



**LAW**

ENGINEERING AND ENVIRONMENTAL SERVICES

**PROPOSAL FOR TANK CLOSURE**

**NASSAU COUNTY DETENTION CENTER**

**YULEE, FLORIDA**

**LAW ENGINEERING PROPOSAL NO. 94-4005E**



**LAW**

ENGINEERING AND ENVIRONMENTAL SERVICES

March 30, 1994

Board of County Commissioners  
c/o T. J. Greeson  
Ex-Officio Clerk  
Nassau County Courthouse  
416 Centre Street, Room 9  
Fernandina Beach, Florida 32034

**SUBJECT: Proposal for Tank Closure**  
Nassau County Detention Center  
Yulee, Florida  
Law Engineering Proposal No. 94-4005E  
FDEP Facility No. 458841517

Gentlemen:

Thank you for the opportunity to submit this proposal to provide turn-key UST closure services for the UST system at the Nassau County Detention Center in Yulee, Florida. This proposal is in response to the request by Mr. William P. Lecher, P.E., Nassau County Engineer on March 11, 1994. This proposal contains our understanding of available background information, an outline of the proposed services, our anticipated schedule and fee, and authorization instructions.

Law Engineering (LAW) is experienced in UST closures through similar projects accomplished over the past few years, and are familiar with applicable Florida Department of Environmental Protection (FDEP) underground storage tank (UST) closure requirements.

### **BACKGROUND INFORMATION**

A 4000 gallon gasoline UST was excavated and removed by Scott Peterson Construction Company in February 1992 at the subject property. The UST excavation and removal was supervised by GWL/EMCON Southeast, Inc. and a tank closure report was prepared and submitted by them to the FDEP in July 1992. LAW conducted the Contamination Assessment after the tank removal and submitted a Contamination Assessment Report (CAR) to the FDEP in August 1993, under LAW Project No. 444-06900.01.

After review of the CAR, the Florida Department of Environmental Protection (FDEP) requested additional environmental services be conducted at this camp in their letter dated October 20, 1993. In letters from the FDEP (dated October 20, 1993) and Mr. Brian Kelly, FDEP, Jacksonville, Florida (dated February 10, 1994), a 10,000 gallon gasoline tank was referenced as being located on the property. Mr. Lecher, on March 11, 1994, informed LAW that Nassau County personnel had located a 10,000 gallon diesel UST on the property. LAW personnel visited the site on March 14, 1994 to obtain details on this tank. During the site visit, LAW personnel observed that the tank was bounded by a fence to its east and south. We measured approximately 45 inches of diesel fuel in the tank.

### **LAW ENGINEERING, INC.**

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JACKSONVILLE, FLORIDA 32207  
(904) 396-5173 • FAX (904) 396-5703

ONE OF THE LAW COMPANIES 

The 10,000 gallon diesel tank was not identified before submittal of the proposal for additional services for the former 4000 gallon gasoline tank (LAW Proposal No. 94-3965E) and therefore, this tank closure service could not be included in that proposal. However, we understand based on our conversations with Mr. Lecher, the 10,000 gallon diesel tank services are to be performed under a separate account and this account will be setup before the authorization of this proposal.

We also understand that the County is currently conducting a survey to obtain a site plan of the Detention Center. LAW will proceed with the tank removal services and the services proposed for the former 4000 gallon tank after obtaining this survey site plan from the County.

As stated in the Florida Administrative Code (FAC) 17-771, a closure assessment and an associated ground water sample would be required during this tank closure as the soil and groundwater contamination (if present) has not been defined in the vicinity of the 10,000 gallon diesel tank. The balance of the proposal contains our scope of services and a fee estimate.

### **SCOPE OF SERVICES**

The objective of this project is to permanently close by removal the approximately 10,000 gallon capacity diesel UST. In preparing this Scope of Services, we have assumed the tank is 10,000 gallons or less in capacity and a closure assessment report will be submitted to the FDEP. We have also assumed that additional soil and ground water sampling will be required in association with the tank closure.

