REQUEST FOR PROPOSALS

"Underground Storage Tank Compliance Evaluation Inspections"

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

RFP No: 5701-08-01

September 19, 2007

REQUEST FOR PROPOSALS

"Underground Storage Tank Compliance Evaluation Inspections"
Louisiana Department of Environmental Quality

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REQUEST FOR PROPOSALS

"Underground Storage Tank Compliance Evaluation Inspections"
Louisiana Department of Environmental Quality

PART I. ADMINISTRATIVE INFORMATION

1.1 Request for Proposals

The Louisiana Department of Environmental Quality (LDEQ) requires the services of a well-qualified contractor to conduct Underground Storage Tank (UST) Compliance Evaluation Inspections (CEI) at 300-700 UST facilities throughout Louisiana to determine compliance with Federal and State UST Regulations. This project will be under the direction of the LDEQ. The LDEQ will provide a list of facilities to inspect following the award of the contract. The goal of this project is to perform UST compliance evaluation inspections in accordance with the procedures established by the LDEQ. As additional funding for these inspections becomes available, additional facilities may be added to the facilities list. LDEQ invites all qualified parties (companies and individuals) to submit proposals for providing these services.

1.2 Contract Term and Compensation

The term of the contract resulting from this RFP will be twelve (12) months, beginning approximately December 1, 2007, and ending approximately November 30, 2008. **All inspections must be completed no later than August 1, 2008. All invoices must be received no later than September 30, 2008**. Compensation for contract services will be based on the Schedule of Prices (see RFP Section 3.2.7) to be incorporated into the contract, with a maximum total contract cost based on the scheduled number of units of requested services and the unit prices resulting from the RFP process. LDEQ reserves the right to amend the contract to increase the number of units of requested services and thereby increase the total contract cost, using the unit prices established in the Schedule of Prices. This contract and any amendments require the approval of the Louisiana Office of Contractual Review.

1.3 Proposal Preparation

Instructions for preparing proposals are provided in Part III below. Proposals submitted for consideration should follow the specified order of presentation and format.

1.4 Questions and Answers

It is not intended that a pre-proposal conference be held. **Any and all questions regarding this Request for Proposals must be submitted in writing to the LDEQ Contracts and Grants**

Division by October 2, 2007. Do not contact other LDEQ program personnel with questions regarding this RFP.

Questions may be mailed to:

Helen Hebert
Contracts and Grants Division
Louisiana Department of Environmental Quality
P. O. Box 4303
Baton Rouge, LA 70821-4303

or submitted by e-mail to: Helen.Hebert@la.gov

Questions will also be accepted by FAX at (225) 219-3823. Responses to these questions can be accessed by going to www.deq.louisiana.gov, Contracts and Grants Division. Questions and answers that may potentially result in the disclosure of information from proposals of competing bidders will not be published.

1.5 Submission of Proposals

If you desire to submit a proposal, six (6) copies of the technical information presented in Section 3.2 Elements for Technical Proposal (Volume I), and one (1) copy of the financial information presented in Section 3.3 Elements for Financial Information (Volume II), must be received by the Louisiana Department of Environmental Quality (LDEQ), Contracts and Grants Division, **no later than 3:00 p.m. local time on or before October 22, 2007. Proposals, amendments, and any other information received after this date and time will not be considered.**

All proposals should be delivered to:

Laura McDonald, Contracts and Grants Division
Louisiana Department of Environmental Quality
602 N. Fifth Street, Room 931 (9th Floor)
Baton Rouge, Louisiana 70802

Mail through the U. S. Postal Services is not delivered directly to the LDEQ headquarters building. Therefore, proposers are advised to hand deliver or send their proposals by some means other than the U.S. Mail. Proposers are further advised not to wait until the last day to dispatch their proposals. Maximum competition is encouraged but time extensions for messenger delays, traffic, fogbound airplanes, or other causes will not be granted. Proposals will not be accepted by facsimile (FAX) or electronic mail (e-mail).

Proposers are solely responsible for the timely delivery of their proposals. LDEQ will not acknowledge by mail or telephone timely receipt of proposals.

1.6 Changes, Addendum, or Withdrawal of Proposals

Any changes or addenda to a proposal must be submitted in writing, signed by an authorized representative of the proposer, cross-referenced clearly to the relevant proposal section, and received by LDEQ prior to the proposal due date and time. All changes and addenda must meet all requirements for the proposal. Any proposer choosing to withdraw its proposal must submit a written withdrawal request to LDEQ.

1.7 RFP Schedule Summary

The events and dates summarized in Table 1 represent milestones in LDEQ's RFP process; however, LDEQ reserves the right to deviate from this schedule.

Table 1. RFP Schedule Summary.

Event	Date	Local Time
Begin Advertisement of RFP	September 19, 2007	
Deadline for LDEQ receipt of written questions from prospective proposers	October 2, 2007	4:00 p.m.
Proposal due date and time	October 22, 2007	3:00 p.m.
Oral presentations by proposers (if required)	To be scheduled	
Estimated award date	Approximately November 9, 2007	
Estimated initiation of the contract period	Approximately December 1, 2007	

PART II. GENERAL INFORMATION

2.1 "Foreign" Corporations Contracting with the State of Louisiana

According to the provisions of LSA R.S. 12:301-302, any corporation which is incorporated in another state must have a certificate of authority to transact business in Louisiana from the Louisiana Secretary of State, Corporations Division, 3851 Essen Lane, Baton Rouge, Louisiana, 70809, (225) 925-4704. NOTE: The certificate of authority should not be submitted with the proposal. However, the Louisiana Certificate of Authority must be provided prior to contracting with the LDEQ.

2.2 Disclosure of Ownership Affidavit

All for-profit corporations whose stock is not publicly traded must file a Disclosure of Ownership Affidavit with the Louisiana Secretary of State's office before contracting with state government. Non-profit corporations and for-profit corporations whose stock is publicly traded are exempt from this requirement. NOTE: The Disclosure of Ownership Affidavit should not be submitted with the proposal. However, the Disclosure of Ownership Affidavit must be provided prior to contracting with the LDEQ.

2.3 Code of Ethics for State Employees

Proposers are hereby advised that contractors may, in certain circumstances, be deemed "public employees" as interpreted by the Louisiana Commission on Ethics for Public Employees. Potential contractors are responsible for determining that there will be no conflict or violation of the Ethics Code if their company is awarded the contract. (See Attachment 5, Sample LDEQ Contract, Article 27).

2.4 Insurance Requirements

Potential contractors are encouraged to carefully examine the insurance coverages that will be required by the contract. (See RFP Attachment 5, Sample LDEQ Contract, Article 15). Certificates of insurance, signed by a person authorized by that insurer to bind coverage on its behalf, must be provided by the successful contractor and approved by LDEQ before work begins. Furthermore, the successful contractor must include all subcontractors as insureds under its policies or must furnish separate certificates for each subcontractor before work begins.

