SHOW CAUSE HEARING AND CONTINGENT APPLICATION OF WEC, INC. REGARDING STATEWIDE RULE 9 COMMERCIAL DISPOSAL PERMIT NO. 12263 FOR THE ACTON SWD LEASE, WELL NO. 1, IN THE NEWARK, EAST (BARNETT SHALE) FIELD, HOOD COUNTY, TEXAS

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

APPEARANCES:

REPRESENTING:

WEC, Inc.

Applicant:

Stephen Fenoglio, Attorney Phil Gamble, Attorney Richard York Wickline, Sr. Kerry A. Pollard Jeff Bradley Harold E. von Dran, Jr. Richard York Wickline, II Mike McInturff

Protestants:

Terry K. Fleming, Attorney Richard Stannell Diane Perkins Dr. Judy Reeves Felicia Tornabene Peters, President Cullen Crisp Amy Mayer

Kathryn Benson Perry A. Hackman John E. Pruitt Jeremy & Amy Parks

Public Officials and Interested Parties:

Honorable Jim Keffer Bob Lowrey, President **Terry and Elaine Fleming**

Granbury Association of Realtors Concerned Citizens of Acton Concerned Citizens of Blue Water Shores Concerned Citizens of Fall Creek Perry A. Hackman John E. Pruitt Jeremy & Amy Parks

State Representative - District 60 Pecan Plantation Home Owners Association

Charles R. Baskett

David Brown, Station Manager

Dr. Richard L. Roan, Commissioner Leonard Heathington, Commissioner David Southern, Mayor Gene Mayo, Sheriff

Observers:

Dick Pruitt, Mayor Winnie Cener Chrystal Childers Matt Mildren Lionel & Dorothy Milberger Dena Day Gerald Burns Pecan Plantation Home Owners Association De Cordova Volunteer Fire Department Hood County Hood County Granbury, Texas Hood County

De Cordova, Texas

PROCEDURAL HISTORY

Date of Application: Date of Notice: Dates of Hearing:

Date of Last Transcript: Date Closing Arguments Filed: Date PFD Issued: May 15, 2008 June 9, 2008 August 1 & 15, 2008 September 9 & 10, 2008 September 18, 2008 October 10, 2008 November 21, 2008

EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

This is a Commission called hearing to allow WEC, Inc. to show cause why Rule 9 Commercial Permit No. 12263 should not be suspended, modified or cancelled for failure to provide proper notice. In the event the permit is found to be invalid, WEC, Inc. requests that the Commission grant a new Commercial Disposal Permit for the Acton SWD Lease, Well No. 1, in the Newark, East (Barnett Shale) Field, Hood County, Texas.

The application is opposed by various surface owners of offset tracts and by numerous other residents of the area where the subject disposal well is located. In addition, several public officials and representatives of interested associations or citizen groups gave testimony or made statements in opposition to the application.

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DISCUSSION OF THE EVIDENCE

BACKGROUND

The Acton SWD Lease, Well No. 1, was originally noticed and permitted by Majestic Consulting, LC in January 2006. An amended application changing the operator to WEC, Inc. was filed and an amended permit was issued in February 2007 reflecting the new operator name. WEC applied for and received a drilling permit in July 2007.

All three of the above referenced applications stated that the well was to be located 2.9 miles northwest of Acton, Texas. However, the well was actually drilled and completed in November 2007 at a location 2.3 miles southeast of Acton, Texas. To date, the installation of the surface facilities is 80-85% completed. As a result of this activity, the Commission began receiving complaints from potentially affected persons about WEC's failure to provide adequate notice of the actual location of the proposed disposal well.

At the hearing, WEC acknowledged that the notice provided of the original Form W-14 application for Commercial Permit No. 12263 was misleading as to the well location and WEC presented evidence to support a new disposal permit. An amended form W-14 with the correct well location was filed April 16, 2008 and notice was given to the affected persons, the County Clerk of Hood County, all surface owners of adjoining tracts and all operators within one-half mile on April 18, 2008. Notice of this application was published in the *Hood County News*, a newspaper of general circulation in Hood County, on April 19, 2008. Soon thereafter, the Commission began receiving protests, which resulted in the scheduling of this hearing.

APPLICANT'S EVIDENCE

An amended Commission Form W-14 (Application to Dispose of Oil and Gas Waste by Injection) was filed by applicant for the Acton SWD Lease, Well No. 1 in February 2007 and additional amended applications were filed in April and July 2008. The SWD Well No. 1 was drilled and completed in November 2007 (See attached WEC Exhibit No. 19). The well was drilled to a total depth of 8,526 feet and is completed as follows:

- Surface casing (9-5/8") set at 672 feet with cement from the casing shoe to the ground surface.
- Longstring casing (7") set at 6,670 feet and cemented in 2-stages using a DV Tool set at 4,221 feet. The longstring is cemented from the casing shoe up to 6,250 feet, based on a cement bond log, and from the DV Tool at 4,221 feet to a depth of 3,450 feet, based on a cement bond log.
- Tubing (4-1/2") set on a packer at 6,600 feet.

The top of the Ellenburger Formation is at 6,190 feet. The disposal interval is openhole from 6,670 feet to 8,526 feet subsurface depth. WEC requests that the permitted disposal interval continue to extend down to 10,000 feet in the event there is a reason to deepen the well further down into the Ellenburger Formation. The top of the Barnett Shale is at 5,710 feet and the Barnett Shale is approximately 480 feet thick in this area. The disposal interval is 480 feet below the top of the Ellenburger and WEC feels that this is sufficient separation to prevent fluid migration between the Ellenburger and the Barnett Shale.

Pursuant to the Texas Commission on Environmental Quality, the interval from the land surface to 20 feet below the base of the Cretaceous-age beds must be protected. In this area, the base of Cretaceous-age beds is estimated to occur at a depth of 625 feet (TCEQ Letter dated July 10, 2008). The maximum requested injection volume is 30,000 barrels per day and the maximum requested injection pressure is 3,300 psig.

A review was made of all wells within a two mile radius from the disposal well. There were several permitted locations for horizontal wells to be drilled by Quicksilver Resources, Inc. and ninety seven water wells located within the two mile radius.¹ There were twelve water wells located within a ½ mile radius and the two deepest reported water wells were 680 feet and 718 feet.

Public Interest

WEC believes that the safe and proper disposal of saltwater serves the interest of the general public. The completion of the subject well and the design of the surface facility protects both surface and subsurface usable quality water. WEC believes that the specific location of the facility will have minimal adverse effects on the general public, yet still be beneficial to the industry.

