RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 06-0273122

THE APPLICATION OF CHIRENO DISPOSAL, LLC PURSUANT TO 16 TAC §3.9 FOR A COMMERCIAL PERMIT TO DISPOSE OF OIL AND GAS WASTE BY INJECTION INTO A POROUS FORMATION NOT PRODUCTIVE OF OIL OR GAS FOR THE CHIRENO SWD LEASE, WELL NO. 3, PINE GROVE (CVL "B" LIME) FIELD, SABINE COUNTY, TEXAS

HEARD BY: Brian Fancher, P.G. - Technical Examiner
Michael Crnich - Legal Examiner

APPEARANCES:
APPLICANT:
Stephen Fenoglio
Kerry Pollard
Bazil Moore
Johnny Moore

Keith Drewery

REPRESENTING:
Chireno Disposal, LLC

PROTESTANTS:
William Osborn
Hilda Ann Snider
Jessica Forbis
Dana G. Bundy
Steve Fuller

Doris Butler
Don Jordan
Self
Self

Self
Self

OBSERVER:
Doyle Dickerson.
Sabine County Commissioner
Billy Ware
Phillip A. Newsom

Self & Katherine Boyer
PROCEDURAL HISTORY

Application Filed:       June 02, 2011
Protest Received:       April 18, 2011
Request for Hearing:    August 18, 2011
Notice of Hearing:      November 18, 2011
Hearing Held:           March 05, 2012
Transcript Received:    March 19, 2012
Proposal for Decision Issued: October 10, 2012

EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

Chireno Disposal, LLC (“Chireno”) requests commercial disposal authority pursuant to 16 TAC §3.9 for the proposed Chireno SWD Lease, Well No. 3, Pine Grove (CVL “B” Lime) Field, Sabine County, Texas.

Notice of the subject application was published in the Sabine County Reporter, a newspaper of general circulation in Sabine County, on March 23, 2011. Notice of the application was sent to the Sabine County Clerk, surface owner of the location for the proposed disposal well, and the adjacent surface owners of each tract which adjoins the disposal tract on March 25, 2011. There were no offset operators identified within the half-mile area of review.

This application is protested by surface owners adjacent to the tract on which the proposed disposal well is located.

DISCUSSION OF THE EVIDENCE

Applicant’s Evidence

The proposed location for the Chireno SWD Lease, Well No. 3 is on a 4.0116-acre tract that is positioned adjacent to the southeast corner of the intersection at State Highway 103 and Farm to Market Road 1. The tract lies within the unincorporated town of Rosevine, Texas, situated three miles north of Bronson, Texas. Keith Drewery, of Keith and Traci Investments, LLC, is the surface owner of the 4.0116-acre tract. Chireno testified it has executed a lease with Mr. Drewery for the 4.0116-acre tract (Tr. P. 84, L. 12-17).

The subject well’s proposed disposal interval incorporates the Fredericksburg and Glen Rose formations from 5,800 feet to 7,600 feet. Chireno requests a maximum and average daily injection volume of 25,000 barrels per day (“bpd”) and a maximum and average surface injection pressure of 2,900 pounds per square inch (“psi”). Chireno testified it seeks to dispose of produced saltwater and RCRA-Exempt wastes that include frac-flowback from producing wells in the area (Tr., P. 22, L. 15-22).
Chireno testified that the subject well will be drilled to a total depth of 7,700 feet. It is proposed the Chireno SWD Lease, Well No. 3 will be completed with 10-3/4” surface casing set at 1,350 feet that will be cemented to the surface with 610 sacks of cement. Additionally, Chireno proposes to set 7” long-string casing to 7,700 feet and circulate 1,569 sacks of cement from the long-string setting depth to 2,000 feet behind the 7” casing string. The well will be equipped with 4-1/2” tubing and packer set at 5,900 feet and 5,950 feet, respectively.¹

The Railroad Commission’s Groundwater Advisory Unit (“GAU”), formerly the Texas Commission on Environmental Quality (“TCEQ”) Surface Casing Team, recommends that usable quality ground water be protected to a depth of 1,250 feet at the subject well’s proposed location. By letter dated April 08, 2011, the TCEQ indicated the base of usable standard drinking water is at 2,550 feet.

