THE APPLICATION OF US LIQUIDS OF LA, L.P. PURSUANT TO STATEWIDE RULE 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 ITS EFE SWD LEASE, WELL NO. 1, FASHING (EDWARDS LIME -A-) FIELD, KARNES COUNTY, TEXAS

HEARD BY: Andres Trevino, P.E., Technical Examiner  
Marshall Enquist, Hearings Examiner

PFD PREPARED BY: Paul Dubois, Technical Examiner

APPEARANCES:

APPLICANT:  
Joe Sanders  
Bryan Lauer  
Greg Cloud  
Joe Rodriguez

REPRESENTING:  
US Liquids of LA., L.P.

PROTESTANTS:  
Matthew Baab


Charles E. Graham, III, P.E.  
Sue Carter

OBSERVERS:  
Austin Ivey  
American Disposal Services
PROCEDURAL HISTORY

Application Filed:        June 27, 2012
Protest Received:        July 6, 2012
Request for Hearing:     September 24, 2012
Notice of Hearing:       April 25, 2013
Date of Hearing:         May 29, 2013
Transcript Received:     June 10, 2013
Proposal For Decision Issued: July 21, 2014

EXAMINERS’ REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

US Liquids of LA, L.P. (USLL) is applying for commercial authority to dispose of oil and gas wastes into a formation not productive of oil or gas for its Eagle Ford East (EFE) SWD Well No. 1 in Karnes County, Texas. The original application was for a disposal interval from 6,100 to 11,300 feet, and was made under Statewide Rule 46, as this interval includes intervals productive of oil or gas. The interval was amended to 6,100 feet to 7,000 feet, and is now made under Statewide Rule 9 as the revised interval is not productive of oil or gas.

The application is protested by several adjacent landowners. The examiners recommend that the application be denied; the applicant has not demonstrated the disposal well to be in the public interest.

The permit application for this disposal well was complementary to USLL’s application to permit its EFE Stationary Treatment and Recycling Facility (hereinafter, ‘the EFE STR facility’) on adjacent property (Docket No. 01-0287992). The disposal well will occupy a one-acre well site, and the EFE STR facility will occupy 125 acres contiguous to the well site. However, since the hearing on this matter, USLL has withdrawn its application for the EFE STRR facility, and the hearings examiner has dismissed that docket (No. 01-0287992) without prejudice (see attached withdrawal letter and dismissal ruling).

MATTERS OFFICIALLY NOTICED

The examiners have taken official notice of the disposition of Oil & Gas Docket No. 01-0287992, a docket related to the instant docket, involving a companion facility.
DISCUSSION OF THE EVIDENCE

Applicant’s Evidence

The Applicant submitted 14 exhibits into the record and provided expert engineering testimony from Mr. Greg Cloud, P.E. Mr. Joe Rodriguez, Vice President of Regulatory Affairs for USLL, also testified. The proposed disposal well site is on one acre of land approximately 13.5 miles west of Karnes City in Karnes County, Texas. The well site is about 250 feet east of Atascosa County Line, and about 2,500 feet northwest of the triple junction of Karnes, Atascosa and Live Oak Counties. The EFE STR facility surrounds the disposal well site and is mostly located in Atascosa County. The EFE STR facility will gather, separate, treat, recycle and dispose of non-hazardous oil and gas wastes. The recycling component includes the production of a road-base material that may be sold to TxDOT or other entities for road construction. USLL anticipates the EFE STR facility will receive and generate some liquid wastes. Consequently it proposes drilling the applied-for well to dispose of liquid wastes associated with the various waste streams received at the EFE STR facility.