WEC urges that the economic disposal of produced saltwater serves the public interest as it allows for the recovery of additional reserves from wells in close proximity to the new disposal facility. These are reserves that otherwise would be uneconomic to produce. WEC asserts there is an industry need for a commercial disposal facility in this area of Hood County. WEC believes that the Acton SWD facility will primarily service the industry for wells completed within a 20 mile radius (as of the hearing, there were approximately 1,400 completed wells within the review area). Production from wells within 20 miles was approximately 2.6 BCFG in 2003. In 2007, wells within the 20 mile radius produced over 217 BCFG.

¹ State of Texas Well Reports obtained from the Texas Water Well Drillers Board, Texas Water Commission, Texas Department of Water Resources, Texas Water Development Board, Texas Water Well Drillers Advisory Council, Texas Natural Resources Conservation Commission, United Sates Department of Agriculture Farmers Home Administration Water Facilities Program, Unites States Department of the Interior Geological Survey Water Resources Branch.

A review of drilling permits and completions demonstrates a high density of wells to the north and east of the proposed facility in Parker and Johnson County. Currently, there are approximately 8,000 wells in the Barnett Shale trend. In 2000, there were less than 1000 wells. Production increased from 79.3 BCFG per year to 1.1 TCFG per year in just 6 years. Cumulative gas production is 4.1 TCF and 11.9 million barrels of hydrocarbon liquid.

WEC determined the number of drilling permits, producing wells and monthly production for wells completed in the Newark, East (Barnett Shale) Field and other fields, if any, on a county-by-county basis from Commission Drilling Permit records. WEC contends the development trend shows a progression from Wise and Denton Counties southward into Parker and Johnson Counties. Further, the leading edge of the development has now extended into Hood, Somervell and Erath Counties.

WEC observed that the number of drilling permits in the counties associated with the Barnett Shale trend continues at a steady pace. For example, in the five surrounding counties of Johnson, Parker, Hood, Somervell and Erath, approximately 600 drilling permits were issued in every quarter of 2007 and 2008. WEC asserted that the continued drilling results in an increased demand for associated services, such as salt water disposal.

The industry need for economic saltwater disposal is necessary to reduce the operating expenses of the producing wells. This is met by reducing water hauling distance and wait times at commercial facilities. WEC contends that the proposed facility location would be ahead of the drilling activity so the infrastructure would be in place.

WEC submitted letters from water haulers as further evidence to support its public interest argument.² Texas Transco, Legacy Transport, Excalibur Energy and Barnett Well Services all stated that the Acton SWD facility would save them between \$65.00 and \$100.00 operating time on each load of saltwater hauled, due to the proximity of the facility. However, WEC did not present evidence as to the disposal capacity or water volumes presently being disposed of at available existing commercial disposal facilities in the area or any water volume commitments from the saltwater haulers that indicated there was an industry need for disposal at this location.

The Facility

The facility is bounded by a two-lane highway, FM 167 (Fall Creek Highway), on the west and a narrow 18 feet wide county road, Matlock Road, on the east (See attached WEC Exhibit No. 27 with road labeling by the examiners). The south entrance to the facility is on FM 167, about one mile south of the intersection of FM 167 and Matlock Road. The north entrance will be off of Matlock Road. Just north of the intersection of FM 167 and Matlock Road Matlock Road is the Acton Nature Center and the De Cordova subdivision that contains

² These letters were admitted into evidence when protestants withdrew their objections to them.

approximately 3,000 homes. Eight miles south of the WEC facility off of FM 167 is the Pecan Plantation subdivision that contains approximately 6,000 homes and the subdivision has plans to develop an additional 1,500 home sites. Across FM 167 south of the WEC facility is Lake Granbury that has homes along the shore in the Steward Oaks, Blue Water Shores and Beaver Hills subdivisions.

Some truck traffic already exists on FM 167 with the hauling of construction materials and produced fluids from oil and gas production facilities in the area. WEC submitted a traffic survey on FM 167 performed on April 16 & 17, 2008. In the two 24 hour periods, the survey recorded 10,476 and 8,094 vehicles, respectively. Multi-axle vehicles, trucks or buses, represented 1.5% or approximately 150 of the vehicles recorded.

WEC presented a Spill Prevention, Control and Countermeasure Plan ("SPCC") to address any issues concerning daily operation and surface facility spill response. The plan is in accordance the Environmental Protection Agency's 40 CFR Title, Part 112 and is required within 6 months of operation commencement. The plan was prepared and presented in an effort to address concerns of the protestants and was used as a guideline to construct the containment facilities.

Parts of the primary containment facility have already been constructed by WEC. The facility will have a dump station (approximately 15 feet by 80 feet) which will allow up to six trucks to unload simultaneously. The dump station will direct all fluids into a large above-ground concrete vat (approximately 22 feet by 90 feet by 5 feet deep with a capacity of $\pm 1,763$ barrels) where water will flow through various chambers to allow any solid particles to settle. Beneath the vat will be a low density polyethylene liner (not required by EPA or the Commission), topped with sand/crushed road base material and then the steel reinforced concrete vat. The vat will be lined internally with a protective Kevlar coating and surrounding the perimeter of the vat is a sump apron with 6 "dry wells" for the monitoring of the material below the vat.

The facility is designed using confinement factors based on the required NOAA-25 year rain event plus a 1.15 safety factor and will have three levels of containment. The primarily level of containment are the vessels and tanks. The secondary level of containment are the earthen dikes around the vessels and tanks. The areas around the salt water storage tanks and the skim oil tank will be surrounded by an earthen berm approximately 30 inches and 20 inches high, respectively. The entire facility will be surrounded by a secondary earthen berm approximately 12 inches high for containment purposes in case of a catastrophic event. The third level of containment for anything that would exceed the berm boundaries. For security, the entire facility will be enclosed by a fence and will be manned 24 hours a day.

In order to limit access and facilitate traffic flow, WEC submitted a concept plan to TXDOT for widening FM 167 at the entrance to the SWD facility. The proposed improvements were designed to allow access to the facility off of FM 167 only from the

south. Trucks traveling to the facility from the north would turn left off onto Matlock Road at the intersection of FM 167 located to the north of the site. The plan included the widening of FM 167 to provide acceleration and deceleration lanes to accommodate traffic from the south turning right into the site and turning left out of the site. Traffic entering the site from the south would have a separate right turn lane and traffic exiting the site to the south would turn left onto FM 167 in a dedicated lane. The design is intended to prohibit and eliminate the possibility of trucks from the north turning left into the site. In addition, there will be curbing in place on the north side of the driveway at an acute angle to make it impossible for trucks to turn right and proceed north. The estimated cost for the FM 167 improvements is \$350,000, which is a cost to be borne by WEC and its investors. WEC stipulated that the construction of these improvements should be made a condition of any disposal permit granted to WEC.

WEC submits that it has the expertise to build and manage the proposed facility. WEC has constructed six commercial disposal well facilities including drilling, completing and building the surface facility. WEC, Inc. has a current approved Form P-5 (Organization Report) and posted a \$25,000.00 financial assurance bond. In addition, WEC maintains \$1,000,000 of general liability insurance.