2.5 Proposal Costs

Proposers are responsible for all costs incurred for the preparation of their proposals. Proposals received in response to this RFP are subject to the Louisiana Public Records Law and become the property of LDEQ and will not be returned.

PART III. PROPOSAL PREPARATION INSTRUCTIONS

3.1 Proposal Content

Proposals submitted in response to this RFP should include as much detail as practical to provide a straightforward, clear, and concise description of the proposer's ability to meet the requirements of the RFP. The proposer should demonstrate his understanding of LDEQ's requirements. Each proposer is solely responsible for the accuracy and completeness of its proposal.

3.2 Elements for Technical Proposal (Volume I)

Each proposer should address the elements described by this section in his Technical Proposal in the order listed.

3.2.1 Proposal Cover Sheet

Each proposer must complete the proposal cover sheet (RFP Attachment 1). **Proposals lacking a signed cover sheet shall be disqualified.**

3.2.2 Table of Contents

Each proposer should include a paginated Table of Contents to facilitate locating proposal information.

3.2.3 Scope of Services

Each proposer should submit a Scope of Services that clearly and concisely describes his technical and management approach to completing the requirements described in LDEQ's Statement of Work (SOW) (RFP Attachment 2). The proposer's Scope of Services should be presented in as much detail as judged necessary by the proposer. An unsupported statement that the proposer will comply with all the requirements of this solicitation is not acceptable. Any exceptions taken to the SOW must be clearly stated and explained.

Each proposer's Scope of Services should include a brief introduction followed by a discussion of the following technical elements, in the order listed.

(1) Project Management

Describe the proposed approach to project management, including, at a minimum, the following information:

(a) Overall company organization

Describe the overall organization of the company. Include a company organizational chart. If multiple offices are involved in the project, describe how the home office and branch offices will interact with each other and with LDEQ. Include a description of the involvement of any proposed subcontractors in this project (See Item 3.2.6, Subcontractors).

(b) Project organization

Provide a project-specific organizational chart identifying the key Contractor personnel and key subcontractor personnel proposed for work on this project. This chart should specifically include, but need not be limited to, all professional level personnel, Project Manager, key on-site personnel, key personnel responsible for preparation of deliverables, and Contract Administrator positions. Show the lines of authority and lines of communication among all participants, including management, supervisory, and technical staff, points of contact for LDEQ, and any subcontractor relationships. The chart should be realistic and practical. The organizational chart should be accompanied by a narrative identifying the function and responsibilities of each position identified in the organizational chart and the names of specific personnel proposed for assignment to these positions (include dual assignments, multiple individuals assigned to one position, and subcontractors).

(c) Management approach

Describe the proposed approach to project management. Project management includes, but is not limited to, supervision of the Contractor's personnel, communication between the Contractor and LDEQ, meetings and training sessions, contract administration, and preparation and submission of submittals and deliverables in general.

(2) Performance of Project Tasks

Describe the proposed approach to the performance of the technical tasks described in RFP Attachment 2 (SOW). Include a description of deliverables to be received by LDEQ as end products of the services rendered.

3.2.4 Personnel Qualifications and Experience

LDEQ anticipates the need for professional Contractor or subcontractor personnel, with relevant experience in UST related work. Education and experience requirements should include, but are not limited to UST background/experience.

Describe the qualifications and experience of all key personnel designated in the project-specific organizational chart (provided under Section 3.2.3, Item 1b. above) as assigned to this project. Include résumés showing each assigned individual's education, registrations, accomplishments, and experience. LDEQ will consider only experience that is relevant to the tasks listed in RFP Attachment 2 (SOW).

3.2.5 Company Qualifications and Experience

Describe the company's qualifications and experience that are relevant to the proposed tasks listed in RFP Attachment 2 (SOW). Experience will be considered relevant if prior projects major features include UST related tasks. Both government and privately-sponsored work may be included. Experience gained through previous contracts to LDEQ may be considered by LDEQ for proposal evaluation, whether or not listed by the proposer.

Each proposer should describe projects undertaken by his company during the past three (3) years (i.e., since September 2004). Experience gained through joint ventures by the company may be included. In the event that the company has not done business under its present organizational name and status for three (3) years, other corporate experience brought to the company through mergers or similar corporate creations may be added.

The proposer's experience information should be submitted in the tabular format provided in Attachment 3 (Experience Table). The table may be enlarged or duplicated as necessary to provide all required information. For each listed project, the proposer should provide:

(a) the name and address of the client (sponsoring agency or company);

(b) the name and telephone number of the client's contact person;

(c) the project title and contract number;

(d) the starting and ending dates of the project (contract term);

(e) the total dollar amount of the project; and

(f) a brief description of the project.

Each proposer may include as many entries as he desires, however, only complete entries will be considered. Because LDEQ may contact a representative sample of the listed clients as references during the evaluation process, proposers should verify that all client telephone numbers are current.

3.2.6 Subcontractors

Consultants who are not employees of the proposer shall be treated as subcontractors. All subcontractors necessary to conduct the work must be identified on Attachment 1 (Proposal Cover Sheet). The proposer must provide a letter of agreement, a copy of a contract, or some other form of written commitment from any subcontractor who provides key personnel that are evaluated under Criterion 2, or company experience that is evaluated under Criterion 3. This commitment must demonstrate the subcontractor's willingness to provide the listed personnel or undertake his portion of the proposed project.

3.2.7 Price Proposal (Schedule of Prices)

Each proposer must submit a price proposal using LDEQ's pricing structure provided in RFP Attachment 4, Schedule of Prices. No other format is acceptable. **Proposals not including a Schedule of Prices shall be disqualified.** Additionally, all blanks on the Schedule of Prices must be completed. If a proposer identifies deficiencies or errors in this format, he should bring this information to the attention of LDEQ. LDEQ will review the information and issue any correction as an amendment to the solicitation.

To complete the Schedule of Prices, proposers shall provide single unit rates or lump sums as appropriate for the items listed. All proposed rates shall be all-inclusive as described in RFP Attachment 2, Statement of Work, Section 6.0, Measurement and Payment. For items with no charge, "$0" must be entered.

3.3 Elements for Financial Information (Volume II)

In a separate volume, proposals should include evidence demonstrating the proposer's financial capability to carry out this project. Proposers should submit:

(a) Financial Statements audited by an independent CPA for the past three years;

(b) notes to the Financial Statements; and

(c) the CPA's Audit Report for each year.

If the company has been in business for less than three years, proposer may substitute the following for this requirement:

(a) Financial Statements audited by an independent CPA for each complete year in business and an interim Financial Statement audited by an independent CPA for the current year;

(b) notes to the Financial Statements; and

(c) the CPA's Audit Report for the corresponding Financial Statements.

