

THE APPLICATION OF K & D WATER WORKS, LLC FOR A COMMERCIAL OIL AND GAS WASTE SEPARATION FACILITY PURSUANT TO STATEWIDE RULE 8 FOR THE WASKOM STATIONARY TREATMENT FACILITY, HARRISON COUNTY, TEXAS

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

APPEARANCES:

REPRESENTING:

APPLICANT:

George C. Neale
Jim Kersh
Neil Davis
Kurt D. Ritch
Randy Earley
William Carl Gardner
James Flournoy

K & D Water Works, LLC

PROTESTANTS:

Rodney Gilstrap
Jesse Moore, Mayor

City of Waskom

Jimmy E. Cox

Waskom ISD

Harold England

Waskom Volunteer Fire Dept.

Jeffrey L. Thompson

Harrison County Commissioner

Russell Franks
Walter Killion

Self and Ruth Brogan
Self

PROCEDURAL HISTORY:

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|----------------------|-------------------|
| Application filed: | January 4, 2011 |
| Protest received: | January 10, 2011 |
| Request for hearing: | February 22, 2011 |
| Notice of Hearing: | March 28, 2011 |
| Hearing Held: | May 5, 2011 |

OIL AND GAS DOCKET NO. 06-0269808

Transcript Received: May 20, 2011
PFD Issued: June 29, 2011

EXAMINERS' REPORT AND PROPOSAL FOR DECISION

STATEMENT OF THE CASE

K & D Water Works, LLC ("KDWW") requests authority to operate a commercial oil and gas waste separation facility pursuant to Statewide Rule 8 for the Waskom Stationary Treatment Facility, Harrison County, Texas.

Notice of the application was published in the *Marshall NewsMessenger*, a newspaper of general circulation in Harrison County, for four consecutive weeks beginning on March 30, 2011. A copy of the application was sent to all adjacent surface owners and the Harrison County Clerk on January 4, 2011.

The application was protested by the Mayor and several citizens of Waskom, Texas.

DISCUSSION OF THE EVIDENCE

Applicant's Evidence

The Waskom Stationary Treatment Facility was constructed in early 2010 after the Commission Technical Permitting staff determined that KDWW would not need a Commission permit, since no drilling waste would be disposed of onsite. The facility was operated for approximately ten months and was ordered to be shut down by the Commission in December 2010. After several inspections of the facility by the District Office, the Commission Technical Permitting staff changed its policy and issued a December 2010 "Notice to Operators" that all oil and gas waste separation facilities would now require a Commission permit pursuant to Statewide Rules 8 and 78. The violations discovered by the inspectors included the use of un-permitted pits, contaminated material stored on the ground surface, leaking and improperly installed firewalls around storage tanks and areas of oil saturated soil. All of the violations were addressed by KDWW and a final District Office inspection report on January 4, 2011, showed that KDWW was in compliance with all Commission rules and regulations.

KDWW owns the 6.8 acre tract where the Waskom Stationary Treatment Facility is constructed. The tract is located approximately 1 mile west of Waskom, Texas, at the intersection of US 80, the feeder road to IH-20, and FM 134. The site is paved and has a dedicated entrance from the south off of US 80 and a dedicated exit due east onto FM 134 (See attached Appendix A - Site Plan). The site will provide sufficient traffic flow within the property to prevent conflicts between the trucks entering and exiting the facility.

OIL AND GAS DOCKET NO. 06-0269808

KDWW's traffic engineer submitted a traffic analysis for the Waskom Stationary Treatment Facility. The annual daily traffic count on FM 134 is 1,500 vehicles per day and on US 80 is 3,700 vehicles per day. The speed limit in the project area is 55 mph, which requires a stopping sight distance of 495 feet. The entrance off of US 80 has over 600 feet of sight distance in both directions and the exit onto FM 134 has over 1,100 feet of sight distance to the north and over 600 feet to the south intersection with US 80. A TxDOT investigation determined that there was plenty of sight distance in both directions at the facility's entrance and warning signs were not required.

The estimated daily traffic volume entering the facility is 90 tanker trucks in a 24 hour period with a maximum of 20 trucks in the peak hour. The site is paved and is of sufficient size to accommodate 25 trucks, which will prevent trucks from stacking up in the roadway prior to entering the property. The unloading process can cycle 20 trucks per hour. The truck traffic to the facility will increase the average daily traffic count by only 2.5% on US 80 and 5.6% on FM 134. The traffic expert opined that this increase would not adversely impact traffic flow on either highway.