Richard Wickline, Sr. and his son, Richard Wickline II, are owners of WEC, Inc. Richard Wickline, Sr. was once associated with Majestic Consulting, LC. Majestic Consulting, LC has filed for bankruptcy in the North Texas District Bankruptcy Court. There have been no enforcement actions against WEC, Inc.

PROTESTANTS' EVIDENCE

Protestants believe that WEC acted imprudently by drilling the disposal well and constructing the primary containment facility before a lawful disposal permit was granted for the well and requested that the application for the proposed commercial saltwater disposal well and associated facility be denied. Protestants' evidence and the statements of individuals made at the hearing expressed several general categories of concern: 1) increased heavy truck traffic on FM 167, causing county road deterioration and public safety concerns; 2) potential pollution of the Cretaceous Paluxy aquifer; 3) adverse effects on businesses adjacent to the WEC facility; 4) diminished property values; 5) noise, lighting, and odor nuisances which would result from the operation of the facility; and 6) potential negative consequences to the development of the Barnett Shale in the vicinity of the proposed well due to the volumes of fluid injected into the underlying Ellenburger Formation. Additionally, individuals residing in the general vicinity and state, county and city officials provided statements in opposition to the proposed facility citing similar concerns.

The protestants believe that there are sensitive areas, like aquifer recharge zones and proximity to lakes and fresh water resources, where disposal facilities are per se inappropriate. As a result, they presented the American Petroleum Institute sponsored "Guidelines for Commercial Exploration and Production Waste Management Facilities".

This document was developed by a cooperative effort among representatives of the oil and gas industry, commercial waste management facilities and state governments to establish guidelines for managing exploration and production waste. The guidelines were intended to identify design, construction and operational options that may be used, depending on site-specific conditions, at facilities to protect human health and the environment.

In general, facilities should be appropriately spaced from established residences, churches, schools, day care centers, surface water bodies used for public drinking water supply, dedicated public parks or sensitive environmental areas, such as wetlands. Although there are differences in siting requirements among federal, state and local regulations, owners should consider avoiding siting facilities in the following areas:

- 1. **100 year flood plains:** Protestants stated that the WEC facility is not in the 100 year flood plain.
- 2. **Wetlands:** Protestants stated that the WEC facility is adjacent to wetlands, which in this case is the Brazos River.
- 3. Directly over an aquifer's recharge zone: Protestants submitted a geologic outcrop map of the area showing that the Cretaceous Paluxy formation is present at the surface (See attached Protestant Exhibit No. 49). The Paluxy is the upper Cretaceous unit that is an aquifer in the area. The lower aquifer is the Twin Mountains Aquifer. Protestants also urge that the Paluxy aquifer is the only source of usable quality water in the county. The fresh water wells in the county range in depth from 50' to 800'. Protestant's hydrologist presented substantiating data that the specific area of the proposed commercial disposal well facility lies directly over the surface recharge area of a major aguifer in the state of Texas, the Cretaceous Paluxy formation. Thus, any water sources, i.e. rainfall, ponds, creeks, streams and lakes are directly responsible for recharge. At saltwater facilities, particularly commercial facilities, which handle very large volumes of oil/gas field waste waters (for this facility up to 30,000 BWPD), the potential for accidental spills (tanks/pits leakage) or spills caused by nature (high rainfalls into open pits) are more probable. These fluid spills would enter the outcrop directly and immediately.
- 4. Areas of direct drainage into a lake, river or stream: Protestants submitted a topographic map and surface elevation cross-section showing that the elevation to the west of the WEC facility is over 800 feet and then drops down below 600 feet into the Brazos River Valley and into Lake Granbury. The protestants stated that the exhibits illustrate that the surface water flow is from the west to the east across the WEC facility and into Lake Granbury, so the facility is in an area of direct drainage into a lake, river or stream. In addition, this drainage location is adjacent to the inlet of the

Brazos River Authority fresh water treatment plant that processes all of the drinking water for Hood and Johnson Counties.

- 5. **Near aboveground or underground pipelines or transmission lines:** Protestants submitted a map showing the location of the Brazos River Authority 24-inch and 30-inch fresh water intake lines from Lake Granbury. These water lines carry fresh water to the Brazos River Authority water treatment plant and run along the west side of the WEC property adjacent to Highway 167.
- 6. **Habitat for designated threatened and endangered species:** Protestants testified that the Texas Parks and Wildlife Department had at least three reptiles, two plants and seven birds, fishes or invertebrates listed on the state and federal endangered species list for this area.
- 7. **Recreation or preservation areas and scenic river locations:** Protestants submitted an aerial photo and maps showing that FM 167 (Fall Creek Highway) runs along the shores of Lake Granbury and is a scenic river location. In addition, the protestants submitted a DVD depicting the road conditions along FM 167 and Matlock Road. The entrance to the Acton Nature Center is also just north of WEC's facility.
- 8. **Highest anticipated elevation of underlying groundwater:** Protestants submitted an exhibit for the Ed Ronk fresh water well, which is located adjacent to the WEC site. The well had water at a depth of 41 feet, indicating fresh water close to the surface at this site.
- 9. Soil characteristics and hydraulic conductivity of underlying natural geologic materials: Protestants referred to a study of the soil types provided by WEC showing that the soils at the WEC facility are primarily Windthorst fine sandy loam. Loam is a coarse and permeable material that has good drainage and infiltration. The study also listed the depth to any soil restrictive layer or impermeable barrier to be in the "greater than 200 centimeters" depth class, which indicates no restrictive layer is described in the map unit. As a result, there is no restriction of flow to any type of contaminant. The Protestants stated that the EPA just recently issued a new guidance chart for transition zones from surface water to groundwater in an extremely sensitive area. The chart was developed to make a qualitative assessment of risk to water resources, both surface water and groundwater. Based on the chart, the analysis of risk at the WEC facility would be that it is in a high risk area with respect to protecting water resources.

The protestants referred to a WEC report provided by Banks Environmental Data indicating the location of all commercial disposal wells within a 20-mile radius. The report showed 35 total disposal wells, with nine of the disposal wells located in the northeast quadrant of Hood County. Protestants stated that the applicant's evidence focused on the potential future need for a commercial disposal facility and did not directly establish an industry need for the well. The evidence only hypothesized a potential future need and did not address the disposal volumes or capacities of the existing facilities in the area.

The protestants also referred to the Banks Environmental Data report which identified 97 water wells within a two mile radius of the proposed disposal well. They were concerned that the 672 feet of surface casing set in the disposal well might not be deep enough to protect all of the Cretaceous aquifer water sands. The report identified two water wells within the two mile radius at depths of 680 feet and 718 feet. The first well, the Encana water supply well, was drilled to 680 feet and the drillers log indicated a water sand from 600 feet to 660 feet. The second well, the Don Kirk water well, was drilled to a depth of 718 feet and the drillers log indicated broken sand and medium firm brown sand from 674 feet to 718 feet.