USLL is proposing a newly-drilled commercial disposal well that will inject salt water and RCRA-exempt waste into the Lower Wilcox Formation. The proposed disposal well will be drilled to a depth of approximately 7,000 feet with the following well construction and operation details:

- 9 5/8-inch surface casing set to 5,150 feet with cement circulated to the surface.
- 7-inch casing set to 7,000 feet with cement circulated to the surface.
- 4 1/2-inch injection tubing set with a packer at 6,050 feet.
- Injection interval from 6,100 to 7,000 feet.
- Maximum daily injection volume of 17,000 BPD, with an average daily volume of 12,000 BPD.
- Maximum surface injection pressure of 3,050 psig.

The Commission’s Groundwater Advisory Unit (GAU) identified the base of usable quality groundwater (BUQW) to occur at a depth of 5,100 feet, and the base of underground sources of drinking water (USDW) to be at approximately 6,000 feet. The GAU letter stated that using this disposal well as designed and injecting oil and gas waste into the subsurface stratum from 6,100 to 11,300 feet will not endanger the freshwater strata in this area. USLL has since amended its permit application to the interval from
6,100 to 7,000 feet; the GAU requirements and determinations remain applicable. The reduced injection interval is wholly within the originally noticed interval (of 6,100 to 11,300 feet), so a revised notice or publication is not necessary.

The Applicant provided an interpreted well log from the Daubert Oil & Gas, Butler No. 1 Well (Exhibit No. 3), which is located about 5,000 feet southeast of the proposed disposal well. The well log indicates the Middle Wilcox Formation contains 390 feet of clay with the four largest individual unit thicknesses of 98, 77, 71 and 46 feet. Further, the Applicant's expert engineering witness testified that the disposal interval is underlain by the Midway Group, consisting of non-porous and impermeable shale. The disposal interval itself contains about 170 feet of net sand to accommodate the injected fluids. Based on the log, the Applicant interprets the base of lowermost USDW to be at about 5,540 feet, which is several hundred feet higher than identified by the GAU. The Applicant's interpretation is supported by its log interpretation of confining clay intervals between about 5,540 and 6,215 feet.

The Applicant identified two hydrocarbon-producing zones in the area of the disposal well. The Reclaw & Carrizo (Upper Wilcox) Formations produce some hydrocarbons (and fresh water) in the area from about 4,000 feet to 4,500 feet, and the Eagle Ford Formation is encountered at a depth of about 10,300 feet. The shallower zone will be isolated behind two cemeted casing strings, and the disposal well will not penetrate the Eagle Ford zone.

There are wellbores penetrating the disposal interval within one-quarter mile of the proposed disposal well. There is one horizontal wellbore completed in the Eagle Ford Formation that crosses the one-quarter mile area of review. The surface location (and the vertical section that would penetrate the disposal interval) are outside of the one-quarter mile area of review. Also, this horizontal well is completed in the Eagle Ford Shale, about 4,000 feet below the disposal interval.

Within the one-half mile area of review there are three wellbores (or portions thereof). A plugged dry hole is located about 2,300 feet southeast of the proposed location. This well was drilled and plugged in 1969 to a depth of 4,227 feet, and thus does not penetrate the disposal interval. The other two wells are horizontal laterals completed in the Eagle Ford Formation 4,000 feet below the disposal interval. The surface locations and vertical wellbores for these two wells are not within the one-half mile area of review.

Applicant's Exhibit Nos. 4 and 6 indicated horizontal well permitting and completion activity in the area, so presumably there is some need for waste fluid disposal. The Applicant's expert engineering witness, on cross-examination, did state that he had performed a study into the number of permitted commercial disposal wells in the vicinity of the proposed well. The Applicant's expert stated that within a 15-mile radius there were probably a dozen such wells, and that within a 3 1/2-mile radius there are four permitted
commercial disposal wells.