OR

if the above financial information is not available, the proposer should submit other evidence of financial status sufficient to demonstrate its capability, and the capability of each of its subcontractors, to carry out the project, i.e. a Performance Bond, letters from banks and other financial companies and a listing of debt including terms of any notes.

3.4 Proposal Format

Proposals submitted for consideration should follow the format and order of presentation provided in Part III, Sections 3.1 and 3.2. Each volume of the proposal should be typed and securely bound in a three ring binder. Pages of the technical proposal should be numbered consecutively and each section should be marked by a labeled page divider. Proposals should be prepared simply, legibly, and economically. Elaborate binders, color pictures, and promotional material are neither necessary nor desired.

3.5 Use and Disclosure of Confidential Information

Pursuant to LSA-R.S. 30:2030 and R.S. 44:1, et seq., LDEQ records obtained in response to this RFP shall be available to the public unless LDEQ determines that the information requires confidentiality. In order to secure nondisclosure of information contained in its proposal, the proposer must submit a written request to the Secretary of LDEQ in accordance with LAC 33:I. Chapter 5 and applicable laws.

PART IV. PROPOSAL EVALUATION AND SELECTION

4.1 Evaluation Process

A Selection Committee composed of LDEQ technical personnel will evaluate and rank the proposals according to the criteria listed in Section 4.2. Any proposal that does not provide the following mandatory items shall be disqualified by LDEQ and shall not be evaluated by the Selection Committee:

(1) a signed Proposal Cover Sheet (Part III, Section 3.2.1); and

(2) a Schedule of Prices (Part III, Section 3.2.7).

Upon completion of the Evaluation and Ranking Report, the highest rated proposal selected for award receives further evaluation through preparation of a Financial Statement Analysis. Prior to the award of any contract, the proposer must submit evidence of financial status sufficient to demonstrate its capability, and the capability of its subcontractors, to carry out the project.

Proposals will be evaluated in light of the material and the substantiating evidence presented in the proposal, not on the basis of what can be inferred. Additionally, LDEQ may contact a representative sample of the clients provided to describe the company's experience as references during the evaluation process. (See Section 3.2.5 above.)

The responsible and qualified proposer with the highest rated proposal will be recommended for tentative selection. The Selection Committee will report its comments and recommendations to the LDEQ Secretary or his designee. The tentative selection is subject to the approval of the Secretary of LDEQ or his designee and the Louisiana Office of Contractual Review. The Secretary of LDEQ or his designee is the only individual who can legally commit LDEQ to the expenditure of funds in connection with this proposed procurement. Any other commitment, either explicit or implied, is invalid. The contract will not be valid until approved by the Louisiana Office of Contractual Review.

4.2 Evaluation Criteria

All proposals will be evaluated according to the following weighted criteria:

(1) 10% Merit of the proposer's Scope of Services (Part III, Section 3.2.3) and overall quality of the proposal (Part III, Sections 3.1 through 3.4).

(2) 20% Qualifications and relevant experience of the proposer's key personnel assigned to the project (including subcontracted personnel as allowed) (Part III, Sections 3.2.4 and 3.2.6).

(3) 20% Qualifications and relevant experience of the proposer in providing UST related work (including subcontractor experience as allowed) (Part III, Sections 3.2.5 and 3.2.6).

(4) 50% Price (Part III, Section 3.2.7).

4.3 Price Evaluation Calculation

The proposal with the lowest total price from Attachment 4, Schedule of Prices, will receive the maximum possible points. All other proposals will be rated using the following formula:

$$50 \times \frac{\text{Price of lowest proposal}}{\text{Price of proposal being rated}} = \text{Proposal price points}$$

Price evaluation for all proposers will be based upon the 700 inspections included in the Schedule of Prices, as well as other Schedule of Prices line items; however, LDEQ reserves the right to decrease the number of inspections upon contract award based upon the successful proposer's prices and available funding.

4.4 Clarifications and Oral Presentations

Written or oral clarifications may be requested for the purpose of enhancing LDEQ's understanding of a proposal element, eliminating minor irregularities, or correcting apparent clerical mistakes in a proposal. Written or oral discussions may be conducted with proposers who submit proposals determined to be reasonably susceptible of being selected for award. Any commitments or representations made during discussions, if conducted, may become formally recorded in the final contract. However, proposals may be accepted without such clarifications or discussions and award may be made on the basis of initial offers received. Therefore, proposals should be complete as submitted and reflect the most favorable terms available.

Any or all proposers may be requested to make oral presentations of their proposals to enhance LDEQ's understanding prior to the final selection of the Contractor. Proposers selected for oral presentations will be notified by the LDEQ Contracts and Grants Division on or before November 2, 2007. Presentations will be made by the selected proposers on November 6, 2007, at a time assigned by LDEQ.

In the event oral presentations are requested, proposers will be evaluated on the clarity and detail of the technical approach with a maximum score of twenty points, which will be added to the initial scores for a final score.

4.5 Determination of Responsibility

Determination of the proposer's responsibility relating to this procurement shall be made according to the standards set forth in LAC 34:136. LDEQ is prohibited from awarding any contract for consulting services for $50,000 or more to any person or firm unless LDEQ has first determined that such person or firm is responsible according to the standards described in this section. LDEQ must find that the selected proposer:

(a) has adequate financial resources for performance, or has the ability to obtain such resources as required during performance;

(b) has the necessary experience, organization, technical qualifications, skills, and facilities, or has the ability to obtain them (including probable subcontractor arrangements); and

(c) is able to comply with the proposed or required time of delivery or performance schedule;

(d) has a satisfactory record of integrity, judgment, and performance (A proposer which is seriously delinquent in current contract performance, considering the number of contracts and the extent of delinquencies of each, shall in the absence of evidence to the contrary or compelling circumstances, be presumed to be unable to fulfill this requirement.); and

(e) is otherwise qualified and eligible to receive an award under applicable laws and regulations.

Proposers should ensure that their proposals contain sufficient information for LDEQ to make its determination by presenting acceptable evidence of financial resources, experience, organization, technical qualifications, skills, personnel, and facilities, to perform the services called for by the contract.

4.6 Contract Award and Debriefings

Unless it is determined that it is in the best interest of the State of Louisiana to reject all proposals or cancel the RFP, LDEQ estimates that the contract will be awarded by approximately November 9, 2007, and will issue a "Notification of Award" letter to the successful proposer. Unsuccessful proposers will also be notified of LDEQ's decision in writing, and may request a post-award debriefing by contacting Laura McDonald at (225) 219-3812, or by e-mail at laura.mcdonald@la.gov.

4.7 Protest of the Solicitation or Award

Protests of this RFP or award of the resulting contract must follow the procedures specified in LAC 34:145(8).