Due to the possible insufficient surface casing set in the disposal well, the protestants were very concerned that the SWD well failed it's H-5 tests. On January 10, 2008 an H-5 test was run and the results were inconclusive, as the test did not maintain a 200 pound differential between the tubing and casing pressure as specified in 16 TAC §3.9(12)(d). On June 5, 2008 a second H-5 test was attempted. The Railroad Commission inspector present for the test noted 80 pounds of pressure on the bradenhead valve that could not be bled off. The protestants submitted a well log on the injection well showing that there are potentially gas productive conglomerate zones at 1,200 feet and below. Since the top of cement is at 3,450 feet, protestants believe that those zones could be responsible for the bradenhead pressure found on the injection well.

The protestants believe that WEC should not have drilled the Acton SWD Lease, Well No. 1, until the application was properly noticed and a disposal permit was granted for the noticed location. Protestants further asserted that the well is currently in violation of several Commission Rules and Regulations for failure to timely file completion papers, permit applications and to properly secure the facility. In addition, protestants submitted public record documents showing: 1) a forfeiture of corporate privileges for failure to comply with franchise tax laws by several companies owned by Mr. Richard Wickline; 2) a Mechanic's Lien on the WEC Acton SWD facility by Hammer Construction, Inc. in the amount of \$184,593.91; 3) failure to file financial responsibility for pit closure in the amount of \$161,342 pursuant to 16 TAC 3.8; 4) a Complaint filed by the Northern District of Texas Bankruptcy Court for over \$2,200,000 against Mr. Richard Wickline concerning the Majestic Consulting, LC bankruptcy proceedings; and 5) a WEC stated net worth of only \$500,000. Based on these issues, protestants do not believe that WEC is a prudent operator capable of following Commission rules or has the financial ability to operate this facility and protect the surface and ground water resources.

Protestants Jeremy and Amy Parks are adjacent residential property owners south of the proposed SWD facility and operate the Fall Creek RV and Boat Storage business next to the proposed SWD facility. Mr. Parks is concerned about water runoff from the facility bringing contaminates onto his property and the noise levels. He noted that the noise level was going to be 100 decibels at the plant and 75 decibels at the fence, which is only 260 feet from his front living room. In addition, the well is less than 500 feet from his house. The proposed improvements to FM 167 will require most of the 70 foot driveway access to Mr. Parks's storage units and he will lose the entry and frontage area. Mr. Parks stated that this will force him to move the fencing back and rebuild the driveway, which will limit access and affect his business income. He also stated that his property values have already decreased 30 percent as a result of the disposal well facility installation.

Protestant Perry Hackman is an adjacent property owner along Matlock Road north of the proposed SWD facility. Mr. Hackman is also concerned about water runoff from the facility bringing contaminates onto his property and the noise levels. He stated that his wife runs a kennel and dog grooming business and ever since the construction started on the SWD well, the dogs have been stressed by the constant movement of people and machinery they can hear but they cannot see. In addition, all of the activity is limiting access to his property and he is worried that this and the noise levels will negatively affect his wife's business and reduce its income. Mr. Hackman also stated that his property values have already decreased 30 percent and his oil and gas lease is not being renewed as a result of the disposal well facility installation.

Protestant John Pruitt is an adjacent property owner on 40 acres across Matlock Road east of the proposed SWD facility. He and his son have homes on the property and he operates a restored Texas historic log cabin bed and breakfast. Mr. Pruitt is concerned that fumes, dust, noise and lights from the facility will affect his business, as his patrons are escaping the city to enjoy the country life. He stated that he can no longer see Comanche Peak Mountain in the background across Lake Granbury at night. He believes that his family's quality of life will be diminished and is concerned for his grandson's safety at the designated school bus stops located on Matlock Road. In addition, between the SWD facility entrance on Matlock Road and the intersection of FM 167 to the north, there is a bridge across a drainage ditch which is wide enough for only one vehicle at a time to cross. He also stated that his property values have already decreased 30 percent as a result of the disposal well facility installation.

Protestant Elaine Fleming is an adjacent residential property owner along FM 167 west of the proposed SWD facility. Ms. Fleming is mainly concerned about water runoff from the facility bringing contaminates onto her property and into Lake Granbury. Her property fronts on Lake Granbury and she stated that all of the water runoff from the other side of FM 167 is gathered into a culvert that runs under FM 167. The water then flows into a pond on their property and down a natural drainage runoff area into Lake Granbury. In addition, Ms. Fleming testified that there was a lot of farm equipment moving down FM 167 and the equipment frequently slows traffic down to a crawl resulting in long travel delays.

She felt that it was only a matter of time until some type of farm equipment and a saltwater hauling truck collided and caused a fatal accident. Ms. Fleming is a realtor and was also concerned that her property values have declined.

Most of the adjacent landowners have domestic water wells on their property in the Paluxy aquifer and believe that the site location for the proposed facility is not suitable for a commercial industrial facility.

All of the protestants complained that the facility is located on FM 167 which has blind S-curves, no shoulders and a steep drop off into the drainage ditch on either side of the highway. They are concerned over safety issues resulting from increased truck traffic and the impact that the trucks will have on the road conditions. In addition, there are numerous school bus stops on the highway and increased traffic would create a hazard for school children. They believe their quality of life and property values will be diminished as a result of the operation of the proposed well and facility.

The Protestants contended that there is not an industry need for a commercial well at this site or in this general geographical area. These protestants believe that WEC failed to meet its burden of proof to support the proposed permit because it did not investigate how potential increased truck traffic will affect the public interest. Protestants contend this public interest issue must be addressed pursuant to the Texas Water Code §27.051(b)(1).

Collectively, the testimony of the protestants, statements, proclamations and letters submitted in opposition to the facility assert that the proposed commercial disposal facility will have adverse effects on traffic safety, property values, and quality of life in and around the area. They request the Commission consider these issues in determining whether the proposed facility is in the public interest.

OTHER INTERESTED PARTIES

Jim Keffer, State Representative of District 60 which includes Hood County, made a statement regarding of the proposed facility. Rep. Keffer stated that 25 years ago no one would have dreamed that wells would be drilled and pipelines laid in the heavily populated areas of Denton, Tarrant and Hood Counties. He was concerned that along the Fall Creek Highway, there were 10,000 people or more traveling up and down a road that in anybody's book was one of the most terrible roads due to the blind corners and no shoulder. Rep. Keffer felt that somehow a balance between the landowners and the oil and gas industry is needed. He stated that as new technologies are developed a co-existence area could be discovered with guidance from the Railroad Commission and the legislature. As far as this particular permit goes, Rep. Keffer didn't see how it could be approved, just for the safety aspect alone, until the road is improved. He felt that going forward some changes were needed so that the oil and gas industry could continue to develop Texas's natural resources, but also keep the public interest and safety paramount in these urban locations.