The Waskom Stationary Treatment Facility is used as a processing facility for oil and fresh water based drilling fluids. The facility separates the fluids from the solids with the use of a centrifuge. The liquid waste is hauled to local commercial saltwater disposal wells. The solid waste is dried and hauled to a landfill facility located in the State of Louisiana. No drilling waste is disposed of onsite. To minimize spills, the washout and mixing bays are covered by a roof and surrounded by a concrete wall. In addition, there is sufficient containment around the tanks to prevent fluids from leaving the facility in the event of a catastrophic tank failure. Finally, the trucks and tires are power steam washed with fresh water before exiting the facility.

KDWW stated that this location would have a positive impact on the oil and gas operations in the area. Since it is close to where the waste is generated, it would provide a more economical means of disposing of the drilling waste. The next closest facilities are 75 to 300 miles away and have two to four hour wait times. KDWW opined that there was an industry need in this area for a drilling mud treatment facility and it was unreasonable to require the oil and gas industry to haul this type of waste to other facilities at much greater expense.

KDWW's hydrogeology expert analyzed the water wells in the area of the facility and constructed a north to south and west to east topographic cross section. The nearest municipal water well is located approximately 1,500 feet to the northwest and is 10 feet higher in elevation than the facility. Most of the water wells produce from a Wilcox sand found between 120 feet and 170 feet. The cross sections show that a substantial portion of the shallow subsurface throughout the area consists of clay and shale which is resistant to the vertical flow of liquids.

OIL AND GAS DOCKET NO. 06-0269808

KDWW plans to install four groundwater monitoring wells on the Waskom Stationary Treatment Facility, as shown on the attached site plan. Samples will be collected from each monitor water well upon installation and quarterly thereafter and the results of the analyses of 13 parameters will be submitted to the Commission on the required semi-annual report. KDWW has also agreed to install a security fence around the facility, as required in the permit, and will comply with all of the other permit conditions required by the Commission staff. The estimated cleanup and closure cost of the monitoring wells and facility is \$304,000. Financial security in that amount will be required before the facility is put back into operation.

Protestant's Evidence

The application is opposed by the Mayor, several other officials and citizens of Waskom, Texas. The protestants are primarily concerned that a surface spill could contaminate their usable water quality in the municipal water wells and the surface water. Any drainage from the facility would flow into a creek that drains into Pawpaw Bayou and then into Cross Lake, which is the water supply for the City of Shreveport, Louisiana.

Protestants are also concerned that noise, dust and fumes from the facility will affect their quality of life and property values. There is a rural subdivision, church and high school within one mile of the facility, and the protestants are worried that children in the area might be harmed, since the facility does not have a security fence around its perimeter to restrict access. In addition, KDWW's past operations have created a traffic hazard in the area, as trucks were parked on US 80 and were leaving large amounts of mud on the highways.

EXAMINERS' OPINION

The examiners recommend that KDWW's permit be approved. KDWW has shown that operation of the treatment facility will not cause pollution and will provide a more economical means of disposal for oil and fresh water based drilling fluids in this area. The thick shale and clay soil layers will provide a barrier to prevent migration of disposal fluids to fresh water resources which occur at a minimum depth of 120 to 170 feet. The permit recommended by Commission Technical Permitting staff includes provisions for a security fence around the facility, groundwater monitoring wells and closure requirements.

Approval of the application is in the public interest. The Haynesville Shale development core area encompasses Harrison and surrounding Counties and drilling mud disposal volumes within a 50 mile radius of the facility have picked up within the last year, as a direct result of the increased drilling activity. According to KDWW, the next closest treatment facilities are 75 to 300 miles away and have two to four hour wait times. This treatment facility is closer to a vast majority of recently permitted wells than any other facilities.

OIL AND GAS DOCKET NO. 06-0269808

Access to the disposal facility will be off of US 80, which is a public highway that has minimal traffic. The surface facility is paved and is of sufficient size to accommodate trucks hauling drilling fluids to the facility without creating a traffic hazard on the highway that provides access to the facility. Accordingly, the trucks and tires are power steam washed before leaving the facility to minimize the mud and dust tracked onto the highways. The KDWW tract has approximately 700 feet of frontage along US 80 with good visibility of traffic flow in both directions. Because the separation facility will be closer to the drilling activity, use of the facility for the treatment of drilling fluids will reduce traffic and use of public highways for hauling drilling fluids to a disposal site, thereby decreasing public risk from the truck traffic.