According to Mr. Joe Rodriguez, Vice President for Regulatory Affairs, USLL's main business is land-based disposal. The proposed EFE STR facility would have various treatment cells, staging cells and landfill cells. According to Mr. Rodriguez, solid materials that cannot be recycled would be entombed in plastic-lined landfill cells; the treatment and staging cells would not include artificial liners. USLL operates three surface facilities similar to the one proposed for Karnes/Atascosa County, but two of those facilities do not have on-site disposal wells. Mr. Rodriguez testified that most of the waste their facilities receive is 60 to 80 percent liquid. The liquids are typically disposed by injection, either by an on-site well or they are trucked off-site to another commercial disposal facility. USLL has had some trouble with other facilities taking their waste, typically due to filtration and volume concerns. The remaining 20 to 40 percent of the incoming waste stream are solids, which would be treated onsite and then the treated material will be sold for use in road construction. Mr. Rodriguez testified that having their own on-site disposal well greatly benefits their facility and their ability to accept, treat and dispose of oil and gas waste.

On cross-examination Mr. Rodriguez confirmed that Commission staff had initially denied certain aspects of the EFE STR facility permit on January 29, 2013 (Protestants' Exhibit No. 29). This denial was based on the presence of shallow groundwater at a depth of 48 feet below the proposed road base recycling, thermal treatment and treatment areas, the design of which did include the installation of artificial liners. Commission staff will consider amended applications with appropriate liners. Mr. Rodriguez said that since the January 29, 2013 determination letter, USLL has made two additional submittals to the Commission. Mr. Rodriguez testified that those submittals remain pending with the Commission and have not been denied.

Notice of the application was published in Karnes Countywide, a newspaper of general circulation in Karnes County, on June 27, 2012. The published notice was for disposal into a porous formation productive of oil and gas (that is, pursuant to Statewide Rule 46). The application presented at the hearing was for disposal into a non-productive formation pursuant to Statewide Rule 9. Notice requirements for wells permitted under the two rules are identical. The application was mailed on June 29, 2012 to the Karnes County Clerk and to the surface owners of the disposal tract and each tract adjoining the disposal tract. The notice did not include operators of wells within the one-half mile area of review, as the surface locations of those horizontal wells were not within the area of review. The oversight was recognized during hearing preparations and the two operators were noticed. Marathon protested the application but then withdrew the protest.

Commission staff determined the disposal well application to be administratively complete.
Protestant's Evidence

The Protestants offered 29 exhibits at the hearing and one late-filed exhibit, which was subsequently admitted into evidence. The Protestants' expert engineering witness was Charles E. Graham, Ill, P.E. Ms. Betty Sue Carter, an nearby property owner, also testified. The Protestants expressed their concern that the proposed facility was not in the public interest and that the groundwater resources would not be adequately protected. The Protestants' exhibits included photographs, tables, maps and commercial disposal permits.

The Protestants presented information on permitted and active commercial disposal wells within 10 miles of the proposed well. A disposal well is considered 'active' when a Commission Form H-10, 'Annual Disposal/Injection Well Monitoring Report,' has been filed, indicating the well has begun disposal activities. Within a 5-mile radius there is one active disposal well, and there are three more active disposal wells within a 10-mile radius.

Within a 5-mile radius there are four permitted disposal wells that are not yet active. In addition, a permit was issued for the Nor-Tex Resources, LLC, Nor-Tex SWD Well No. 1, located 2,000 feet east of the proposed EFE SWD well, but the permit was later rescinded due to a notice defect. The examiners note that another hearing was held for the well and a permit was re-issued by the Commission on November 26, 2013 (Docket No. 02-0281299). Within a 10-mile radius there are an additional three permitted disposal wells that are not yet active.

All of the permitted commercial wells within 10 miles of the proposed well are authorized to dispose of salt water and RCRA-exempt waste, except for the Richter Well No. 2 operated by SNG Operating, LLC, which may only dispose of salt water.