David Southern, the Mayor of Granbury, stated that although the WEC site is not within the city limits, it is within a major corridor that feeds into the city. Traffic along FM 167 has resulted in several deaths in the past year, which were associated with vehicles from the oil and gas industry being involved in accidents with folks driving to and from their homes in the different developments in the area. However, Mayor Southern's primary concern is that the drainage area from the proposed facility goes right into Lake Granbury at a location very near the inlet to the Brazos River Authority (BRA) desalination plant. This plant provides fresh water to the City of Granbury and Acton Municipal Utility District. Mayor Southern stated that it was very difficult and expensive to process the normal chlorides out of the lake water and the additional chlorides and chemical pollutants from fracing wells is the biggest concern because none of the membrane technology that is used by the BRA has been approved for this kind of cleanup. The BRA also has a number of fresh water wells in the aquifer near the WEC facility and the saltwater disposal well may jeopardize the aquifer. From these aspects, Mayor Southern believes that this particular location is not appropriate and will impinge on the quality of life in the community.

David Brown, Station Manager of the De Cordova Volunteer Fire Department, stated that his fire station had two fire engines that held 750 gallons of water and one tanker that held 2,000 gallons of water. He stipulated that his station did not have a foam truck and his personnel had no training in oil field fires. As a result, his station is not equipped to fight a fire at a saltwater disposal site. In addition, Mr. Brown testified to the accidents that have occurred on FM 167, Fall Creek Highway, in the prior year. In 2007, the community saw a jump in traffic accidents to nineteen and seven were caused by multi-axle vehicles. This represents a three-fold increase as compared to 2006 and a two-fold increase of the 2004-2006 accident average. Mr. Brown also testified that through July 26, 2008, Fall Creek Highway had already experienced sixteen accidents caused by excessive speed and no shoulders. Two of the accidents had fatalities and four of the accidents were caused by multi-axle vehicles.

Dr. Richard L. Roan, Hood County Commissioner, is primarily concerned about the traffic safety on FM 167. Commissioner Roan had been studying the traffic along FM 167 since January 2007 and was familiar with the three fatality accidents that were caused by a combination of speed and unfamiliarity with the road. Commissioner Roan has been working with TXDOT to obtain road improvements, but has had little success due to the lack of funding. Although he was not in favor of the injection facility, he felt WEC was likely to get their permit with or without his involvement. As a result, Commissioner Roan stated that it became apparent to him that the logical position seemed to support WEC, since they were voluntarily willing to encumber themselves with highway repair that he couldn't get TXDOT to do. He felt that it only made sense to follow this path and get approximately 1,400 feet of road improvements on FM 167 instead of nothing and have WEC still get their permit. Commissioner Roan also testified that Matlock Road on the other side of the proposed injection facility was an old county road and in its current condition was hardly wide enough for two cars to pass let alone a truck and a car or two trucks. He stated that one option discussed with WEC, but not agreed upon, were to bring the intersection of

Matlock Road and FM 167 out to a T-intersection that would increase the line of sight further in both directions and reconstruct Matlock Road back to the WEC facility entrance to a higher weight limit than the 26,800 pounds that is currently specified.

Leonard Heathington, Hood County Commissioner, has his private residence less than a quarter of a mile from the proposed facility. He is concerned about road safety along FM 167 and is working with TXDOT to get a concept plan approved for road improvements to FM 167. Commissioner Heathington had met with WEC to find out what was going on in regards to road improvements to FM 167 and Matlock Road. He stated that he had investigated the regulations concerning coming off of private property onto a state right-of-way and, that as a county commissioner, he had no authority to influence what could or could not be done.

Gene Mayo, Hood County Sheriff, has his private residence off of FM 167 (Fall Creek Highway) in Pecan Plantation. Sheriff Mayo felt that there could not be a worse location for the injection facility. When he started as sheriff in 1990, the population of Hood County was about 21,000 with two deputies on patrol. Now with the Pecan Plantation development, the population is up to around 60,000 with only three deputies on patrol. He felt that his department could not take the burden of more water trucks on these roads right now due to the lack of manpower. Sheriff Mayo testified that he worked side by side with Senator Averitt, Representative Keffer and the DPS, to get a license and weight trooper on Fall Creek Highway, which is giving a little relief. However, even with the license and weight trooper, his department gets complaints constantly about the speed of the trucks. His department can't work traffic on Fall Creek Highway or Matlock Road as they can't pull a vehicle over due to there being no shoulders on either road. Accordingly, Matlock Road is only about 16 feet wide and he doesn't even see how two trucks can pass on that road. Sheriff Mayo understands that the county stands to gain tax money from the oil and gas industry, but stated that there has to come a point when the public safety of the citizens of Hood County is more important. In the last two years alone, he has seen more fatality accidents on Fall Creek Highway than in the previous four years combined.

In addition, several parties representing the citizens of Acton, Blue Water Shores, Pecan Plantation, De Cordova and Fall Creek subdivisions, made statements in opposition to the proposed facility expressing concerns about noise, odors, increased truck traffic and night time lighting from the facility.

APPLICABLE AUTHORITY

Texas Water Code §27.051 (b) provides with respect to permitting disposal and injection wells:

- (b) The Railroad Commission may grant an application in whole or part and may issue the permit if it finds:
 - (1) that the use or installation of the injection well is in the public interest;

- (2) that the use or installation of the injection well will not endanger or injure any oil, gas, or other mineral formation;
- (3) that, with proper safeguards, both ground and surface fresh water can be adequately protected from pollution; and
- (4) that the applicant has made a satisfactory showing of financial responsibility if required by §27.073 of this code.

EXAMINERS' OPINION

Validity of WEC's Existing Permit

A threshold issue to be considered is whether WEC's existing Commercial Permit No. 12263 for the Acton SWD Lease, Well No. 1 is valid or whether this permit should be suspended, modified, or cancelled based on the inaccurate description of the well location in the Form W-14 application that led to issuance of the permit and deficiencies in the notice of the application provided to affected persons.

It is undisputed that the Form W-14 application filed by Majestic that led to the issuance of Commercial Permit No. 12263, as well as the Form W-14 filed by WEC to amend the permit to show WEC as the operator and the Form W-1 application for drilling permit filed by WEC, showed an incorrect location for the Acton SWD Lease, Well No. 1. In these applications, the location of the well was shown as 2.9 miles *northwest* of Acton, whereas the as-drilled location is 2.3 miles *southeast* of Acton. Both the mailed notices (copies of the original Form W-14) sent to affected parties and the original newspaper publication of notice contained this erroneous description of the well location. WEC now concedes that the erroneous description of the well location in the notices was misleading. The original Form W-14 was unopposed, and Commercial Permit No. 12263 was approved administratively.