#### **Task 1 - Project Management**

For Task 1, LAW will prepare a set of performance specifications for the tank removal. As part of this proposal preparation, we obtained bids for the tank removal. We recommend Treadwell, Inc. as a subcontractor for the tank removal because of their lowest bid cost for this tank removal. LAW will manage and administer the overall project and will also review any change orders, approve and process subcontractor invoices for payment, and review and accept their work as complete. In addition, LAW and the tank contractor will prepare and submit the appropriate notification and registration forms and permits to the local authorities, as required.

#### **Task 2 - Underground Storage Tank Closure**

For Task 2, LAW will directly subcontract with the approved contractor for the removal and disposal of the UST and any products within the tank. The tank closure will be performed in general accordance with the American Petroleum Institute (API) Recommended Practice 1604. LAW or it's subcontractor will notify the appropriate local officials of the planned date for closure activities, and will obtain the necessary and appropriate permits at the local level. We understand Detention center personnel will provide details on utilities in the vicinity of the UST and provide access to the tank to facilitate its removal.

Any tank bottom sludges encountered will be drummed and sampled to characterize these items for disposal. You should be aware that additional characterization analysis may be necessary if the sludges are determined to be hazardous.

In an effort to provide the most cost-effective solution to Nassau County, we have not included a lump sum fee for actual disposal of the tank bottom sludges and nonhazardous liquids in the tank. Unit costs per drum for drumming, sampling, analyzing and disposal of the tank bottom sludges and unit cost per gallon for disposal of the nonhazardous liquids (diesel) in the tank are included in the cost estimate. LAW will submit a fee estimate for the disposal of the tank bottom sludges and nonhazardous liquids after their characterization is complete.

### **Tank 3 - Closure Monitoring and Testing**

LAW will provide on-site personnel throughout the removal of the UST. Soils excavated from in and around the tank area will be monitored for contamination during the removal of the storage tank systems. The soils will be monitored by screening with an organic vapor analyzer (OVA) to determine the relative absence or presence of petroleum hydrocarbons in the soil. Soils will be monitored at vertical intervals not greater than 2 feet until the ground water table is encountered. The current ground water level is approximately four feet below ground surface at the UST location. Additionally, a minimum of one soil boring will be analyzed with the OVA for every 20 feet of product transfer line at a depth of 2 feet below the line, if encountered. Approximately 20 OVA borings will be taken around the tank and its piping.

As discussed in Task 1 and 2 of the proposal presented for the former 4000 gallon gasoline tank (LAW Proposal No. 94-3965E dated February 25, 1994), we indicated OVA soil screening will be performed in the vicinity of the former 4000 gallon gasoline tank and the retention ponds. We recommend this survey be done prior to the removal of the 10000 gallon UST. This OVA screening for this survey was planned to extent to the vicinity of the 10,000 gallon diesel tank. The results of this survey will dictate the soil removal sequence. In an effort to provide the most cost-effective solution to Nassau County, excessively contaminated soils as defined by our OVA survey at the time of the 10,000 gallon tank closure will not be excavated and stockpiled if additional soils have to be in regard to the 4000 gallon tank.

We had also stated in our previous proposal that two soil samples would be collected to determine the extent of organics and hydrocarbons in the soils in the vicinity of the former 4000 gallon gasoline tank and the retention ponds. If excessively contaminated soils are detected in the vicinity of the former 4000 gallon tank and the 10,000 gallon diesel tank an Initial Remedial Action (IRA) or appropriate remediation (based on volume of soil) for cleanup of these excessively contaminated soils will be presented. This proposal for removal of the 10000 gallon UST includes no soil removal.

If OVA soil screening indicated no soil removal is required for the 4000 gallon tank but soil removal is required for the 10,000 gallon tank, we will provide costs for removal of the excessively contaminated soils under a separate scope of services. If both groundwater and soil contamination are encountered around the 10,000 gallon diesel tank, LAW will provide a proposal for conducting a Contamination Assessment (CA) for cleanup of the contaminated soils and groundwater in the vicinity of the 10,000 gallon diesel tank in accordance with the Florida Administrative Code (FAC) Chapter 17-770. A Discharge Notification Form informing the FDEP about the discharge will also be submitted.