Attachments to this RFP:

(1) Proposal Cover Sheet
(2) Statement of Work
SOW Enclosure A
SOW Enclosure B
SOW Enclosure C
SOW Enclosure D
SOW Enclosure E
SOW Enclosure F
SOW Enclosure G
(3) Experience Table
(4) LDEQ Schedule of Prices Form
(5) Sample LDEQ Contract
(6) Indemnification Agreement
(7) Payment Bond

ATTACHMENT 1. PROPOSAL COVER SHEET

Project Title: **Underground Storage Tank Compliance Evaluation Inspections**

Proposer:

Company Name: _____

Company Address: _____

_____

Proposer's Contact Person:

Name _____ Title _____

Address: _____

Telephone No. (_____) _____ FAX No. _____(_____) _____

Subcontractors (add lines as necessary):

Name	Written commitment attached (Y/N)

I hereby certify that:

1. This proposal will remain in effect for at least ninety (90) days from October 22, 2007.

2. I possess an established system of accounting and financial controls adequate to permit the effective administration of this contract or willingness to modify the present system to meet State of Louisiana requirements.

3. I will be ready and able to begin work within fifteen (15) days after contract award.

4. I accept the mandatory Department of Environmental Quality contract provisions (RFP Attachment 5).

5. I am authorized to represent _____ and can commit the organization to all provisions of this proposal.

_____ _____

Signature Date

ATTACHMENT 2
STATEMENT OF WORK

"UNDERGROUND STORAGE TANK COMPLIANCE EVALUATION INSPECTIONS"
Louisiana Department of Environmental Quality

1.0 INTRODUCTION / PROJECT GOAL

The Louisiana Department of Environmental Quality (LDEQ) requires the services of a well-qualified contractor to conduct Underground Storage Tank (UST) Compliance Evaluation Inspections (CEI) at 300-700 UST facilities throughout Louisiana. This project will be under the direction of the LDEQ. The LDEQ will provide a list of facilities to inspect following the award of the contract. The goal of this project is to perform UST compliance evaluation inspections in accordance with the procedures established by the LDEQ. As additional funding for these inspections becomes available, additional facilities may be added to the facilities list.

2.0 BACKGROUND INFORMATION

The Energy Policy Act of 2005 requires periodic on-site inspections of all underground storage tanks at least once every three years (with a one-time four year option cycle) to determine compliance with Federal and State UST Regulations. As used in this document, underground storage tanks (USTs), means those tanks that satisfy the definition of "Underground Storage Tank" or "UST" in LAC 33:XI.103, except those tanks that are excluded under LAC 33:XI.101.B or deferred under LAC 33:XI.101.C.

3.0 CONTRACTOR TASKS

The scope of work for this project consists of performing underground storage tank compliance evaluation inspections and submitting final UST CEI reports. A detailed description of each item mentioned above can be found in the sections below.

The Contractor shall provide the methods and resources (including, but not limited to, personnel, supervision, materials, supplies, computers, equipment, transportation, meals, and lodging) necessary to perform the tasks described in this Statement of Work with the exception of resources that will be provided by the LDEQ (SOW Section 5.0). All maintenance, service and repair of the equipment used to perform the tasks described in this Statement of Work will be the Contractor's responsibility.

The Contractor shall perform underground storage tank compliance evaluation inspections as outlined in the sections below. The LDEQ Project Manager must be provided with a weekly schedule (via email) of all inspections five (5) business days prior to the commencement of any site work. Site work shall be limited to weekdays only, 8:00 am to 5:00 p.m., unless otherwise directed by the LDEQ.

3.1 Commencement Conference

Within seven (7) calendar days of the LDEQ's Notice to Proceed, a post-award conference will be held between the Contractor's key personnel (and subcontractor personnel as determined to be

necessary by the Contractor) and LDEQ staff to discuss the commencement of the project and answer any questions regarding the contract. The post-award conference is expected to last approximately two hours and shall be held at the LDEQ Headquarters in Baton Rouge: 602 N. Fifth Street. The LDEQ will prepare an agenda for the meeting, take minutes and distribute copies of the minutes to all participants. The Contractor shall come to the conference prepared to request clarification of any issues not clearly understood by him.

A list of UST facilities to be inspected will be provided to the Contractor during the post award conference. The LDEQ expects the successful contractor to complete the scope of work for each of the sites provided on the UST facilities list, without violation of the Code of Governmental Ethics. Any potential conflicts of interest as should be brought to the attention of the LDEQ Project Manager prior to scheduling and/or performing the compliance inspection. Facilities that present a conflict of interest will be replaced by the LDEQ Project Manager.

Any contractor who is awarded a contract may be considered to be a public servant under the Code of Governmental Ethics (La. R.S. 42:1101-1170) and as such, would be prohibited from receiving any thing of value from any party whose substantial economic interest could be affected by the performance or non-performance of their public employment. The LDEQ cannot give legal advice to individuals, but does provide ethics information to parties with whom it does business pursuant to La. R. S. 42:1170(B). The Louisiana Board of Ethics (Ethics Board) is the sole authority on the Code of Government Ethics (Code), and interested parties should contact the Louisiana Board of Ethics directly to satisfy any concerns they may have regarding potential conflicts of interest before responding to the request for proposals.

3.2 Training Meeting

The Contractor (including key subcontractor personnel as applicable) shall attend a training meeting to discuss inspection protocol, familiarize with LDEQ regulations, etc. The training meeting shall be held at the LDEQ Headquarters and is expected to last no more than eight (8) hours. The LDEQ will schedule the training meeting and will give seven (7) calendar days notice to the Contractor in advance of the training meeting.

3.3 Compliance Evaluation Inspection

Each underground storage tank compliance evaluation inspection includes, but is not limited to, the pre-inspection file review, the inspection, the preparation and submittal of a site-specific final report for each inspection, including revisions as directed by the LDEQ. These tasks are further outlined below:

3.3.1 File Review

Prior to performance of the CEI, the Contractor shall conduct a pre-inspection file review. Files can be obtained electronically through LDEQ EDMS (LDEQ will arrange access). Information to be obtained includes, but is not limited to, facility location, facility contact information, UST registration and technical requirements information, UST repair or upgrade information, prior compliance history, and prior releases.

3.3.2 Facility Record Review

The Contractor shall conduct the records review before or after the visual observation of the UST system and shall determine if required records are present and being properly maintained for compliance, completeness, accuracy and retention times. Request copies of records necessary to support any area of concern noted. Records that may be inspected include, but are not limited to, correspondence between the facility and the Department, release detection records, cathodic protection records, maintenance records, testing or monitoring results, historical data kept onsite, required reports, and records of corrective actions taken since the last inspection (if applicable).

3.3.3 Facility Contact

The Contractor shall make contact with the facility's responsible party in advance of the inspection date to provide the facility adequate time to compile the required paperwork for review. The following are examples of the required paperwork that needs to be available: LDEQ registration forms, type of equipment at facility, monthly release detection records, corrosion protection records, any tank, line and leak detector test results, any UST system repair, upgrade or modification records, etc.

