RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7C-0281350

THE APPLICATION OF PROBITY OPERATING, LLC, FOR A COMMERCIAL PERMIT TO DISPOSE OF OIL AND GAS WASTE BY INJECTION INTO A POROUS FORMATION NOT PRODUCTIVE OF OIL OR GAS, BIG LAKE SWD LEASE WELL NO. 2, PRICE (GRAYBURG) FIELD, REAGAN COUNTY, TEXAS

HEARD BY: Paul Dubois, Technical Examiner
Laura Miles-Valdez, Hearings Examiner

APPEARANCES:

APPLICANT:
Paul Tough
Rick Johnston
Benjamin Warden

REPRESENTING:
Probity Operating, L.L.C.
Select Energy Services

PROTESTANTS:
George Neale
Harold Wayne Smith
David Gross
Dale Miller

Alice Environmental Services

PROCEDURAL HISTORY

Application Filed: October 12, 2012
Request for Hearing: October 30, 2012
Notice of Hearing: April 16, 2013
Date of Hearing: August 23, 2013
Transcript Received: September 4, 2013
Proposal For Decision Issued: September 30, 2013
EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

Probity Operating, LLC (Probity), requests authority pursuant to Statewide Rule 9 to operate Well No. 2 on its Big Lake SWD Lease in Reagan County, Texas, as a commercial disposal well in the San Andres Formation, Price (Grayburg) Field. The proposed disposal well will be a newly drilled well.

Notice of the application was published in The Big Lake Wildcat, a newspaper of general circulation in Reagan County, on October 11, 2012. Notice of the application was mailed on October 12, 2012 to the Reagan County Clerk and to the surface owners of the disposal tract and each tract adjoining the disposal tract. There were no offset operators within one-half mile of the proposed location.

The application was determined to be administratively complete by Commission staff, but it is protested by DLB Oil & Gas, Inc. (DLB), and Alice Environmental Services, LP (AES). DLB operates several producing wells in the Price (Grayburg) Field from one half to one mile south and east of the proposed well. DLB is a related entity to Texas SWD Co., Inc., which operates two disposal wells within five miles of the proposed well. AES is a general partner of TX Energy Services, LLC, which operates a disposal well about one mile southeast of the proposed disposal well.

DISCUSSION OF THE EVIDENCE

Applicant's Evidence

Probity proposes to drill a new disposal well, the Big Lake SWD Lease, Well No. 2, 3 miles east of Big Lake, Reagan County, Texas. Access to the well will be off of U.S. Highway 67. The well (API No. 383-38039) has been issued a drilling permit and is designed to be built and operated as follows:

- A total depth of 3,500 feet below ground surface, encountering the San Andres formation at about 3,030 feet.
- A 9 5/8th-inch surface casing set to a depth of 950 feet with 500 sacks of cement, which is sufficient to return cement to the surface with approximately 100% excess.
- A 7-inch longstring casing set to a depth of 3,050 feet and cemented back to a depth of 250 feet with 600 sacks of cement, providing for a cement excess of approximately 50%.
The 4-inch injection tubing will be set with a packer at 2,950 feet.

An open hole injection interval in the San Andres formation from 3,050 to 3,500 feet.

A maximum daily injection volume of 12,000 BPD of saltwater and RCRA-exempt oil and gas waste, with an estimated average daily injection volume of 6,000 BPD.

A maximum surface injection pressure of 1,515 psig, and an estimated average surface injection pressure of 1,000 psig.

The Commission's Groundwater Advisor Unit (GAU) recommends that usable-quality groundwater be protected to a depth of 850 feet below ground surface, which corresponds to the estimated depth of the base of the Santa Rosa formation. The base of underground sources of drinking water (USDW) is estimated to be at 950 feet. The GAU indicated that, if the well is otherwise compliant with Commission rules, injection of oil and gas waste into the interval from 2,410 to 3,500 feet will not endanger freshwater in the area.

Probity submits that it has the expertise to build and manage the proposed well. 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.

There are no wells identified in Commission records within one-quarter mile of the proposed well location. There are no production or injection wells identified within one-half mile of the proposed well location. Probity holds drilling permits to three wells between one-quarter and one-half mile north of the proposed location. Probity's application for a commercial disposal well at one of these locations was recently approved by the Commission.

The nearest producing field to the proposed well is the Price (Grayburg) Field. Several producing wells are located between one-half and one mile south of the proposed disposal well. The nearest producing wells to the proposed location are six wells in the TXL Lease operated by DLB. Three of these wells are located within three-quarters of a mile of the proposed disposal well, and three are located from three-quarters to one mile of the proposed well. The wells produce from the Price (Grayburg) Field with perforated intervals from about 2,396 to 2,575 feet. From January through July 2013, these six wells produced about 412 BO, which corresponds to less than one-half barrel of oil per well per day. None of the six DLB wells penetrates the proposed injection interval, the San Andres formation.

One well penetrates the San Andres injection interval within a one-mile radius of the proposed location. The Ball No. 3 well, operated by Atlas Operating and currently shut-in, is located between one mile and three-quarters of a mile to the east of the proposed location. This well is completed in the Spraberry (Trend Area) Field at a depth of 5,253 to
6,697 feet, below the proposed injection interval.