At the hearing, Chireno submitted quarter-mile and half-mile areas of review (“AOR”) that surround the proposed disposal well location. No wells were identified within the AORs. Additionally, Chireno submitted a two-mile AOR and testified that one well, the Marathon Oil Co., Shockey Lease, Well No. 1 (API No. 42-403-30366), is placed approximately 1.5 miles east of the subject well location. Further, Chireno testified the Shockey, Well No. 1 was drilled horizontally to total depth at 9,566 feet measured depth, having true vertical depth of 5,370 feet. Lastly, Chireno testified the Shockey Well No. 1 is currently plugged and abandoned.

Chireno testified the nearest oil and gas productive zone produces from the Austin Chalk formation, stratigraphically situated above the Fredericksburg formation. The nearest productive well was identified as the Shockey Well No. 1. The Shockey well was not economically productive of hydrocarbons and, as a result, has been plugged and abandoned.

The Chireno SWD Lease, Well No. 3 has yet to be drilled. Chireno testified that it seeks a correlative interval from 5,800 feet to 7,600 feet, as seen in the log for the Marathon Oil Co., Stokes Unit No. 1 (API No. 42-405-30176), located approximately four miles southwest of the proposed disposal well location.

In support of its proposed disposal interval, Chireno submitted a two-well, stratigraphic cross section that incorporates well logs from the Stokes Unit No. 1 and the EOG Resources, Inc., Marvin Hardy Gas Unit No. 1H (API No. 42-405-30361), located approximately five miles northwest of the proposed disposal well location. Additionally, Chireno testified that, based on its correlative interpretations from the Stokes Unit No. 1, it anticipates the proposed injection interval may be encountered at 5,600 feet, rather than 5,800 feet (Tr., P. 42, L. 11-46). Beyond that, Chireno testified it believes that the correlative interval it proposes as its injection interval will properly confine injected fluids. Chireno testified the top of its proposed injection interval is capped by an adequate amount of shale to properly confine disposal fluids. No testimony was presented by Chireno demonstrating that the base of the proposed injection interval will properly confine disposal fluids.

¹ See attached Chireno Exhibit No. 7 - Proposed Wellbore Schematic
Chireno submitted an aerial map centered on the proposed disposal well location, encompassed with ten-mile and fifteen-mile AORs. Chireno testified this map includes the locations of permitted and completed oil and gas wells from 2009 to 2011, along with locations of injection and disposal wells. As presented, the map depicts multiple oil and gas well locations within the AORs that are predominately placed northeast of the subject well location. Ultimately, Chireno testified the map demonstrates the need for additional disposal in the area due to Haynesville Shale development. No evidence was submitted to support the field names of the wells located within ten and fifteen miles from the subject well that would indicate whether hydro-fracture stimulation is performed.

Additionally, Chireno submitted letters of support for the subject application from State Line Vacuum Services, LLC and J-Dawg Vacuum Services, LLC. In summation, the letters collectively opine there is a need for the subject well and that the well will be utilized for disposal services. No evidence relating to the current disposal capacity or the need for additional disposal capacity in the ten and fifteen-mile AORs was submitted. Although the expert witness on behalf of Chireno testified the letters from third-party vendors indicate a need for additional disposal capacity, no evidence was submitted on behalf of Chireno to demonstrate surrounding disposal wells are no longer accepting disposal fluids due to lack of disposal capacity.

Chireno testified the nearest commercial disposal well is operated by High Roller and located approximately ten miles to the northeast of the subject well location (Tr., P. 69, L. 13-24). No further testimony was presented with respect to the High Roller disposal well. However, at the hearing, it came to light that the Stokes Well No. 1 (API No. 42-405-30176), located four miles southwest of the subject well, is an active commercial disposal well permitted to dispose from 4,900 feet to 6,000 feet (Tr., P. 110, L. 1-9).

Beyond that, Chireno testified that seventeen disposal wells were identified within the fifteen-mile AOR, but only four wells have been drilled and completed (Tr., P. 109, L. 7-12). Moreover, Chireno acknowledged that approximately five to six disposal wells are located between four and five miles west of the proposed subject well, predominately adjacent to State Highway 103.