Clean soils to replace the volume of the tank displaced will be provided and placed by our subcontractor at no additional cost to the county, if no excessively contaminated soils are observed around the 10,000 gallon diesel tank. If excessively contaminated soils are observed around the tank, the tank area shall be brought to grade using the soils in its vicinity.

#### **Task 4 - Groundwater Monitoring Well Installation and Sampling**

LAW will install one shallow temporary groundwater monitoring well using a hand auger or backhoe in the area of highest soil contamination.

The well will be sampled using disposable teflon bailers and the samples shall be analyzed for the Kerosene or Mixed Product analytical group by EPA Methods 601, 602, 610, 7421 and 418.1 (including MTBE, EDB and Total Xylenes). Costs provided are based on a standard three week turnaround. Prior to obtaining the groundwater samples for laboratory analysis, three to five well volumes of groundwater shall be removed from each well. Groundwater samples will be placed in appropriate containers and shipped by over-night courier to Law Environmental National Laboratories in Pensacola, Florida. Sampling and analysis shall be performed in accordance with our approved Comprehensive Quality Assurance Plans and our Health and Safety Plan submitted to the FDEP in the CAR dated August 1993.

#### **Task 5 - Report Preparation**

At the conclusion of the closure, LAW will submit a Tank Closure Report to Nassau County and the FDEP. The report will be structured to provide documentation of closure activities. LAW will also submit a discharge notification form to the FDEP, if soil and groundwater contamination is observed during the tank closure.

Throughout the project, LAW will act as a technical resource and to the extent requested and assist with regulatory compliance. Our fee allows for one meeting and telephone conversation (approximately five hours of professional time) with the regulatory agency in Jacksonville and the County. Time spent, on the site visit and conversations with Nassau County personnel for gathering information about the tank have been included in this proposal.

### FEE ESTIMATE

Since the subsurface conditions at the site are not precisely known, it is not possible to foresee unexpected circumstances which may be encountered during field activities. These circumstances may necessitate modifications to our Scope of Services. Based on our experience and understanding of the project requirements, our fee for the performance of the Scope of Services outlined herein is estimated as follows:

Task 1 - Project Management/Regulatory Coordination .....	\$800.00
Task 2 - UST Closure .....	\$4940.00
Task 3 - Closure Monitoring and Testing .....	\$1200.00
Task 4 - Groundwater Monitoring Well Installation and Sampling .....	\$400.00
Task 5 - Closure Report .....	<u>\$2610.00</u>
Total Estimated Fee .....	\$9950.00

The actual fee for our services will be determined by the services expended in general accordance with the attached Fee Schedule. Invoices will be due upon receipt. We will not exceed a fee of \$9950.00 without an extension of the scope of services by your office. Our fee estimate is based upon our performing the scope of services described herein. It should be understood our proposal does not include the actual disposal of tank bottom sludges and disposal of non-hazardous liquids (diesel) in the tank and the unit rates for these items are listed below:

Cost for disposal of nonhazardous liquids from tanks	\$0.58/gallon
Costs for sludges per drum including analyticals	\$259/drum

### SCHEDULE

We understand it is necessary to complete the UST closures as soon as possible. We also understand that the County is currently conducting a survey to obtain a site plan of the Detention Center. LAW will proceed with the tank removal services and the services proposed for the former 4000 gallon tank after obtaining the site plan from the County. LAW can perform the closure within two weeks of receiving the site plan, assuming we will have access to the site. A Closure Report will be submitted approximately four weeks after the field services are complete based on a three week laboratory turnaround. If this schedule does not meet your deadlines, please notify our office so that a mutually agreeable schedule can be arranged.

### AUTHORIZATION

We understand based on our conversations with Mr. Lecher on March 11, 1994, the 10,000 gallon diesel tank removal services are to be performed under a separate account and this account will be opened before authorization of this proposal. We, however, assume that these services will be formally authorized under our existing contract with Nassau County.

