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Project No. ASF05-017-00
February 23, 2005

Ramon Garcia, County Judge
County of Hidalgo
100 East Cano, 2nd Floor
Edinburg, Texas 78539

**RE: Petroleum Storage Tank Regulatory Compliance Assessment
Hidalgo County Sheriff's Department Facility
701, 711, 713 East Cibolo Road
Edinburg, Texas 78541**

Dear Judge Garcia:

Raba-Kistner Consultants, Inc. (R-K) has completed an assessment of existing petroleum storage tank (PST) systems located at the referenced facility operated by Hidalgo County (CLIENT). As you are aware, Hidalgo County authorized **R-K** to evaluate whether PST facilities (i.e., including underground storage tank [UST] and aboveground storage tank [AST] facilities) operated by the County are compliant with applicable regulatory provisions including specific requirements set forth in the Texas Administrative Code (TAC) and Code of Federal Regulations (CFR). A detailed scope of services for this project is described in the professional services agreement between **R-K** and Hidalgo County, dated December 29, 2004.

Project activities were initiated in January 2005 and to date have included database review and site inspection activities at a total of six (6) facilities designated by the County. In accordance with the County's request, **R-K** has prepared this correspondence specifically to provide our assessment results and recommendations to address immediate compliance issues identified with respect to the Hidalgo County Sheriff's Department facility although the overall scope of services also includes assessment and reporting for the five (5) remaining PST facilities. Assessment results and recommendations for remaining PST facilities will be provided under separate cover.

This report is intended for the use of Hidalgo County and their representatives. Our services have been performed under a mutually agreed-upon scope of work defined in the referenced professional services agreement. No other parties should rely on this information without written consent from both Hidalgo County and **R-K**.

DESCRIPTION OF ASSESSMENT ACTIVITIES

A phased approach consisting of the methodical completion of several steps was followed to evaluate PST systems existing at the referenced facility. It has been our experience on similar projects that a phased approach provides for cost-effective allocation of resources necessary to achieve project objectives. Appropriate recommendations to address recognized deficiencies

were developed once a thorough understanding of facility conditions was obtained. A synopsis of pertinent project activities performed to date is as follows:

- **R-K** performed a regulatory database review to obtain information pertaining to the current regulatory status of PST installations at the referenced facility available through the PST Registration Database maintained by the Texas Commission on Environmental Quality (TCEQ). In Texas, this regulatory agency is charged with administration of environmental sections of the TAC, which includes *30 TAC Chapter 334*, pertaining to *Underground and Aboveground Petroleum Storage Tank Systems*.
- **R-K** visited the site and performed a visual inspection of system components including spill and overfill prevention systems, leak-detection systems, dispenser pumps, and containment areas to evaluate compliance with technical standards for UST and AST systems pursuant to *30 TAC Chapter 334, Subchapter C and Subchapter F*, respectively. Documents on file with site personnel were reviewed to evaluate compliance with applicable general operating and management requirements for PST systems.
- **R-K** compiled and interpreted data gathered as the result of previous project phases. On the basis of collective information developed as the result of research and facility inspection activities, **R-K** has prepared the following discussion. This discussion includes a summary of findings and recommendations to address recognized compliance issues.

It is anticipated that **R-K** will initiate a new phase of project activities to address specific noncompliance issues in accordance with the authorized scope of professional services subsequent to County review and acceptance of assessment results. Pending County authorization, **R-K** will coordinate corrective actions with appropriate facility personnel.

SUMMARY OF ASSESSMENT RESULTS

As PST systems currently operated at the Sheriff's Department facility are not currently registered with the TCEQ, no information pertaining to current regulatory compliance status and/or previous regulatory compliance inspections was available for **R-K** review. Therefore, pertinent findings and recommendations to achieve regulatory compliance were based solely upon site inspection activities and review of available PST documentation provided by County personnel at the subject facility. Assessment results are provided in the following subsections.

Specific observations made by **R-K** with respect to AST and UST systems are presented in bulleted format within respective subsections. A discussion pertaining to associated regulatory compliance/noncompliance issues is subsequently provided for County consideration.