The Protestants' expert engineering witness, Mr. Graham, correlated the available disposal capacity in the area with the demand created by the oil and gas industry. This study was based on the Commission's Final Order (Docket No. 02-0278322) denying a commercial disposal permit for Karnes County Properties, LLC. In that case, the Commission found disposal authority for the KC SWD Lease Well No. 1 was not in the public interest because there was not an industry need in the area at the time. The Protestants believe the situation is unchanged. Citing Commission records, the Protestants stated that the current monthly disposal volume demand for all of Karnes County is slightly less than about 1.2 million barrels, and for Atascosa County it is slightly less than 1 million barrels. The Protestants indicated that within a 5-mile radius of the proposed EFE SWD disposal well there is an existing permitted capacity to dispose of 3.5 million barrels of salt water and RCRA-exempt waste.

Noting that there were many more permitted disposal wells beyond the five mile radius, the Protestants believe that excess disposal capacity exists in the area. Mr. Graham also noted that drilling rig counts for Karnes and Atascosa Counties were stable
and do not indicate an increase in activity that would correlate to an increased amount of produced water. Mr. Graham also commented that water production from the wells was a result of stimulation and that water production declined over time. Mr. Graham concludes that there is not a need for additional disposal capacity in the area.

The Protestant argued that the disposal well construction would not be protective of the USDW. The GAU letter identified the USDW to be at 6,000 feet, and the top of the injection interval will be at 6,100 feet. The Protestant believes that there is not sufficient confining strata between the top of the disposal interval and the base of the USDW.

On June 17, 2013, the Protestants submitted late-filed Exhibit No. 30. After notification to the parties, the exhibit was admitted into evidence. Protestant’s late-filed Exhibit No. 30 was a letter dated March 28, 2013 to the Commission. This letter was a response to the Commission’s application denial letter of January 29, 2013. In this letter USLL states several times that it “is withdrawing the portion of this application for recycling of oil and gas waste.” The Protestants point out that prior to the May 29, 2013 hearing, USLL had withdrawn its application to recycle oil and gas waste (i.e., to make a marketable road base material from such wastes), but that the Applicants had repeatedly staked their public interest claim on the benefits of such recycling capability.

EXAMINERS’ OPINION

The examiners recommend that the proposed application for the EFE SWD Well No. 1 be denied. Based on the evidence in the record, the examiners conclude that the proposed well is not in the public interest, the Applicant has not met its burden of proof that the well is in the public interest, and the Protestants have demonstrated that the well is not in the public interest.

USLL designed the completion, operation, and mechanical aspects of the disposal well and associated facilities in a manner to be protective of groundwater and hydrocarbon resources. The casing and cementing design, along with injection into the Lower Wilcox Formation, will be protective of the groundwater and mineral resources in the area. There is about 1,000 feet of vertical separation and at least 390 feet of clay between the top of the disposal interval and the base of usable-quality water. USLL has met its financial assurance obligations.

The Protestants offered no persuasive contrary evidence to suggest that the proposed disposal well would endanger or injure any oil, gas, or other mineral formation, or that ground water would not be adequately protected from pollution.

Under the provisions of the Texas Water Code, the Commission cannot approve an injection well unless it finds, "that the use or installation of the injection well is in the public interest." Texas Water Code § 27.051(b)(1). This is a separate, and independent,
prerequisite from the required findings that the injection well will not endanger or injure oil or gas formations, that both ground and surface fresh water will be adequately protected, and that the applicant has shown financial responsibility. See Texas Water Code §27.051(b)(2)-(4). Generally, a disposal well applicant makes a *prima facie* case that a well is in the public interest by evidence that there is a need for the well and that it will provide a more efficient and economical disposal option for nearby operators of producing wells. A more economical disposal option allows producing wells to lower their operating expenses, produce longer and thus increase cumulative hydrocarbon production to the benefit of the public and the State.

In this case, the Applicant seeks a commercial disposal well permit for a well that is directly related to the operation of its proposed EFE STR facility. The EFE STR facility is not a part of this matter, except as it relates to the proposed disposal well. The Applicant's testimony clearly and unequivocally states that the proposed disposal well is an important component of the affiliated EFE STR facility, as it will allow for more economical disposal of decanted waste liquids, eliminating the need for these wastes to be trucked off-site for disposal. The disposal well is not, however, a necessary component of the EFE STR facility, as USLL, at other similar facilities, is accustomed to trucking waste liquids for off-site disposal.