Compliance with permit conditions will minimize the risk of spills at the facility and will prevent the migration of any spills that occur, thereby protecting both ground and surface water. Additionally, topographic cross sections show that a substantial portion of the shallow subsurface throughout the area consists of clay and shale which is resistant to the vertical flow of liquids. The examiners believe that the proper operation of the proposed Waskom Stationary Treatment Facility will prevent waste of oil, gas and geothermal resources by providing a means for disposal of oil based and freshwater based drilling fluids that are necessary for the drilling of additional Haynesville Shale wells.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. Notice of the application was published in the *Marshall NewsMessenger*, a newspaper of general circulation in Harrison County, for four consecutive weeks beginning on March 30, 2011. A copy of the application was sent to all adjacent surface owners and the Harrison County Clerk on January 4, 2011.
3. KDWW owns the 6.8 acre tract where the Waskom Stationary Treatment Facility is constructed.
 - a. The tract is located approximately 1 mile west of Waskom, Texas, at the intersection of US 80, the feeder road to IH-20, and FM 134.
 - b. The site is paved and has a dedicated entrance from the south off of US 80 and a dedicated exit due east onto FM 134.
 - c. The site will provide sufficient traffic flow within the property to prevent conflicts between the trucks entering and exiting the facility.
 - d. A security fence will be installed around the facility's perimeter to

OIL AND GAS DOCKET NO. 06-0269808

restrict access.

4. The Waskom Stationary Treatment Facility is used as a processing facility for oil based and freshwater based drilling fluids.
 - a. The facility separates the fluids from the solids with the use of a centrifuge.
 - b. The liquid waste is hauled to local commercial saltwater disposal wells.
 - c. The solid waste is dried and hauled to a landfill facility located in the State of Louisiana.
 - d. No drilling waste is disposed of onsite.
5. Use of the Waskom Stationary Treatment Facility as an oil based and freshwater based drilling fluid processing facility will not harm fresh water resources.
 - a. The nearest municipal water well is located approximately 1,500 feet to the northwest and is 10 feet higher in elevation than the facility.
 - b. Most of the water wells produce from a Wilcox sand found between 120 feet and 170 feet.
 - c. A topographic cross section shows that a substantial portion of the shallow subsurface throughout the area consists of clay and shale which is resistant to the vertical flow of liquids.
 - d. The thick shale and clay soil layers will provide a barrier to prevent migration of disposal fluids to fresh water resources which occur at a minimum depth of 120 to 170 feet.
 - e. To minimize spills, the washout and mixing bays are covered by a roof and surrounded by a concrete wall.
 - f. There is sufficient containment around the tanks to prevent fluids from leaving the facility in the event of a catastrophic tank failure.
 - g. The trucks and tires are power steam washed with fresh water before exiting the facility.
 - h. Four groundwater monitoring wells will be installed on the Waskom Stationary Treatment Facility and will be sampled on a quarterly

OIL AND GAS DOCKET NO. 06-0269808

schedule.

6. Approval of the application is in the public interest.
 - a. The Haynesville Shale development core area encompasses Harrison and surrounding Counties and drilling mud disposal volumes within a 50 mile radius of the facility have picked up within the last year, as a direct result of the increased drilling activity.
 - b. The next closet treatment facilities are 75 to 300 miles away and have two to four hour wait times.
 - c. This treatment facility is closer to a vast majority of recently permitted wells than any other facilities.
7. The proper operation of the proposed Waskom Stationary Treatment Facility will prevent waste of oil, gas and geothermal resources by providing a means for the disposal of oil based and freshwater based drilling fluids necessary for the drilling of additional wells.
8. The estimated closure cost of the monitor wells and the separation facility is \$304,000. Financial security in that amount will be required before the facility is put back into operation.

CONCLUSIONS OF LAW

1. Proper notice was issued as required by all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction to decide this matter.
3. K & D Water Works, LLC's application to operate a commercial oil and gas waste separation facility on the Waskom Stationary Treatment Facility, Harrison County, Texas, complies with Statewide Rule 8 and will not cause waste of oil, gas or geothermal resources or pollution of useable quality surface and ground water.

OIL AND GAS DOCKET NO. 06-0269808

EXAMINERS' RECOMMENDATION

The examiners recommend that K & D Water Works, LLC's application to operate a commercial oil and gas waste separation facility on the Waskom Stationary Treatment Facility, Harrison County, Texas, be approved, as set out in the attached Final Order.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner

James M. Doherty
Legal Examiner