Aboveground Storage Tanks

The following ASTs and associated appurtenances were observed at the referenced facility and are currently in operation:

- 150 gallon AST containing diesel fuel
- 1,000 gallon AST containing diesel fuel
- 2,400 gallon AST containing diesel fuel
- 2,400 gallon AST containing diesel fuel

R-K noted the following conditions pertaining to the AST systems as the result of site inspection activities conducted on January 19, 2005:

- There are four ASTs at the subject facility, all of which are an integral part of an individual emergency electrical power generator. The three larger ASTs are UL-142 listed, are double walled in construction, and have electronic interstitial monitors. The 150 gallon AST is single wall in construction, does not have interstitial monitoring, and is not constructed to UL standards.
- All four ASTs were generally observed in good condition.
- Referenced ASTs are all located over a paved area. No product piping exists outside the perimeter of the AST because these tanks are dedicated to the generator engine that is placed on top of the AST.
- There are no fill limiting valves or overfill alarms on the ASTs.
- The ASTs have primary and emergency venting.
- The control panel for the emergency generator system displays the fuel level in the AST. There are no other clock gauges or similar level gauges associated with the system.
- ASTs are not currently registered with the TCEQ.

There are two primary regulations that must be followed with respect to the ASTs at this facility. These are the *30 TAC Chapter 334 (Petroleum Storage Tank Rules)* and *40 CFR Part 112 (Spill Prevention, Control, and Countermeasure plan [SPCC])* administered by the TCEQ and U.S. Environmental Protection Agency (EPA), respectively. These regulations are intended to work together although the SPCC regulations are far more restrictive.

The TCEQ regulations (*30 TAC §334, Subchapter F*) exempt all ASTs less than 1,100 gallons in capacity from registration. There are other exemptions and exclusions allowed in the TCEQ regulations, however the size of the tank is the only applicable condition at this facility. Therefore, at this facility, there are only two regulated ASTs that must be registered with the TCEQ (i.e., 2,400-gallon ASTs).

The Oil Pollution Act, specifically the SPCC regulations (*40 CFR Part 112*), require specific controls and procedures in order to prevent the loss of oil to a navigable water way. Moreover, for the SPCC regulations to apply, there must be a cumulative total of 1,320 gallons of oil at the facility, excluding containers of oil less than 55 gallons in size. Clearly, this facility meets these criteria.

Because the two 2,400 gallon ASTs are not registered with the TCEQ, and a SPCC plan does not exist for the four ASTs at this facility, this facility is not in compliance with either agency requirements at this time.

Underground Storage Tanks

The following UST system is located at the referenced facility and currently in operation:

- 24,000 gallon UST; split compartment containing diesel (20,000 gallons) and gasoline (4,000 gallons).

R-K noted the following conditions pertaining to the UST system as the result of site inspection activities conducted on January 19, 2005:

- The UST is a dual compartment, double wall, ACT-100 fiberglass clad steel tank, 24,000 gallons in capacity. The compartments are 20,000 gallons and 4,000 gallons in capacity, respectively.
- The underground piping at this facility is double wall FRP. There are UL aboveground flex hoses on each end of the piping system. This piping system is a pressurized system.
- Leak detection for the tank is accomplished using a Veeder-Root TLS-300C system. Line leak detection for the product lines is accomplished using a mechanical line leak detector on each submerged turbine pump and annual precision line leak testing.
- Shear valves and dispenser pans are installed at each dispenser.
- Spill containers, overfill prevention valves, and tight fill fittings are on the UST fill connections. A single point vapor recovery system is on the gasoline tank.
- The UST system is not currently registered with the TCEQ.

For an UST to be in compliance with the TCEQ regulations, and for a fuel wholesaler to fill any petroleum storage tank, it must be registered using the required Self Certification Form. This form provides data to the TCEQ, and verifies the existence of pollution insurance. Fuel has not been placed into this UST due to the lack of registration, and the tank is therefore out-of-service.

Although the UST system is not being used, there is a specific procedure outlined in 30 TAC §334.54, pertaining to Temporary Removal From Service, which must be followed for the system to be in compliance with this provision. At this time, it does not appear that the system is in compliance with 334.54.

According to 30 TAC §334.50, Release Detection, monthly reconciliation of the tank inventory must be performed using the automatic tank gauge and meter readings at the dispensers. Additionally, because the product lines have mechanical line leak detectors installed, annual precision line leak tests must be performed, and the mechanical line leak detectors must be tested. No records were available regarding the monthly tank reconciliation, mechanical line leak detector testing, or annual precision line leak testing.

RECOMMENDATIONS

Based upon the results of this evaluation, R-K offers the following recommendations to bring existing PST systems into regulatory compliance. In accordance with the authorized scope of services, and pending review and acceptance of assessment results and recommendations

presented herein by Hidalgo County, **R-K** will initiate a new phase of project activities to address specific noncompliance issues.