3.3.4 Facility Inspection

The Contractor shall determine the following information during each UST compliance evaluation inspection. The bulleted list below is intended as an overview/summary of the process. The UST CEI Checklist includes complete details of requirements for inspections.

- Number, construction and size of all underground storage tanks at the facility
- Documentation of GPS information, in accordance with the LDEQ SOP (SOW Enclosure A
- Construction of piping, system type (suction or pressurized)
- Visual inspection of all equipment, including but not limited to, submersible pumps, line leak detectors, check valves, containment sumps, metal flex hoses, release detection wells, etc.
- Type of spill prevention and overfill prevention equipment
- Type of corrosion protection equipment for tanks and piping (anodes, impressed current system, etc.)
- Date of installation or upgrade of all equipment, determination of any repairs or modifications made to the UST system
- Method of release detection for tanks and piping
- Determine if release detection is conducted at proper intervals and performed correctly
- Operation and maintenance of corrosion protection equipment
- Determination if a suspected release has occurred by review of release detection records
- Determination if any releases have occurred by checking release detection devices, checking submersible pump containment sumps, checking under-dispenser containment sumps, etc.
- Determine if the LDEQ UST-REG-01 and UST-REG-02 forms were filled out correctly
- If out of service, document tank contents and date tanks were last used

- Documentation of inspection results and documentation of non-compliance with UST regulations on the UST CEI Checklist (SOW Enclosure B)
- Conduct an exit interview and providing a Field Interview Form (FIF) (SOW Enclosure C) to the facility representative

The UST system shall be observed visually to check for consistency with UST forms submitted to the Department. Determine if any revisions to applicable UST forms have been made or submitted by the facility or if there are near future plans to make modifications. Items that may be observed and evaluated include, but are not limited to, release detection devices for tanks and piping, corrosion protection of tanks and piping, spill prevention equipment, overfill prevention equipment, general condition and housekeeping of the UST system and any problems that should be referred to other sections within the Department. Determine if the facility has made changes to the UST system. The inspector shall make notes of observations and pertinent statements made by facility representatives. Ask questions and investigate any area that the inspector thinks is necessary. If an area of concern is noted, always bring it to the attention of the facility representative. Document the areas of concern and photograph them if visible and appropriate.

When an emergency condition is discovered (leaking tank or line, product in release detection well, storm sewer, utility line, etc.), it is imperative that the inspector immediately notify the facility representative, document all information, and contact the LDEQ Single Point of Contact (SPOC) at 225-219-3640 or 225-342-1234 within 24 hours.

3.3.5 GPS Collection and Submittal

All GPS information that is collected must follow the LDEQ GIS guidelines in order to be compatible with and acceptable. The equipment used to collect the GPS information must meet the quality control criteria as defined in the LDEQ Accuracy Document (SOW Enclosure F). It is the responsibility of the contractor to obtain equipment that meets these criteria, as it will not be provided by the Department. It is the responsibility of the Contractor to ensure that field personnel are properly trained in the operation of this equipment in accordance with the LDEQ GPS SOP (SOW Enclosure A).

The GPS information shall be collected in accordance with the LDEQ Accuracy Document (SOW Enclosure F) and the LDEQ GPS SOP (SOW Enclosure A). All geospatial data created for LDEQ will be consistent with Federal Geographic Data Committee (FGDC) endorsed standards. The inspector must complete the GPS Location to ensure that the location of the collected coordinates is adequately defined. This information includes but is not limited to facility location information and identifying the GPS point location.

Once collected, digital coverages/products will be delivered as ArcInfo export coverages, ArcView shapefiles, or ArcGIS geodatabase with associated HTML containing metadata as stated in the LDEQ GIS Standards Document (SOW Enclosure G). The digital files will serve as the primary record for GPS information. The GPS location form (SOW Enclosure E) shall be submitted with the Facility-Specific Final Report and will serve solely as supporting documentation for the digital submittal. Deviation from the quality control parameters as defined in the guidance documents will render the GPS data deficient. It is the responsibility of the contractor to correct any work that is determined to be deficient by the LDEQ.

3.3.6 Field Interview Form

The inspector must have the Field Interview Form (FIF) filled out in a manner that would communicate discovered areas of concern. The FIF must include a list of all equipment that was physically inspected, a list of all records that were reviewed, a list of any areas of concern that are discovered during the inspection, and a list of any records that have been requested for submittal by the facility that were not available during the inspection.. The FIF shall be reviewed with company representatives at this time and signatures obtained. In the case of an unmanned facility or if the facility representative refuses to sign the FIF, state so in the signature blank and mail a copy of the FIF to the responsible official via certified mail at the facility address. The 'green card' receipt must be handled as a public record. However, it shall be clearly stated and understood that the inspection is not complete until all of the information gathered during the inspection is reviewed for compliance. A copy of the completed FIF shall be provided to the facility manager, his/her designee or the highest-level official present at the end of the exit interview.

The FIF shall be written legibly in ink (preferably blue) and contain information in all blanks. For those fields that have no significance to the inspection or if the information is not available, mark the blank "N/A". Ideally the report should be error-free, but if an error is made, line it with a single "strike-through", make the correction next to the error, and initial the correction.

The FIF is printed on NCR paper so that true copies can be distributed. Therefore it is important to press hard enough with a pen to ensure that multiple copies are legible. The inspector shall be sure to get the signature of the facility manager, his/her designee or the highest-level official present.

3.3.7 Facility-Specific Final Report

The Contractor shall prepare a facility-specific final report when a compliance inspection of the UST system has been completed. The report shall be a thorough documentation of the factual information gathered at the time of the inspection. The report shall consist of the UST CEI Checklist, the FIF, photographs (SOW Enclosure D), GPS Location Form (SOW Enclosure E) and any necessary attachments.

The facility-specific final report will contain inspector observations that summarize the facts of the inspection. Information contained in this section is the basis for enforcement action that may arise from the inspection. If areas of concern are found, they are documented here with a list of supporting facts (who, what, when, where, how). This section may contain a broad range of information, including portions discussing the following subjects:

- General Information – Includes the number of tanks, tank contents and tank capacity, types of equipment, etc.
- Visual Observations – Includes pertinent observations noted while inspecting the UST system, including areas of concern.
- File Review – Includes observations made during a review of records maintained by the facility and the Department
- Specific Conditions – Includes the apparent compliance status of the facility.

- Conclusions – Includes the inspector's summary of factual information that supports any concerns noted.

A facility-specific final report must be completed for each inspection within 21 days of each inspection.

3.4 Availability for Legal Support

The Contractor, including all personnel who perform inspections, shall be available to provide legal support to the LDEQ in the event that any inspection results in an enforcement hearing, legal hearing, court case, etc.