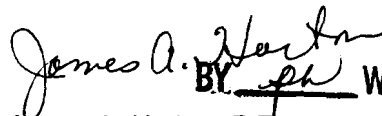
We appreciate your consideration of the Jacksonville Branch of Law Engineering for this service and are looking forward to serving as your environmental consultant on this and future assessments.

Sincerely,

**LAW ENGINEERING, INC.**



Srinivas Kuchibotla, E.I.  
Project Environmental Engineer



James A. Horton, P.E.  
Principal Engineer

BY ph WITH PERMISSION

SK/JAH:ph

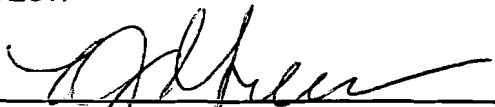
Attachments: Fee Schedule

Distribution: Nassau County Board of County Commissioners (2)

### FOR NASSAU COUNTY USE ONLY:

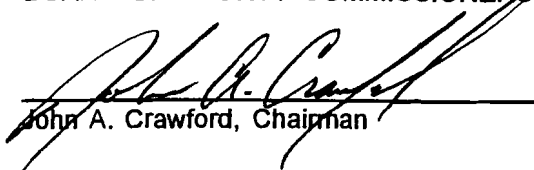
Approved this 11<sup>th</sup> day of April, 1994 by the Board of County Commissioners, Nassau County, Florida.

ATTEST:



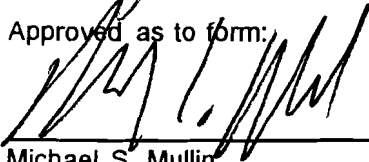
T.J. Greeson, Ex-Officio Clerk

BOARD OF COUNTY COMMISSIONERS



John A. Crawford, Chairman

Approved as to form:



Michael S. Mullin  
County Attorney

Nassau County Detention Center  
10,000 Gallon Diesel Tank Removal

**LAW ENGINEERING, INC.**  
**SCHEDULE OF FEES**

Nassau County Detention Center  
Yulee, Florida

Law Engineering Proposal No. 94-4005E

**ENGINEERING SERVICES**

Environmental Technician, per hour .....	\$	45.00
Staff Environmental Scientist/Geologist/Engineer, per hour .....	\$	75.00
Project Environmental Scientist/Geologist/Engineer, per hour .....	\$	80.00
Senior Environmental Scientist/Geologist/Engineer, per hour .....	\$	85.00
Principal Environmental Scientist/Geologist/Engineer, per hour .....	\$	95.00
Chief Engineer, P.E., per hour .....	\$	105.00
Corporate Environmental Consultant, per hour .....	\$	110.00
Clerical Support, per hour .....	\$	32.00
CADD Operator, per hour .....	\$	45.00
Mileage, per mile .....	\$	0.40
Reimbursable Expenses, Cost divided by 0.8		
Subcontract Services, Cost divided by 0.8		

**FIELD SERVICES\***

Organic Vapor Analyzer (OVA), rental per day .....	\$	150.00
Hydropunch II, per sample .....	\$	75.00
Mileage, per mile .....	\$	0.40
Reimbursable Expenses, Cost divided by 0.8		
Subcontract Services, Cost divided by 0.8		

\*Please add the appropriate engineering rates for execution of field services.



**FEE SCHEDULE**  
**PAGE - TWO -**

**DRILLING SERVICES**

Mobilization and Transportation of Drilling Equipment, lump sum .....	\$ 375.00
Drill and Install Monitor Wells (10-foot screen)	
2-inch PVC, per foot .....	\$ 24.00
4-inch PVC, per foot .....	\$ 29.00
Split-Spoon Samples, in conjunction with well installation, each .....	\$ 31.00
Decontamination of Drilling Equipment, per hour .....	\$ 145.00
Well Cover	
Above Ground, each .....	\$ 175.00
Flush Mount, each .....	\$ 225.00
Well Development, per hour .....	\$ 135.00
55-Gallon Drums, each .....	\$ 65.00
Time Rate, per hour .....	\$ 135.00
Stand-by, per hour .....	\$ 105.00
Grouting of Borings or Wells, per foot .....	\$ 5.00
Piezometer Installation, per foot .....	\$ 12.00