Statewide Rule 9(6)(A) provides that a permit for saltwater or other oil and gas waste disposal may be modified, suspended, or terminated by the Commission for just cause after notice and opportunity for hearing, if the applicant has misrepresented any material facts during the permit issuance process. Whether inadvertent or not, the erroneous description of the well location in the original Form W-14 application and notices that led to the issuance of Commercial Permit No. 12263 was a misrepresentation of a material fact. The notice provided of the original Form W-14 was deficient because it did not inform potentially affected parties of the actual well location. The Commission has determined that permits granted without proper notice are void *ab initio*. See Oil and Gas Docket No. 06-0229019, *Commission Called Hearing on the Complaint of the Long Trusts Regarding Whether Proper Notice Was Given by Union Pacific Resources Co. of its Application for an Exception to Statewide Rule 37, Barksdale Estate Gas Unit, Well No. 8, Oak Hill (Cotton Valley) Field, Rusk County, Texas (Final Order dated September 12, 2002). Accordingly,*

the examiners conclude that Commercial Permit No. 12263 is void and should be cancelled.

WEC's Contingent Application

In this case, the parties contested every element the Commission is required to evaluate with respect to the issuance of a permit under Texas Water Code 27.051(b). It is the examiners' opinion that WEC's application fails to meet the requirements under Texas Water Code 27.051(b)(1) and (3).³

Public Interest

The Texas Water Code §27.051 (b)(1) requires the Railroad Commission, when issuing a permit, to find "that the use or installation of the injection well is in the public interest". The term "public interest" is not defined under Chapter 27 of the Texas Water Code. Additionally, the term is not defined in Statewide Rules 9 or 46.

In this case, the protestants' argument concerning public interest focused on the third factor listed in the Commission's publication of the "Discussions of Law, Practice and Procedure" that extra disposal capacity is needed in the area of the proposed well. There was lengthy debate and some evidence presented addressing whether there is a current need for a commercial disposal facility. The applicant failed to meet the required burden of proof because: 1) applicant did not provide any evidence that existing disposal wells in the area are insufficient to meet current need; 2) applicant provided no evidence of any commitments for the use of the facility; 3) applicant admitted that there were only drilling permits and no drilling activities within the immediate area of the proposed well; and 4) the issuance of a drilling permit for a Barnett Shale well is not direct evidence of future demand for an additional commercial disposal facility.

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. In the absence of evidence of countervailing public interest factors, "public interest" may be established by showing that: 1) the safe and proper disposal of saltwater serves the public interest; and, 2) the economic disposal of produced saltwater serves the public interest as it allows for the recovery of additional reserves due to the proximity to the new disposal facility, reserves that would otherwise be uneconomical to produce.

³ Applicant met the burden under Texas Water Code 27.051(b)(2) to show that the proposed commercial disposal well and facility will not threaten oil, gas, or mineral resources in the area. The wellbore schematic for the well shows that it would be completed in such a manner as to prevent the migration of injected fluids to producing zones other than the intended disposal zone. Additionally, the area of review shows there are no other wells within two miles of the proposed well. Applicant also met the burden under 27.051(b)(4) to show that financial responsibility is adequate to insure that an abandoned well is properly plugged.

Applicant's evidence focused on the potential future need for a commercial disposal facility based primarily on a county-wide drilling permit search for Hood County and its study of Barnett Shale development in adjacent counties. The applicant seeks to get out in front of the anticipated Barnett Shale development by obtaining a Commission permit in advance of the predicted demand for a commercial disposal facility. The evidence supplied by the applicant to demonstrate the future need for the facility consisted of maps showing well completions and locations based on exhibits generated from queries to the Commission's Drilling Permit System Database in the Barnett Shale trend area. Applicant identified 185 "results" in a search for new drilling permits in Hood County in fields beginning with the name "Newark, East". This result was used to project the future need for applicant's proposed commercial disposal facility.

This study does not address the issue of whether the proposed well will serve the public interest by allowing for the recovery of additional reserves because it does not directly establish an industry need for the well, it only hypothesizes a potential future need. Statistical data showing Barnett Shale development may be suitable to establish a generalized need for saltwater disposal facilities, but it does not necessarily serve to establish a need for a disposal facility *at this particular location*. WEC proved nothing about the existing saltwater disposal facilities in the surrounding area, and when protestants presented evidence that there were 35 such facilities within 20 miles of the proposed WEC facility, WEC still established nothing about permitted disposal capacity or volumes of water being disposed of at these facilities. There is no probative evidence that adequate disposal capacity does not currently exist in area of WEC's proposed disposal facility.

No saltwater hauler or operator appeared at the hearing as a witness in support of WEC's application to give testimony regarding a need for the proposed disposal facility. WEC did provide four unverified form letters from saltwater haulers containing general expressions of need "for a disposal well such as this" and general estimates of savings in operating time and expense to be realized from use of the WEC facility. However, the weight that can be accorded to these letters is diminished by their hearsay nature and the unavailability of the sponsors of the letters for cross-examination. None of the letters contain any commitment to dispose of any particular volumes of water at the WEC facility or even an estimate of water volumes that might be diverted from other existing disposal facilities in the area. Furthermore, none of these letters say anything about the lack of available disposal capacity, or unreasonable wait times, at existing disposal facilities. As this was the only evidence WEC presented addressing public interest, the examiners conclude that the applicant did not meet its burden of proof on this issue.

A primary concern of all who opposed the WEC application is the increased truck traffic on and along Fall Creek Highway and Matlock Road that would result from use of the proposed WEC disposal facility. In *Texas Citizens for a Safe Future & Clean Water v. Railroad Commission*, 254 S.W.3d 492 (Tex.App.-Austin 2007, pet. pending), the Austin Court of Appeals held that the Commission is required to consider such issues as part of the "public interest" inquiry under §27.051 of the Texas Water Code. This litigation is now pending on petition for review to the Texas Supreme Court. In deference to the opinion of

the Austin Court of Appeals, the examiners have considered all of protestants' stated concerns and evidence relating to traffic issues, impact on property values, and quality of life issues such as noise, odors and nighttime light pollution. The examiners' consideration of these issues is not to be taken, however, as a position of the examiners or the Railroad Commission on the legal issues still pending on petition for review before the Texas Supreme Court.

Assuming that the traffic impact is a factor which must be considered and weighed against other relevant factors as a part of the public interest inquiry, the examiners conclude that this is a factor which weighs against a finding that approval of the WEC disposal facility at the proposed location is in the public interest. There is hardly any dispute that Fall Creek Highway is a roadway that is in need of improvement to accommodate safe travel by the heavy volume of vehicular traffic that presently exists. WEC characterized Fall Creek Highway as a roadway in bad need of repair. This is a twolane road presently used by anywhere from 8,000 to 10,000 vehicles daily. The road has no shoulders and is winding in nature at various places. A significant number of heavy trucks and tractor-trailers already traverse this roadway. During a twelve hour traffic count in July 2008 at a location near the proposed WEC facility, a total of 5,600 vehicles were counted moving along Fall Creek Highway, and, of these, 192 were heavy trucks, including saltwater hauling trucks or other tankers. School buses carrying children to and from school are among the vehicles that travel this roadway. The proposed volume of water to be disposed at this SWD facility will more than double the existing multi-axle vehicle traffic on FM 167.