4.0 Project Management

The Contractor shall provide efficient management to ensure the successful completion of the contract. The Contractor shall plan and supervise all tasks efficiently and with his best skill and attention. The duties and responsibilities for project management shall continue throughout the term of the contract. The resources and methodology for project management activities shall be the responsibility of the Contractor.

Project management shall include, but not be limited to, the following activities:

(1) monitor the Contractor's work through telephone communications, meetings, and review of Weekly Progress Reports;

(2) contract administration:

(a) invoicing;

(b) changes to the contract;

(c) resolving disputes between the Contractor and the LDEQ; and

(d) compliance by the Contractor with all contract clauses and conditions;

(3) scheduling meetings and training sessions;

(4) record-keeping; and

(5) preparation and submission of submittals and deliverables.

LDEQ will be available for assistance to the Contractor in solving problems or answering questions that may arise and will meet with the Contractor as necessary.

4.1 Compliance with Laws and Regulations

The Contractor and/or any subcontractors used by the Contractor shall, on his own time, and at his own expense, secure all permits, licenses, and certificates that may be required of him by law

for the performance of the requirements of the contract. The Contractor shall comply with all federal, state and local laws, ordinances, rules, and regulations relating to the performance of this work. The laws and regulations pursuant to the laws include but or not limited to the following:

- The Federal Resource Conservation Recovery Act (RCRA) regulations included in 40 CFR Parts 260-299
- The Occupational Safety and Health Administration (OSHA) regulations included in 29 CFR Part 1910.120.
- The Louisiana Environmental Quality Act (the "Act") and regulations included in Title 33, Part XI. Underground Storage Tank Regulations

The Contractor is responsible for the health and safety of his employees during the performance of all activities required by this contract. He shall maintain and comply with a Health and Safety Plan (H&SP) consistent with Section 104(f) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 as amended, EPA Order 1440.3 and all Occupational Health and Safety Administration requirements, all applicable federal, state and local laws regulations, ordinances, and codes used in planning and implementing site health and safety. In the event of conflict between any of these requirements, the more stringent requirement shall be followed. The H&SP shall be made available for the LDEQ review upon request.

All wastes, substances, or materials resulting from or produced by the Contractor's work shall be segregated, removed from the site, and disposed of by the Contractor in accordance with applicable laws, regulations, ordinances, and codes.

4.2 Weekly Progress Reporting

The Contractor shall prepare and submit to the LDEQ Project Manager a Weekly Progress Report describing all work completed during the preceding week, the status of the work in progress and anticipated work for the following week. The Weekly Progress Report shall be submitted in an electronic format to the LDEQ Project Manager no later than 10:00 a.m. every Thursday. This report shall include:

(1) the Contractor’s name, address, and the name of the Contractor’s Project Manager;

(2) LDEQ’s contract number and project title;

(3) the dates of the reporting period;

(4) a description of the progress made during the previous week, including problems experienced, requests for approved changes in personnel, and the effect of the problems/changes on the due date of deliverables; and

(5) the status of the work in progress and a list of anticipated work for the following week.

4.3 Deliverables

The deliverables listed below in 4.3.1 and 4.3.2 shall be requirements under this contract.

4.3.1 Facility-Specific Final Reports

Facility-Specific Final Reports shall be submitted according to Section 3.3.7. The LDEQ will review and approve each Facility-Specific Final Report. The Contractor, to the satisfaction of the LDEQ, must correct discrepancies or omissions before the project will be accepted by the LDEQ as complete. Three (3) copies of each Facility-Specific Final Report shall be sent to the LDEQ staff member and address specified at the post-award conference.

4.3.2 Overall Contract Final Report

An overall Contract Final Report, which will summarize all activities throughout the contract term, shall be submitted within 45 days of the last inspection. The Overall Contract Final Report shall include the following items:

- The total number of sites inspected;
- The total number of sites found to be in compliance;
- The total number of sites – including AI numbers - not in compliance;
- The total number of sites that were in service and operating;
- The total number of sites out of service / not operating;
- The total number of sites discovered to have an emergency condition; i.e., leaking UST or line, product in RDD, storm sewer, utility line, etc.;
- The total number of sites that were in compliance with leak detection requirements;
- The total number of sites - including AI numbers - on the 'State Contractor Facility List' that were not inspected;
- The total number of sites – including AI numbers - that were unable to be inspected due to various reasons; i.e., inability to locate records, inability to contact owner/operator, inability to access facility (i.e., locked).

Three (3) copies of the Overall Contract Final Report shall be sent to the LDEQ staff member and address specified at the post-award conference.

4.4 Record Keeping

The Contractor shall keep accurate records and provide documentation for this project. These records shall include:

(1) technical records; and

(2) other records and reports required by Federal and State laws and regulations.

4.5 Project Communication

The Contractor shall maintain communications and coordination with the LDEQ Project Manager, including reporting problems encountered in performing this work and notifying the LDEQ of schedule delays relating to these activities. The Contractor shall attend meetings as necessary to discuss requirements or problems with the LDEQ Project Manager or his representative. Meetings may be held at the LDEQ Headquarters in Baton Rouge, the LDEQ Regional Offices, or on-site. Interim conference calls may be required.

4.6 Subcontractors

All subcontractors used by the Contractor for this project must be identified in the Contractor's proposal or approved in writing by the LDEQ before performing any work under this contract. The Contractor shall be the sole point of contact regarding subcontracted services provided to the LDEQ. The LDEQ will not accept deliverables directly from subcontractors.

The Contractor shall guarantee the quality and timeliness of work performed by his subcontractors. He is responsible for correcting all mistakes, errors, or omissions in the subcontractor's work. It is also his responsibility to ensure that all subcontractors have the expertise necessary to perform project tasks and adequate insurance coverage as specified in this contract.

4.7 Substitution of Personnel

To ensure efficiency and continuity, the Contractor's key project management personnel shall remain assigned to the contract until its completion. If, during the course of the contract, the Contractor finds that he cannot provide the personnel listed in his accepted proposal, the Contractor must request permission in writing from the LDEQ to provide a substitute. This request must be approved by the LDEQ before the proposed replacement does any work on this contract, and shall include:

(1) justification of the need for any such substitution;

(2) a narrative establishing that the proposed substitute is at least equal in education, qualifications, and experience to the person being replaced; and

(3) a résumé for the proposed substitute.

The LDEQ reserves the right to require the replacement of any person working on this contract who is determined by the LDEQ to be unresponsive to the needs of the LDEQ as defined by the contract.

4.8 Site Access

The Contractor shall be responsible for gaining access to all properties, and scheduling inspections with the appropriate facility representatives.

