production within a 2 and one-half mile radius. The nearest production is from the shallower Grayburg formation at an average depth of 2,350 feet in the Price (Grayburg) Field.

f. The San Andres formation is a blanket formation across Reagan county and, using an infinite unbounded reservoir assumption, the fluids will dissipate out in all directions over time.

5. Use of the Pro-Select SWD Lease, Well No. 1, 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. There are 1,916 active producing wells in this area of the county and, within the last 90 days, 329 drilling permits have been issued by the Commission.

b. In addition to the Spraberry formation development, there is ongoing development in the Cline and Wolfcamp shale formations.

c. The development activity has resulted in 42 rigs operating within a 35 mile radius of the proposed disposal well and saltwater disposal volumes have picked up within the last year, as a direct result of increased drilling activity.

d. Although there are currently 12 active commercial disposal wells contained within a ten mile radius, only two of the wells are public commercial disposal wells.

e. Probity operates 20 saltwater disposal trucks out of its facility in Big Lake, Texas, and many times its trucks experience wait times at the two existing facilities. As a result, Probity has to divert some of the saltwater to other facilities and make a 90 mile round trip haul, which increases the operator's costs.

f. The use of the proposed disposal well will reduce travel time and miles traveled by waste hauling trucks, resulting in reduced costs to operators.

g. Probity plans to use the proposed facility for its own disposal needs, but it will be available for use by other salt water disposal haulers.
6. Probity has a current approved Form P-5 (Organization Report), a $25,000 letter of credit for financial assurance and no pending Commission enforcement actions.

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 Reagan County and is in the public interest pursuant to Sec. 27.051 of the Texas Water Code.

4. Probity Operating, 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 application of Probity Operating, LLC for commercial disposal authority pursuant to Statewide Rule 9 for the Pro-Select SWD Lease, Well No. 1, be approved, as set out in the attached Final Order.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner

Marshall F. Enquist
Legal Examiner
Proposed Disposal Configuration

Well To Be Drilled, if Permitted

Base Usable Quality Water @ 800'

9-5/8" Casing @ 900'
Plan Cement to Surface

San Andres

4" Tubing
With Packer @ 2550'

7" Casing @ 2660'
Plan Cement to 200'

Disposal Interval: 2650-3500'

Total Depth: 3500'

Exhibit No. 3
O & G Docket No. 7C-0280238
Date: February 19, 2013
Probity Operating, L.L.C.