The nearest active commercial disposal well is located between three-quarters and one-half mile to the southeast. This well – the TXL No. 1 SW (API No. 383-33683) – was operated as a commercial disposal well by DLB but is now operated by Basic Energy Services, L.P. It injects into the San Andres formation at a depth of 2,600 to 3,050 feet, which may overlap the proposed well’s injection interval by 20 feet (depending on formation correlation.) This injection well is located about one-quarter mile from two of the DLB TXL Lease production wells mentioned above.

Probity testified that, within one mile of the proposed disposal well, there were no wells having inadequate cementing, casing or other construction deficiencies that might result in harm to water or hydrocarbon resources as a result of Big Lake SWD No. 2 operations.

There are sixteen active commercial disposal wells within a 10-mile radius of the proposed disposal well location, including the Basic Energy Services TXL No. 1 well mentioned above. Fourteen of the wells are in Reagan County and one well in each of Irion County to the east and Crockett County to the south. Many of these sixteen wells inject into the San Andres formation, which receives a tremendous amount of injected fluids in Reagan County. Based on its review of the drilling activity and disposal capacity within the 10-mile radius, Probity believes there is a need for additional capacity.

Much of the development in the area is being driven by horizontal wells completed in the Wolfcamp and Cline shale formations. Within a 35-mile radius of the proposed location, Probity identifies:

- 49 active drilling rigs (34 horizontal rigs and 15 vertical rigs), which is an increase from 42 active rigs in February 2013
- 292 drilling permits issued within the last 90 days
- 583 drilling permits issued since February 19, 2013
- 2,664 active producing wells since 1990, which is an increase of about 750 wells since February 2013.

Probity, and its partner Select Energy Services, currently haul and dispose of about 10,000 bbl of waste fluids a day for Devon, and that is expected to increase to about 18,000 bbl per day over the next two months. Probity and Select also haul for several other operators in the area.

With regard to disposal capacity, Probity notes that many of the sixteen commercial disposal wells in the area are ‘private’ wells. Private wells are not available for the use of the general (waste-hauling) public, including Probity, but instead operate through prior contractual arrangements with specific haulers or waste generators. A ‘public’ commercial
disposal well is available for any hauler to use. Probitly identifies eight of the sixteen disposal wells as ‘private’ and five as ‘public’; Probitly is uncertain of the availability status of the three remaining wells. Probitly identified adverse concerns with several of the public wells, including limited daily capacity, long wait times, and facility reliability issues. Probitly asserted that the proposed Big Lake SWD No. 2 commercial disposal well will help to meet waste disposal needs in this area.

Protestant’s Evidence

DLB’s direct case asserts that the proposed disposal well is not in the public interest because excess disposal capacity exists in the area. Stepping through the same list and map of sixteen disposal wells within a ten-mile radius of the proposed Probitly disposal well, DLB’s witness, Mr. Wayne Smith (a contractor for DLB) testified that the three wells for which Probitly is ‘uncertain’ with regard to status are actually public wells. DLB further stated that wait times were not a problem in the area. Mr. Smith lives in the Big Lake area and frequently drives by many of the disposal wells in question. His testimony was based on his personal observations of activity and wait times at the various disposal well facilities.

Cross examination of DLB’s witness identified a relationship between DLB and Texas SWD Co., Inc. (Texas SWD), which operates disposal wells within ten miles of the proposed probity well. DLB permitted and constructed two disposal wells, the Hickman Nos. 1 and 2, which have since been transferred to Texas SWD. While DLB does not currently operate commercial disposal wells that might compete with Probitly, DLB does appear to be closely related to Texas SWD Co., Inc., which does operate commercial disposal wells. Mr. Smith indicated that a Mr. Larry Heintzelman has an operational management and/or an ownership interest in both entities, but Mr. Smith was not certain—and his testimony was at times contradictory—as to the precise relationship of the two firms.

AES did not present a direct case in protest. Instead, the stated purpose of its presence was to hear Probitly’s case and to ensure the well complies with Statewide Rule 9.

EXAMINERS’ OPINION

The examiners recommend approval of the commercial disposal well permit as requested by Probitly.

Commission staff determined the application to be administratively complete. Probitly has met its financial assurance and burden of proof obligations. The protestant DLB offered no evidence to suggest that the proposed well would endanger or injure any oil, gas, or other mineral formation, or that ground and surface fresh water would not be adequately protected from pollution. DLB argued that the proposed well was not in the public interest because there was no need for additional disposal capacity in this area.

The issue in this case comes down to one party arguing a need for additional disposal capacity and the other party asserting sufficient capacity is already in place.
Disposal capacity is of public interest in that it is a necessity in areas where oil and gas resources are being developed, but this is not a universally accepted standard for assessing the public interest need for disposal capacity. Probity described the pace of growth in the nearby producing areas by summarizing drill rig counts, drilling permits issued and completions. Evidence offered by Probity (Exhibit No. 12) indicates several operators are actively pursuing commercial disposal permits in and around Reagan County. Probity is willing to risk its own private capital investment based on this analysis, as other operators are doing.