In its application, Chireno submitted a copy of a letter dated December 22, 2011, from John Tintera, Executive Director of the Railroad Commission to constituents of Senator Robert Nichols, some of whom are protestants to the subject application. In brief, the letter explains the Commission’s view on the purpose of oil and gas disposal wells, the regulatory requirements thereof, the pressure testing requirements for disposal wells, and the determinations made by the Commission for the permitting of commercial disposal wells.

Finally, Chireno testified it has the expertise to build and manage the proposed disposal well. Chireno currently holds an active Commission Form P-5 (Organization Report), has a financial assurance in the form of a $25,000 bond, and has no Commission enforcement actions pending against it.

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2 See Chireno Exhibit No. 22
Protestants’ Evidence

Doyle Dickerson, Sabine County Commissioner

Mr. Dickerson testified there are approximately 18 to 20 homes within a half-mile surrounding the location of the proposed subject well. Mr. Dickerson testified he is concerned for the safety of the families and their homes within the area.

Doris Butler

Counsel on behalf of Ms. Doris Butler submitted evidence in opposition to the subject application. In support of her position, Ms. Butler’s counsel submitted a copy of the permitted commercial injection/disposal wells for Oil and Gas District 06, through October 05, 2010, taken from the Railroad Commission’s internet website.

Additionally, counsel on behalf of Ms. Butler submitted evidence that the Commission has granted sixteen commercial disposal permits subsequent to October 05, 2010, in Shelby, Sabine, and San Augustine Counties, Texas. From April 04, 2011, through January 23, 2012, the Commission issued two permits in Shelby County, nine permits in San Augustine County, and five permits in Sabine County for commercial disposal authority.

Ms. Butler testified she is concerned with the potential pollution to surface waters as a consequence of the subject disposal well due to spillage. Specifically, Ms. Butler testified Donohue Creek is located two-tenths of a mile south on Farm to Market Road 1 and Tebow Creek is three-tenths of a mile east on State Highway 103. Beyond that, Ms. Butler expressed concern for potential traffic hazards and the potential for increased automobile accidents that may occur as a result of the truck traffic associated with the subject well location. Ms. Butler expressed concern that the approval of the subject well at its proposed location will adversely affect the property value of tracts adjoining the proposed well location.

Finally, counsel for Ms. Butler opined that Chireno failed to demonstrate that fluids disposed in its proposed injection interval will be properly confined. Further, the counselor suggested that the base of the proposed injection interval is situated in the middle of a sand bearing formation and therefore cannot properly contain all fluids disposed.

Billy Ware

Mr. Ware is an adjacent surface owner. His property is located directly north, across State Highway 103. Mr. Ware testified he is concerned with potential surface pollution from spillage that may run-off the four-acre disposal well tract and onto adjacent pasture land used for hay crop, as well as into the nearby Tebow and Donohue Creeks.
Jessica Forbis

Ms. Forbis testified in support of Mr. Ware’s testimony and added that hay farming is a way of life in Rosevine, TX. Beyond that, Ms. Forbis testified her concerns related to traffic and possible traffic dangers near the proposed disposal well location.

Hilda Ann Snyder

Ms. Snyder is the independent executrix of and represents the Estate of Margie Mae Cockerham. Additionally, Ms. Snyder testified she represents Don Jordan, her neighbor. The Estate of Margie Mae Cockerham is the owner of a one-acre tract adjacent to and across Farm to Market Road 1, west of the proposed disposal well tract. Mr. Jordan is the owner of an 8.83-acre adjacent tract, south of the Cockerham Estate tract.

Ms. Snyder testified that on behalf of the Margie Mae Cockerham Estate, the subject application’s proposed location is inappropriate. In support, Ms. Snyder testified the nearest town to the subject well is not Bronson, Texas, as described by the applicant, but instead Rosevine, Texas. Both towns are unincorporated. Beyond that, Ms. Snyder testified the approval of the proposed disposal well would cause additional daily traffic and danger at the intersection of State Highway 103 and Farm To Market Road 1. That same intersection is part of a school bus route; therefore, the increased traffic would increase the danger to school children.

In addition, Ms. Snyder testified she feels that the business plan for the improvements related to the four-acre tract obtained by Chireno for the subject disposal well should be submitted to the Commission and that the Commission has responsibilities related to trade secrets thereof.