The Applicant's claim of public interest for the disposal well is based on its relationship to the EFE STR facility. The *prima facie* claim of public interest of the EFE STR facility is based primarily on the facility's recycling capabilities. That is, it was intended to transform solid oil and gas waste into a road base material that will be purchased by TxDOT (and presumably others). The facility was also intended to treat and landfill wastes, but the Applicant emphasized the recycling aspect with regards to public interest benefits.

The Applicant provided no evidence or information regarding the need for this facility apart from its connection to the EFE STR facility. The Applicant did not offer exhibits documenting direct evidence about the number or location of disposal wells in the area of the proposed well or the need for additional disposal capacity in the area. Typically, operators seeking a commercial disposal well permit will assess various factors in an area such as (1) demand for disposal capacity, (2) supply of disposal capacity, and (3) truck wait-times at disposal facilities. Such information is typically provided at hearing to justify the public interest need for such facilities. In this case, USLL provided no such evidence. Its expert engineering witness apparently studied such data, but did not offer it into evidence at the hearing. The Protestants, however, did present such evidence of the supply and demand for disposal capacity in Karnes and Atascosa Counties. The Protestant's evidence did indicate that there was significantly more permitted capacity than needed in the immediate and county-wide area. The Applicants did not object to or refute this evidence.
USLL has withdrawn the ‘recycling of oil and gas wastes’ portion of the Eagle Ford East facility permit application. Subsequently, Commission records indicate on July 1, 2013, Commission staff denied USLL’s “Amended application to operate a commercial oil and gas waste separation/disposal/treatment facility.” Subsequent to the hearing on the proposed EFE disposal well, USLL has resubmitted its application for the EFE STR facility, and the application was protested. The new EFE STR application was assigned docket no. 01-0287992, and a hearing on the matter was convened on June 18 to 23, 2014. On July 16, 2014, USLL withdrew its application for the EFE STR facility; the hearings examiner in that matter dismissed the docket without prejudice on July 17, 2014.

Thus, the examiners conclude that the Applicant has not demonstrated that the proposed injection well is in the public interest. The examiners recommend the application be denied because it is not in the public interest.

Finally, the examiners believe that the testimony of Mr. Rodriguez was, at best, intentionally misleading. He stated that their application for the EFE STR was pending and had not been denied. However, he failed to mention that USLL had withdrawn the recycling aspects of the application while continuing to assert that the solid waste recycling was a significant benefit that the EFE STR facility (and associated disposal well) would provide in the public interest.

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

**FINDINGS OF FACT**

1. Notice of the application was published in *Karnes Countywide*, a newspaper of general circulation in Karnes County, on June 27, 2012.

2. The published notice was for disposal into a porous formation productive of oil and gas (that is, pursuant to Statewide Rule 46). The application presented at the hearing was for disposal into a non-productive formation pursuant to Statewide Rule 9. Notice requirements for wells permitted under the two rules are identical.

3. The application was mailed on June 29, 2012 to the Karnes County Clerk and to the surface owners of the disposal tract and each tract adjoining the disposal tract. The notice did not include operators of wells within the one-half mile area of review, as the surface locations of those horizontal wells were not within the area of review. The oversight was recognized during hearing preparations and the two operators were noticed.

4. The proposed disposal well would be drilled to a depth of approximately 7,000 feet with the following well construction and operation details:
a. 9 5/8-inch surface casing set to 5,150 feet with cement circulated to the surface.

b. 7-inch casing set to 7,000 feet with cement circulated to the surface.

c. 4 1/2-inch injection tubing set with a packer at 6,050 feet.

d. Injection interval from 6,100 to 7,000 feet.

e. Maximum daily injection volume of 17,000 BPD, with an average daily volume of 12,000 BPD.

f. Maximum surface injection pressure of 3,050 psig.