The examiners note that the matter was not protested by adjacent surface owners or mineral owners within one-half mile of the proposed location. The matter was not protested by local government or water resource and supply agencies. The matter was protested, in the case of DLB, by a nearby mineral owner who did not present any evidence suggesting the disposal activities would have any impact on its production. The other protestant, AES, did not challenge the applicant’s case or present a direct case of its own at the hearing.

The examiners recommend adoption of the following Findings of Fact and Conclusions of Law:

**FINDINGS OF FACT**

1. Notice of this hearing was given to all persons entitled to notice at least ten (10) days prior to the hearing. Notice of the application was published in the *Big Lake Wildcat*, a newspaper of general circulation in Reagan County, on October 11, 2012.

2. Probity Operating LLC has a permit to drill the Big Lake SWD No. 2 well.

3. The Big Lake SWD No. 2 well will be drilled to a total depth of 3,500 feet below ground surface, encountering the San Andres formation at about 3,030 feet.

4. The Big Lake SWD No. 2 well will be completed as follows:
   a. A 9 5/8th-inch surface casing set to a depth of 950 feet with 500 sacks of cement, which is sufficient to return cement to the surface with approximately 100% excess.
   b. A 7-inch longstring casing set to a depth of 3,050 feet and cemented back to a depth of 250 feet with 600 sacks of cement, providing for a cement excess of approximately 50%.
   c. A 4-inch injection tubing be set with a packer at 2,950 feet.
   d. An open hole injection interval in the San Andres formation from 3,050 to 3,500 feet.
5. The Groundwater Advisory Unit recommends that usable-quality water be protected to 850 feet in the area of the proposed well.

6. The Big Lake SWD No. 2 commercial disposal well will be operated as follows:
   a. A maximum daily injection volume of 12,000 BPD of saltwater and RCRA-exempt oil and gas waste, with an estimated average daily injection volume of 6,000 BPD.
   b. A maximum surface injection pressure of 1,515 psig, and an estimated average surface injection pressure of 1,000 psig.

7. The Big Lake SWD No. 2 well will be cased, cemented and operated in a manner to protect usable quality water, and injection will be confined to the injection interval.

8. The Big Lake SWD No. 2 well will be cased, cemented and operated in a manner to not endanger or injure any oil, gas, or other mineral formation.

9. There are no wells—permitted, active, or plugged and abandoned—within one-quarter mile of the proposed disposal well.

10. No wells within one mile of the proposed disposal well have inadequate cementing, casing or other construction deficiencies that might result in harm to water or hydrocarbon resources as a result of Big Lake SWD No. 2 operations.

11. The Probity Operating LLC Big Lake SWD facility will incorporate all required standard containment design features for commercial disposal facilities designed to prevent pollution.

12. The proposed well is located in the an area of active hydrocarbon development driven by horizontal wells in the Wolfcamp and Cline formations.

13. Within a 35-mile radius of the proposed location, there are:
   a. 49 active drilling rigs (34 horizontal rigs and 15 vertical rigs), which is an increase from 42 active rigs in February 2013.
   b. 292 drilling permits issued within the last 90 days.
   c. 583 drilling permits issued since February 19, 2013.
   d. 2,664 active producing wells since 1990, which is an increase of about 750 wells since February 2013.

14. The active hydrocarbon development in the area will require disposal of salt water and RCRA-exempt oil and gas waste.
15. The need for expanded disposal capacity has resulted in numerous other operator applicants actively pursuing permits in the area.

16. Probit Operating, LLC has an active P-5 on file with the Commission, and $25,000 letter of credit as financial assurance.

CONCLUSIONS OF LAW

1. Proper notice was issued in accordance with the applicable statutory and regulatory requirements.

2. All things have occurred to give the Railroad Commission jurisdiction to consider this matter.

3. The use or installation of the proposed injection well is in the public interest.

4. The use or installation of the proposed injection well will not endanger or injure any oil, gas, or other mineral formation.

5. With proper safeguards, as provided by terms and conditions in the attached final order, which are incorporated herein by reference, both ground and surface fresh water can be adequately protected from pollution.

6. Probit has made a satisfactory showing of financial responsibility to the extent required by Section 27.073 of the Texas Water Code.

7. Probit has met its burden of proof and satisfied 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 and conclusions, the examiners recommend that the application be approved as set out in the attached Final Order.

Respectfully submitted,

Paul Dubois  
Technical Examiner

Laura Miles-Valdez  
Hearings Examiner
Big Lake SWD # 2  
API # 42-383-38039)  
Probity Operating, LLC  
Reagan County, Texas

Proposed Disposal Configuration

Well To Be Drilled, If Permitted

Base Usable Quality Water @ 850'

9-5/8" Casing @ 950'
Plan Cement to Surface

San Andres

4" Tubing  
With Packer @ 2950'

7" Casing @ 3050'
Plan Cement to 250'
Disposal Interval: 3030-3500'

Total Depth: 3500'

Exhibit No. 2  
O&G Docket No. 7C-0281350  
Date: August 23, 2013  
Probity Operating, LLC