Ms. Snyder testified Mr. Jordan is concerned for his water quality beneath his property. Mr. Jordan’s primary concern is the possible damage to the environment, specifically the available underground drinking water supply within the area. Mr. Jordan is also concerned that changes in the sub-surface strata, resulting from injection of brine salt water, may not be observed for years in to the future and will be difficult to correct once problems become apparent. Mr. Jordan’s property and home are adjacent to the subject well’s proposed location, and he believes that the injection of brine will negatively affect his property. Lastly, Ms. Snyder requested the Commission deny the subject application.

Phillip Newsom

Mr. Newsom is a resident of South Lake, Texas and owns property in Sabine County, approximately three-quarters to one mile near the proposed disposal well location. Mr. Newsom testified he is concerned with the content of salt water to be disposed, if the subject application were granted. Mr. Newsom inquired as to how far from the subject disposal well will the disposed fluids travel once they have been injected.
Ms. Bundy is a resident of Rosevine, Texas and testified that the current road sizes of State Highway 103 and Farm to Market Road 1 are inappropriate to support the size of waste hauler trucks and the volume of traffic that would result at the proposed disposal well location, if the subject application were approved. Beyond that, Ms. Bundy testified she is concerned that the safety of children going to and from church and the safety of school buses may be compromised due to increased truck traffic.

Steve Fuller

Mr. Fuller is the owner of a 115-acre tract adjacent to, and south of, the proposed disposal well location. Mr. Fuller testified the addition of truck traffic as a consequence of operating the subject well is overwhelming and will add to the danger caused by rock trucks currently operating in the area.

**EXAMINERS’ OPINION AND DISCUSSION**

Based on the testimony and physical evidence submitted by parties at the hearing, the examiners recommend the application for the proposed Chireno SWD Lease, Well No. 3 be denied. Primarily, the examiners conclude the applicant has failed to meet its burden of proof in establishing that fluids disposed in the proposed injection interval will be confined to the injection interval. Additionally, the examiners believe the applicant has failed to meet its burden of proof that the proposed facility is in the public interest, as required by Texas Water Code §27.051.

First, the examiners note that 16 Texas Administrative Code (“TAC”) §3.9 governs the permitting, use, and maintenance of a disposal well under the jurisdiction of the Railroad Commission. Specifically, 16 TAC §3.9(1) provides oil and gas operators the following requirement:

> “Every applicant who proposes to dispose of saltwater or other oil and gas waste into a formation not productive of oil, gas, or geothermal resources must obtain a permit from the Commission authorizing the disposal in accordance with this section”

Under the provisions of Rule 9 an operator is required to demonstrate that fluids will be confined to the injection interval that is requested. In the subject application, Chireno has failed to meet this burden.

At the hearing, Chireno testified it seeks an injection interval based on the correlative interval observed from 5,800 feet to 7,600 feet on the well log of the Marathon Oil Co., Stokes Unit No. 1, located four miles southwest of the subject well. Chireno testified the Stokes Unit No. 1 is currently an active commercial disposal well with a permitted disposal interval from 4,900 feet to 6,000 feet (Tr., P. 110, L. 1-9). The examiners conclude that Chireno seeks to incorporate the sand member seen at 6,000 feet in the Stokes Unit No. 1, also the top of the Fredericksburg formation (or the Edwards formation), as the top of its proposed injection interval for the subject well. Based upon
the cross-section it submitted, Chireno seeks to incorporate the Glen Rose sand member at the base of its proposed injection interval. Chireno testified it believes there is a confining interval above the top of the Fredericksburg formation that will provide isolation of fluids for its proposed injection interval in the Chireno SWD Lease, Well No. 3 (Tr., P. 48, L. 1-10). However, Chireno testified that the base of its proposed injection interval is situated in the middle of the Glen Rose formation. Further, Chireno testified that it did not observe a confining interval below the Glen Rose formation. In fact, Chireno testified the logs it submitted on its cross-section do not penetrate deep enough to see what is below the Glen Rose formation (Tr. P. 114, L. 4-8). That is, Chireno testified the base of its proposed injection interval stops in the middle the Glen Rose formation and that it did not observe a confining layer below the Glen Rose formation (Tr., P. 113, L. 21-25). The examiners believe the Glen Rose formation is a sand bearing formation incapable of properly confining injected fluids. Furthermore, the examiners find that no where did Chireno present evidence to establish that fluids disposed in the proposed injection interval will be confined to the requested injection interval at its base.