5. The GAU identified the BUQW to occur at a depth of 5,100 feet, and the base of USDW to be at approximately 6,000 feet.

6. The Middle Wilcox Formation separating the disposal interval from usable-quality ground water contains 390 feet of clay with several individual unit thicknesses of 98, 77, 71 and 46 feet, and the disposal interval is underlain by the Midway Group, consisting of non-porous and impermeable shale.

7. There are no wellbores within one-quarter mile of the proposed disposal well that penetrate the disposal interval.

8. There is one horizontal wellbore completed in the Eagle Ford Formation, 4,000 feet below the disposal interval, that crosses the one-quarter mile area of review. The surface location (and the vertical section that would penetrate the disposal interval) are outside of the one-quarter mile area of review.

9. The Applicant did not offer exhibits documenting direct evidence about the number or location disposal wells in the area of the proposed well or the need for additional disposal capacity in the area.

10. The Applicant’s public interest case was based solely on the disposal well complementing USLL’s proposed EFE STR facility.

   a. Commission staff denied the EFE STR facility application based, in part, on shallow groundwater below unlined treatment and staging cells.

   b. USLL withdrew the recycling component of the EFE STR facility application.
c. Commission staff denied the remaining EFE STR facility application.

d. Subsequent to the hearing on the proposed EFE disposal well, USLL resubmitted its application for the EFE STR facility.

i. The new application was protested. The new EFE STR application was assigned docket no. 01-0287992, and a hearing on the matter was convened on June 18 to 23, 2014.

ii. On July 16, 2014, USLL withdrew its application for the EFE STR facility; the hearings examiner in that matter dismissed the docket without prejudice on July 17, 2014.

e. The Applicant has failed to demonstrate that the proposed disposal well is in the public interest.

11. Excess disposal capacity exists in Karnes and Atascosa Counties, and additional disposal capacity is not needed.

**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 not in the public interest.

4. US Liquids of LA, L.P. has not satisfied the public interest requirements of Chapter 27 of the Texas Water Code.

**EXAMINERS' RECOMMENDATION**

Based on the above findings and conclusions, the examiners recommend that the application be DENIED as set out in the attached Final Order.

Respectfully submitted,

Paul Dubois  
Technical Examiner

Marshall Enquist  
Hearings Examiner
July 16, 2014

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Re:  Oil and Gas Docket No. 01-0287992; Application of U.S. Liquids of LA, LP, Pursuant to Statewide Rule 8 and 78 to Operate a Commercial Land Treatment Facility Eagle Ford East Facility, Atascosa and Karnes Counties, Texas

Dear Examiners,

U.S. Liquids withdraws its application. Please cancel the hearing scheduled for July 18th, 2014.

Please disregard the letter that I sent you that incorrectly referred to Docket No. 02-0278758.

Sincerely,

Ray Langenberg

RL:ssm

cc via e-mail: Matthew Baab
Eric Opiela

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RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

JULY 17, 2014

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RE: Oil and Gas Docket No. 01-0287992; Application of U.S. Liquids of LA, LP., Pursuant to Statewide Rules 8 and 78 to Operate a Commercial Land Treatment Facility, Eagle Ford East Facility, Atascosa and Karnes Counties, Texas

Dear Parties:

The Commission is in receipt of correspondence dated July 16, 2014, from counsel for U.S. Liquids of LA, LP ("U.S. Liquids"), in which U.S. Liquids, withdraws the above-referenced docket. Therefore, U.S. Liquids application is hereby withdrawn, without prejudice.

Further, pursuant to Tex. Gov’t Code § 2001.059, the hearing examiners hereby access the cost of transcription services to be split equally between Applicant U.S. Liquids (50%) and Protestant Sue Carter (50%).

Laura E. Miles-Valdez
Hearings Examiner

Cc: Docket Services
   Terry Edwards, RRC Oil and Gas Division

Service List