Aboveground Storage Tanks

The following recommendations are made:

1. Prepare appropriate paperwork to register the two 2,400 gallon ASTs with the TCEQ as soon as possible.
2. Utilize services of a qualified environmental engineer to prepare a SPCC plan for this facility. Because the cumulative storage total exceeds 1,320 gallons, this plan is required.
3. Utilize services of a qualified environmental engineer to design a means to control the flow of oil if it were to be spilled before it is lost off site (i.e., berm structure, sump, etc.). Once the design is completed, utilize the services of a qualified contractor to construct this control system.
4. Purchase spill kits and place them adjacent to the emergency generators. These may be used to help control the flow of oil and prevent its loss off site the event of a spill.
5. Ensure that all persons transferring fuel to or from these tanks are trained in the proper procedures and safe operation of the systems. This training should also prepare the operator to respond appropriately in the event of a spill.
6. Maintain a file regarding maintenance and operations of the ASTs as applicable. Record any repairs to the ASTs themselves and maintain these records at the facility for the life of the tanks.

In accordance with the scope of the existing agreement for professional services, **R-K** is prepared to assist the County with the implementation of these recommendations. Pending County approval, **R-K** can immediately take necessary action to address items 1-3. Although it is anticipated that County can accomplish items 4-6 directly, **R-K** can provide environmental consulting services in support of these items if requested.

Underground Storage Tanks

The following recommendations are made:

1. Utilize the services of a qualified PST contractor to perform a precision tank and line leak test on both compartments of the UST and all product lines as soon as possible.
2. Complete the required Self Certification form and register the tank with the TCEQ as soon as possible.
3. Utilize the services of a qualified PST contractor to verify the calibration of the meters at the dispensers such that monthly reconciliation can be performed accurately.
4. Have a County service technician periodically confirm that the Veeder-Root system is operating properly. County personnel should record observations and adjustments or repairs to the system in a maintenance log.
5. Clean all dispenser pans and pump manways of water and oil so that any leaks that may form over time will be readily seen. If any FRP piping is visible in any dispenser pan, backfill the pan with gravel until the FRP piping is covered.

6. Provide training for all County employees who will use the system in order to assure safe operation of the system.
7. Begin daily procedures to record all UST system data and file in the facility office for monthly reconciliation. Maintain all records regarding leak detection and testing, and monthly reconciliation in a safe location. The TCEQ can request to see these documents at any time and typically requests these for review in conjunction with periodic compliance inspections. If necessary, utilize the services of a qualified environmental engineer familiar with these systems to assist with initial development of appropriate documentation.

Once the precision testing has been completed, and the Self Certification registration form has been submitted, use of the UST system can commence. If this testing and registration process will not take place immediately, then it is recommended that utilize the services of a qualified environmental consultant to register the UST as "Temporarily Out of Service" in accordance with 30 TAC §334.54 promulgated by the TCEQ.

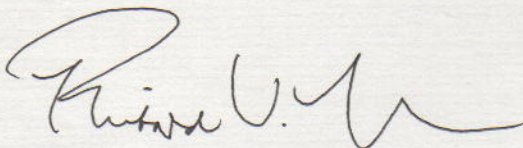
R-K is prepared to assist the County with the implementation of these recommendations. Pending County approval, **R-K** can immediately take necessary action to address items 1-3. Although it is anticipated that County can accomplish items 4-7 directly, **R-K** can provide environmental consulting services in support of these items if requested.

CLOSING

We appreciate the opportunity to be of professional service to Hidalgo County on this important project. Pending your review of this information, **R-K** would appreciate the opportunity to discuss the next appropriate project activities necessary to achieve regulatory compliance objectives with County personnel. Subsequent to this discussion and pending County authorization to move forward, **R-K** is prepared to initiate the next phase of project activities. Should there be any questions or additional information required concerning this report, please do not hesitate to contact either of the undersigned at (210) 699-9090.

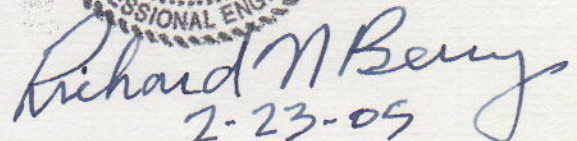
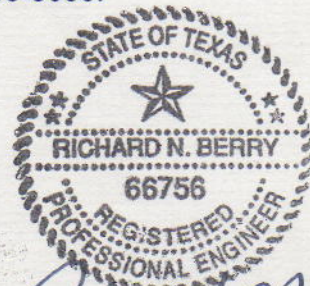
Very truly yours,

RABA-KISTNER CONSULTANTS, INC.



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Senior Project Manager

RVK/RNB/srw
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