Section 27.051(b)(1) of the Texas Water Code requires that the use or installation of the proposed injection well be in the public interest. But, neither Chapter 27 of the Water Code nor 16 TAC §3.9 define “public interest”.

Chireno opined that the subject application meets the requirement of public interest, as there is a need for the proposed disposal well and the applicant is willing to spend capital based on its knowledge of need for the facility (Tr., P. 153, L. 8-18). However, Chireno failed to address the factors indicative of the need for the subject well. In an attempt to demonstrate need for the subject well, Chireno testified that from 2009 to 2011, multiple oil and gas permits and completions were granted for wells within fifteen miles of the proposed disposal well location. Further, Chireno testified these permits and completions are associated with the Haynesville Shale development; however, no well completion data was submitted to support this claim. The examiners find that in similar applications heard by the Commission prior to the subject application, need was measured by industry need. Moreover, industry need was determined to be wait times at existing disposal facilities, along with whether or not surrounding disposal facilities had reached capacity.\(^3\)

Chireno failed to establish industry need through evidence of wait times and current disposal capacities of the seventeen disposal wells currently permitted within fifteen miles of the subject well location. In fact, Chireno testified that only four of the seventeen disposal wells currently permitted for disposal were completed at the time of the hearing. The examiners believe this indicates that due to the surplus of permitted disposal wells, the area surrounding the proposed disposal well currently has adequate disposal capacity. The examiners are of the opinion that Chireno failed to meet its burden of proof in establishing that the subject well meets the requirement of public interest, per Section 27.051(b)(1) of the Texas Water Code. Accordingly, the examiners recommend that the application be denied.

FINDINGS OF FACT

1. Notice of this application and hearing was provided to all persons entitled to notice. Notice of the subject application was published in the Sabine County Reporter, a newspaper of general circulation in Sabine County, on March 23, 2011.

2. Notice of the application was sent to the Sabine County Clerk, surface owner of the location for the proposed disposal well, and the adjacent surface owners of each tract which adjoins the disposal tract on March 25, 2011. There were no offset operators identified within the half-mile area of review.

3. Chireno Disposal Disposal, LLC ("Chireno") requests disposal authority pursuant to 16 TAC §3.9 to commercially dispose of waste in the proposed Chireno SWD Lease, Well No. 3, Chireno SWD Lease, Pine Grove (CVL "B" Lime) Field, Sabine County, Texas.

4. The Chireno SWD Lease, Well No. 3 has yet to be drilled. Chireno proposes to drill the Chireno SWD Lease, Well No. 3 to 7,700 feet, total depth.

5. Chireno seeks to permit the correlative interval from 5,800 feet to 7,600 feet, as seen on the log for the Marathon Oil Co., Stokes Unit, No. 1 (API No. 42-405-30176), located four miles southwest of the proposed disposal well location, as the injection interval for the Chireno SWD Lease, Well No. 3.

6. Chireno failed to demonstrate that fluids injected in the correlative interval from 5,800 feet to 7,600 feet, on the log for the Marathon Oil Co., Stokes Unit, No. 1 (API No. 42-405-30176), will be confined to the injection interval at the location of the Chireno SWD Lease, Well No. 3.

7. Approval of the Chireno SWD Lease, Well No. 3 is not in the public interest.
   a. There was no showing that current disposal capacity in the area of the subject well is inadequate for current disposal needs.
   b. There was no showing of any wait times by waste hauler trucks at disposal wells in the area of the subject well.

8. Chireno has a current approved Form P-5 (Organization Report) and has posted a $25,000 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. Chireno has not complied with the requirements for approval set forth in 16 Texas Administrative Code §3.9 and the provisions of §27.051 of the Texas Water Code.

4. Chireno failed to meet its burden of proof to establish that a commercial disposal facility, at the location proposed for the subject well, is in the “public interest” as required under Texas Water Code §27.051(b)(1).

**EXAMINERS' RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiners recommend that the application of Chireno Disposal, LLC, for commercial disposal authority in its Chireno SWD Lease, Well No. 3, be denied, as set out in the attached Final Order.

Respectfully submitted,

Brian Fancher, P.G.  
Technical Examiner

Michael Crnich  
Legal Examiner