There are an increasing number of traffic accidents on Fall Creek Highway. During the first seven months of 2008, there were 16 accidents on this roadway, four of which involved heavy trucks, as compared to 19 accidents in all of 2007, seven of which involved heavy trucks. The 2008 accidents resulted in two fatalities. The entrance to the WEC facility on Fall Creek Highway is said to be on or near a bad curve in the roadway. Six or seven accidents have occurred near the entrance to the WEC facility on Fall Creek Highway, and the first fatality of 2008 occurred here as a result of an accident involving a heavy truck.

Matlock Road, which is proposed to be traveled by trucks accessing or departing the proposed WEC facility from or to the north, is in the category of a country lane, being for the most part only 16 to18 feet wide. Whether an automobile and saltwater truck, or two saltwater trucks, moving in opposite directions could pass each other along Matlock Road without pulling off the pavement or causing some other hair-raising experience is seriously disputed by the parties.

The existing traffic conditions along Fall Creek Highway are, of course, not of WEC's making. Apparently, these conditions have existed for some time. Area residents and local government officials have been seeking roadway improvements from TXDOT, which have not been forthcoming due to a lack of funding. WEC has made an effort to address the traffic concerns by proposing roadway improvements in the immediate area of the entrance

to the WEC facility, to be constructed at the expense of WEC or its investors. These improvements, if constructed, likely would serve to reduce somewhat the potential danger created by trucks turning into or out of the WEC facility on Fall Creek Highway. WEC has also made the legitimate point that if additional Barnett Shale wells are drilled in the area of the highway, flow back water most likely will need to be moved by truck along Fall Creek Highway whether or not the WEC disposal facility is approved. Nonetheless, it appears inevitable to the examiners that if a large number of saltwater trucks are attracted daily to the proposed WEC facility, even with the proposed roadway improvements, existing traffic conditions on Fall Creek Highway and Matlock Road will be adversely impacted. It is unnecessary to decide whether this adverse traffic impact, standing alone, would require a conclusion that approval of the WEC application is not in the public interest, because regardless of this issue, the examiners have concluded that WEC has not otherwise proved that use or installation of the proposed disposal well at the proposed location is in the public interest.

Protection of Water Resources

The most serious flaw in the proposed application is the failure to fully address the safeguards required to protect ground and surface water under Texas Water Code Section 27.051(b)(3). The Commission's Rules concerning underground injection are premised to assure the protection of fresh water resources above and below the ground surface. Commission permits include conditions and restrictions for a commercial disposal facility which address safeguards to prevent pollution of ground and surface water in the facility design and operations.

Commission approval of a commercial disposal permit is not limited to a determination that the proposed wellbore completion will protect usable quality water resources if the well is drilled and completed in the manner depicted. The Commission also evaluates whether the associated facility will be designed and operated in such a fashion to prevent pollution of ground and surface water in the facility design and operations.

Protestants have concerns that the size, configuration and topography of the tract for the proposed facility may not be sufficient to protect ground and surface water resources. This is particularly true in this matter as protestants demonstrated that the proposed facility site will be located on an outcrop of a shallow part of the Cretaceous Paluxy Aquifer recharge area. The protestants believe that it is inevitable that spills will occur on the disposal facility site. Since fresh water is located close to the surface and the surface consists of a sandy loam that is a coarse and permeable material, the leaching of contaminated material down into the fresh water strata is a real possibility. In addition, the surface water flow is from the west to the east across the WEC facility and directly into Lake Granbury adjacent to the inlet of the Brazos River Authority fresh water treatment plant that processes all of the drinking water for Hood and Johnson Counties.

Although WEC did address to some extent the containment of run off and isolation of the collection pit, the applicant did not adequately address surface water issues such as:

1) the direct and immediate seepage of disposal water into the surface outcrop of the Cretaceous Paluxy aquifer recharge zone; 2) containment of surface runoff waters from the drainage area that leads into Lake Granbury near the inlet to the Brazos River Authority (BRA) desalination plant; 3) fresh water close to the surface at this site; and 4) possible insufficient surface casing set in the disposal well.

The examiners note that the proposed injection well would have needed to be relocated only a few miles away in order to avoid the recharge zone and the fresh water treatment plant altogether. The failure to provide sufficient evidence to support the required finding of fact that proper safeguards exist to protect ground and surface water under Texas Water Code Section 27.051(b)(3) is a further basis for denying the application.

CONCLUSION

The original W-14 application that resulted in administrative approval of Commercial Disposal Permit No. 12263 contained a misrepresentation of the location of the proposed disposal well and the notices that ensued were inadequate to inform potentially affected persons of the actual well location. As a result, the examiners recommend the cancellation of Permit No. 12263. In addition, WEC did not provide the necessary evidence for the examiners to recommend the findings of fact required under Texas Water Code §27.051(b)(1) and (3). Accordingly, the examiners recommend that the application be denied.

FINDINGS OF FACT

- 1. Notice of hearing was given to the affected persons, the County Clerk of Hood County, all surface owners of adjoining tracts and all operators within one-half mile on April 18, 2008. Notice of this application was published in the *Hood County News*, a newspaper of general circulation in Hood County, on April 19, 2008.
- Commercial Disposal Permit No. 12263 for the Acton SWD Lease, Well No. 1 was approved administratively and issued to Majestic Consulting, L.C. on March 1, 2006. This permit was amended on February 28, 2007, to name WEC, Inc., as the holder of the permit.
- 3. The Form W-14 applications that led to the issuance of Commercial Permit No. 12263 in 2006 and amendment of the permit in 2007 contained a misrepresentation of the location where the Acton SWD Lease, Well No. 1 was to be drilled. These applications stated that the well was to be drilled at a location 2.9 miles northwest of Acton. In November 2007, the well actually was drilled at a location 2.3 miles southeast of Acton.
- 4. The mailed notices of the original Form W-14 application for Commercial Permit No. 12263 and the newspaper publication of notice of the original

application contained the same erroneous description of the location where the Acton SWD Lease, Well No. 1 was to be drilled and were misleading as to the actual location of the well. These notices did not adequately inform potentially affected persons of the actual well location.