4.9 Completion of Site Activities

The Contractor shall remove all equipment, used/uncontaminated supplies or materials, non-hazardous contractor-generated trash from the work area and hazardous and/or non-hazardous

investigation derived waste following completion of activities at the site. The Contractor shall dispose of all trash, debris and investigation derived waste generated from the work accomplished at the site in accordance with applicable laws, regulation, ordinances and codes. Any damage to the site caused by his operations and/or equipment shall be repaired by the Contractor.

4.10 Correction of Deficient Work

If required by the LDEQ, prior to payment, the Contractor shall promptly, without additional cost to the LDEQ, correct any deficient work performed by him or his subcontractors. Deficient work is defined as work that is (a) unsatisfactory, faulty, or defective, or (b) does not conform to the requirements of the contract documents. If the Contractor does not correct such deficient work within the time specified by the LDEQ, the LDEQ may have the deficiency corrected by a separate party. All costs to the LDEQ for such correction shall be paid by the Contractor. If corrections made to deficient work interfere with any other LDEQ work by other parties, the Contractor shall also bear the expenses caused by that interference.

4.11 Concurrent Site Work

The LDEQ may concurrently perform additional work at the site related to this project or the LDEQ may procure the services of other contractors. The Contractor shall coordinate his work with the work of the LDEQ or other contractors.

4.12 Project Schedule

The Contractor shall initiate the project within the time frame set out in the schedule below. All activities shall be completed within the stated maximum number of calendar days from the date of the Notice to Proceed (Fully Executed Contract) issued in writing by the LDEQ. **All inspections must be completed no later than August 1, 2008. All invoices must be received no later than September 30, 2008.**

Project Initiation Schedule

Time Frame	Activity
Within 7 calendar days of Notice to Proceed	Post-award conference
Within 21 calendar days of Notice to Proceed	Training Meeting with contractors to discuss inspection protocol, familiarize with the LDEQ regulations, etc.
Within 30 calendar days of Notice to Proceed	Begin inspections
August 1, 2008	Completion of all inspections
Within 21 days of each inspection	Submission of Facility-Specific Final Reports
Within 45 days of LDEQ notification of required corrections	Corrections, as applicable, and re-submittal of Facility-Specific Final Reports
Within 45 days of last inspection	Overall Contract Final Report

5.0 LDEQ RESPONSIBILITIES

As part of its responsibilities for this project, the LDEQ will:

(1) provide points of contact (liaisons) for technical and contract activities (Project Manager and Contract Manager);

(2) provide list of facilities to inspect;

(3) provide EDMS access for pre-inspection file reviews;

(4) observe and inspect the Contractor's work at the site;

(5) review, require revisions as necessary, and accept deliverables and submittals;

(6) review the Contractor's Health and Safety Plan (as necessary); and

(7) monitor the Contractor's work to provide guidance and answer questions through telephone communications, meetings, and review of Weekly Progress Reports.

The LDEQ will be available for assistance to the Contractor in solving problems or answering questions that may arise and will meet with the Contractor as necessary. However, the LDEQ shall not be responsible for the Contractor's performance of the work and reserves the right to reject deficient work.

6.0 MEASUREMENT AND PAYMENT

The Contractor shall submit invoices as tasks are completed to the LDEQ Accounts Payable, P.O. Box 4303, Baton Rouge, LA 70821-4303. **Invoices are to be submitted according to the same timeframe as the Site-Specific Final Report (i.e., both are due within 21 days after the final inspection of each facility)**. The Contractor shall be compensated for the actual work performed. Payment for the tasks required in this Statement of Work shall be based upon the line items listed in the contract Schedules of Prices, Attachment 4. The Contractor shall submit a list of all completed CEIs with the Contractor's invoices to confirm numbers of units.

6.1 Payment for Commencement Conference

The Commencement Conference payment item shall be a lump sum and shall include all direct and indirect costs related to attendance at the commencement conference as described in SOW Section 3.1.

6.2 Payment for Training Meeting

The Training Meeting payment item shall be a lump sum and shall include all direct and indirect costs related to attendance at the training meeting as described in SOW Section 3.2.

6.3 Payment for Compliance Evaluation Inspection

The Compliance Evaluation Inspection payment item shall be a lump sum per inspection regardless of facility size and shall include all direct and indirect costs related to the performance of each underground storage tank compliance evaluation inspection as described in SOW Section 3.3, which includes, but is not limited to, the pre-inspection file review, the inspection, the

preparation and submittal of a final report for each inspection, including revisions as directed by the LDEQ.

6.4 Payment for Availability for Legal Support

The Availability for Legal Support payment item shall be according to the hourly rates established in the contract Schedule of Prices, and shall include all direct and indirect costs related to availability for legal support. Payment shall be limited to actual hours spent during hearings and/or court cases.

6.5 Payment for Travel Related to Legal Support

The Travel Related to Legal Support payment item shall be according to the hourly rate established in the contract Schedule of Prices, and shall include all direct and indirect costs involved with travel related to legal support.

6.6 Payment for Overall Contract Final Report

The Overall Contract Final Report payment item shall be a lump sum and shall include all direct and indirect costs related to preparation and revision as necessary of the overall contract final report as described in SOW Section 4.3.2.

SOW Enclosures:

(A) LDEQ GPS SOP

(B) LDEQ UST CEI Checklist

(C) Facility Interview Form (FIF)

(D) Photo Documentation Form

(E) LDEQ GPS Location Form

(F) LDEQ GIS Accuracy Document

(G) LDEQ GIS Standards Form

STANDARD OPERATING PROCEDURES

FOR THE

COLLECTION OF GEOGRAPHICAL LOCATION DATA

USING THE

TRIMBLE PRO-XR GPS RECEIVER

Revision 1

Louisiana Department of Environmental Quality

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Please Note: The official version of this document is maintained on the LDEQ Intranet. Copies, whether in electronic or printed form, are not official and should be verified for currency against the official document on the Intranet. The Control Header of the SOP will be used for comparison to the official document.

Document Review and Revision Record
Note: Actions older than 5 years may be removed from this record

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Section 1.0 Preface

1.1 The Louisiana Department of Environmental Quality (LADEQ requires that only Trimble brand Global Positioning System (GPS) units be purchased, and that the Trimble GPS equipment purchased be capable of collecting real-time corrected data with an accuracy equal to or better than three meters (3m) 2DRMS[1]. These requirements are necessary to ensure that GPS data collected by the Department be of an acceptable quality. The two GPS units currently approved and supported by the Department are the Trimble ProXR and ProXRS.

1.2 The Department currently operates two Trimble base stations which data can be used to differentially correct GPS field data that may, on occasion, have to be recorded without real-time correction. Whenever a brand of GPS equipment other than Trimble is used, the accuracy is degraded in the conversion from Trimble's standard format to a format common to all GPS equipment, known as RINEX (Receiver Independent Exchange). RINEX converted data does not carry over certain data from Trimble's standard format, usually causing the corrected data to be less accurate than the degree required by the Department.