- 5. The Acton SWD Lease, Well No. 1 was drilled in November 2007 and is completed in a manner to protect subsurface usable quality water.
 - a. The Texas Commission on Environmental Quality requires the interval from the land surface to 20 feet below the base of the Cetaceous-age beds must be protected and the base is estimated to occur at a depth of 625 feet.
 - b. The subject well has 672 feet of 9 $\frac{5}{8}$ " surface casing cemented to surface.
- 6. WEC presented a Spill Prevention, Control and Countermeasure Plan ("SPCC") that was used as a guideline to construct the containment facilities. The facility is designed using confinement factors based on the required NOAA-25 year rain event plus a 1.15 safety factor and is designed to have three levels of containment.
- 7. The use or installation of the proposed injection well will not endanger or injure any oil, gas or other mineral formation.
 - a. The top of the Ellenburger Formation is at 6,190 feet. The disposal zone, the open hole section of the Ellenburger Formation, is from 6,670 feet to 8,526 feet subsurface depth.
 - b. The injection tubing (4-½") is set on a packer at 6,600 feet. The tubing-casing annulus is filled with corrosion inhibiting fluid.
 - c. The proposed maximum injection volume is 30,000 barrels per day and a maximum injection pressure of 3,300 psig.
 - d. The disposal interval is 480 feet below the top of the Ellenburger and there is sufficient separation to prevent communication between the Ellenburger and the productive Barnett Shale formation. The proposed well would not threaten oil, gas, or mineral resources in the area.
 - e. There are no well completions, producing or plugged, within 2 miles of the subject well.

- 8. Installation and use of the proposed disposal well will result in a heavier volume of truck traffic along Fall Creek Highway and Matlock Road and potentially have an impact on traffic conditions in the area of the disposal well.
 - a. WEC proposes to construct and pay for an additional acceleration/deceleration lane on Fall Creek Highway in the immediate area of the entrance to the WEC disposal facility. All trucks traveling from south of the facility, or departing from the facility to the south, would enter and exit the facility from the Fall Creek Highway facility entrance. All trucks traveling to the facility from the north would turn from Fall Creek Highway onto Matlock Road north of the facility and enter the facility from the Matlock Road entrance. Trucks leaving the facility headed north would leave the facility from the Matlock Road entrance and travel north to the intersection with Fall Creek Highway.
 - b. Fall Creek Highway is a heavily used two-lane roadway without shoulders in need of improvement to accommodate existing traffic. This road is winding in various places and there is a curve in the road immediately north of the Fall Creek Highway entrance to the proposed WEC disposal facility.
 - c. In the area of the entrance to the WEC disposal facility, Fall Creek Highway is currently traversed by anywhere from 8,000 to more than 10,000 vehicles daily. A twelve hour traffic count in July 2008, disclosed that 5,600 vehicles, including 192 heavy trucks, used this section of the roadway in the twelve hour period.
 - d. A number of traffic accidents, and some fatalities, have occurred along Fall Creek Highway. In 2008, through July, there had been 16 such accidents including four involving heavy trucks. A number of accidents have occurred near the entrance to the WEC disposal facility on Fall Creek Highway, and one of these during 2008 involving a heavy truck resulted in a fatality.
 - e. Matlock Road is 16 to 18 feet wide in most places, and there is limited clearance for vehicles passing each other in opposite directions.
 - f. The road improvements proposed by WEC should reduce backup of traffic on Fall Creek Highway that otherwise might result from trucks entering and exiting the proposed disposal facility. Limiting facility ingress and egress on Fall Creek Highway to trucks traveling from or to the south should have a similar effect.

- g. Some of the saltwater hauling trucks that presently use Fall Creek Highway may be the same trucks that use WEC's proposed disposal facility. If there is significant new Barnett Shale development in the area along Fall Creek Highway, there is the potential that trucks hauling flow back water or produced water resulting from this activity will use Fall Creek Highway whether or not WEC's proposed disposal well is approved.
- 9. WEC failed to establish that installation and operation of the proposed facility would not pose a threat of pollution to surface or subsurface usable quality waters.
 - a. The proposed facility site will be located on an outcrop of the Cretaceous Paluxy recharge area.
 - b. The surface consists of a sandy loam that is a coarse and permeable material, that will allow the leaching of contaminated material down into the fresh water strata. Any accidental spills or spills caused by nature would enter the outcrop directly and immediately.
 - c. The surface water flow is from the west to the east across the WEC facility and directly into Lake Granbury adjacent to the inlet of the Brazos River Authority fresh water treatment plant that processes all of the drinking water for Hood and Johnson Counties.
 - d. The 672 feet of surface casing set in the proposed disposal well might not be deep enough to protect all of the Cretaceous aquifer water sands, as a Banks Environmental Data report identified two water wells within a two mile radius at depths of 680 feet and 718 feet.
- 10. WEC did not establish a current or imminent future need for additional disposal capacity in the area of the proposed commercial disposal facility or otherwise establish that use or installation of the proposed injection well is in the public interest.
 - a. WEC did not present evidence to identify existing commercial disposal wells that are generally available for disposal in the area of the proposed disposal well.
 - b. WEC did not present evidence as to the disposal capacity or water volumes presently being disposed of at available existing commercial disposal facilities in the area of the proposed disposal well.
 - c. No saltwater hauler or operator testified at the hearing regarding a need to use the proposed disposal well.

- d. WEC presented unverified form letters of support from four saltwater haulers containing general expressions of need for a disposal well such as the one proposed, but the sponsors of these letters did not testify. None of these letters made any commitments or estimates of water volumes to be disposed of at WEC's proposed facility, and none made any claim that the disposal capacity of existing commercial disposal facilities in the area is inadequate.
- e. While WEC presented statistical data regarding Barnett Shale development and data regarding drilling permits granted for such development from which a generalized need for saltwater disposal facilities might be inferred, it did not establish that approval of a disposal facility at the proposed location is necessary to enhance the recovery of oil or gas or to extend the economic life of producing wells.
- f. A Banks Environmental Data report indicating the location of all commercial disposal wells within a 20-mile radius showed 35 total disposal wells, with nine of the disposal wells located in the northeast quadrant of Hood County.
- 11. WEC has on file with the Commission approved financial assurance in the required amount to ensure that the subject well will be plugged at abandonment.

CONCLUSIONS OF LAW

- 1. Proper notice was timely given to all parties entitled to notice pursuant to applicable statutes and rules.
- 2. All things have occurred and have been accomplished to give the Commission jurisdiction in this case.
- 3. The applicant has not complied with the requirements for approval set forth in Statewide Rule 9 and the provisions of §27.051 of the Texas Water Code.
 - a. WEC failed to meet its 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).
 - b. WEC failed to show that the use of the proposed commercial disposal facility would not cause pollution of surface water or fresh water strata as required under Texas Water Code §27.051(b)(3).

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Rule 9 Commercial Permit No. 12263 of WEC, Inc. to operate a commercial salt water disposal well, the Acton SWD Lease, Well No. 1, be canceled and the application by WEC, Inc. for a new permit be denied.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner

James M. Doherty Legal Examiner