1.3 GPS data to be used in any LDEQ database or map must adhere to the above stated accuracy (equal to or better than three meters 2DRMS). The GPS equipment listed above can deliver the accuracy required for LDEQ uses such as:

- Entering the position into an LDEQ database
- Displaying the position on a map
- Using the position in spatial analysis work
- Using the position in any public hearing
- Using the position in any communication with the Governor and/or Legislature
- Using the position in any court case
- Sending the position to any Federal Agency

1.4 The required accuracy for any GPS data transmitted to the LDEQ GIS Center shall be equal to or better than three meters (3m) 2DRMS. To obtain additional information concerning GPS equipment, contact the LDEQ GIS Center.

[1] Accuracy specifications assume a properly operating device under normally good conditions.

Section 2.0 Introduction

2.1 The accurate collection of the geographic location of features[2] of interest to the Louisiana Department of Environmental Quality is fast becoming an important activity within the Department. Access to the Global Positioning System (GPS) operated by the United States Department of Defense (USDOD) has made this activity reliable and cost effective without requiring extensive technical training of personnel.

2.2 GPS derived horizontal positions, typically expressed as latitude and longitude, can be highly accurate when proper data collection methods are established and followed. Utilizing the Trimble Pro-XR GPS equipment, accuracies of better than two meters (2m) 2DRMS can be achieved in the horizontal dimension. However, due to the nature of GPS, elevation data collected with this equipment will be less accurate.

Section 3.0 Purpose

3.1 The purpose of this Standard Operating Procedure (SOP) is to establish standard procedures to be followed when using GPS equipment to record the geographic locations of features of interest. Geographical data collected when following the instructions of this SOP should be valid, accurate, and defensible to the degree of accuracy stated in this document.

3.2 It is not the purpose of this SOP to discuss how GPS works. For an understanding of how GPS works and the terminology used, a prospective GPS user should attend one of the GPS classes offered by the Department.

Section 4.0 Equipment

4.1 The GPS equipment to which this document applies is the Trimble Pro-XR[3]. This GPS unit is comprised of three main components, the receiver, antenna, and a datalogger. The antenna receives signals from GPS satellites orbiting the earth and a correction signal from a real-time differential beacon station (NavBeacon) of the standard type operated by the United States Coast Guard. These signals are passed to the receiver where the GPS positions are determined. The datalogger is used to control the receiver and to store the GPS positions.

4.2 There are currently two types of dataloggers that are used with the ProXR GPS receiver, the TDC1, and the newer TSC1. Regardless of which datalogger is used, there are standard settings that must be entered into the datalogger in order to collect GPS data of an acceptable accuracy. When the settings are in

[2] A feature within a GIS may be a point, line, or area.
[3] All references to ProXR also refer to ProXRS unless otherwise indicated.

place, they will not allow the GPS to record positions whenever certain of these parameters are out of range.

4.3 These settings are discussed below for each type of datalogger. In most instances these settings will already be in place. Each GPS user is responsible for confirming they are correct. These setting should be checked and properly set before each new field session[4].

4.4 TDC1 Datalogger Settings

4.4.1 The following are detailed, step by step instructions on entering the standard settings in the TDC1 datalogger (note - keystroke actions are underlined, while text that appears on the different screens of the datalogger is italicized). Figure 1, found at the end of this document, is an example of the TDC1 datalogger.

Note: If these settings need to be entered due to datalogger battery failure, skip to the time and date section. If this is not performed first, standard settings input will be frequently interrupted by a warning message to enter current time and date.

4.4.2 With the TDC1 turned on (connection to the ProXR is not required) press the Func and then the Config buttons separately. This action will display the *Configuration* screen.

4.4.3 Highlight *GPS* by using the Up/Down arrow keys then press Enter

4.4.4 Highlight *Rover options* then press Enter

4.4.5 The *Rover options* screen should now be displayed. From here make changes as needed to achieve the following settings (use the down arrow key or Enter key to move to the next item):

LOGGING INTERVALS

Point feature	1s
Line/Area	5s
Not in feature	None
Velocity	None
Minimum Posns	30

Carrier Phase

Minimum time	10 mins

[4] New Field Session: 1-initial use after receiver has been reset, 2-initial use after receiver has been used by another, 3-initial use of each day.

Pos. Mode	Manual 3D
Elev. Mask	15°
SNR Mask	6.0
PDOP Mask	6.0
PDOP Switch	6.0
Audible Click	Yes
Log DOP Data	Yes
Dynamics Code	Land

Initial Posn.

Lat	XX XX XX.XXX	(ignore)
Long	XX XX XX.XXX	(ignore)

4.4.6 These items should be displayed at the bottom of the screen:

RTCM ATEN P(Y) OUTPUT

4.4.7 The keys directly below the screen are "Softkeys". The function of these keys changes dependent upon which screen is currently being displayed. For this screen the F1 key correlates to *RTCM*. Press the F1 softkey to set the RTCM defaults for realtime GPS operation as follows:

RTCM Input Mode	On
RTCM Version	Auto
RTCM Station	Any
Warning Time	20s
Log PP Data	Yes
Baud Rate	9600
Data Bits	8
Stop Bits	1
Parity	None

4.4.8 At this point *DGPS* should be displayed in the lower left corner of the screen. Press the F1 key to enter this mode and input the settings as follows:

Source	Beacon
Mode	Auto Range

Frequency	N/A or None

4.4.9 Once changes are made or have been confirmed that they are correct, press the OK key ONCE to save the DGPS settings. The *RTCM input options* screen will be displayed again. Press the OK button ONCE to save these changes and display the four options at the bottom of the screen again.

RTCM ANTEN P(Y) OUTPUT

4.4.10 Press the corresponding softkey for *ANTEN* (F2) and input following settings:

Height	2.00
Measure	Vertical
Type	EC
Confirm	Once per file

4.4.11 Press the OK button ONCE to save changes made here.

4.4.12 Press the OK button again to save all changes made and display the *Configure GPS* screen. Press the Clear key to return to the *Configuration* screen, then arrow down to *Units and display*, and press the Enter key.

4.4.13 The *Units and display* screen is now displayed. Input the following settings:

Coords	Meters
Height	Meters
Distance	Feet
Velocity	Miles/Hour
Angles	Degrees
Angle fmt	DD.ddd
Order	Lat/Lon
Altitude ref	MSL
North ref	Magnetic
Magnetic decl	Auto
Null string	blank
Language	English

4.4.14 After settings are made, press OK to save settings and return to the *Configuration* screen. Arrow down and highlight *External sensors* and press Enter. The *External sensors* screen is displayed. Arrow down and select *Laser* by pressing the Enter key. The *Laser range-finder* screen is displayed.

4.4.15 In the *Laser range-finder* screen, input the following settings:

Type	Atlanta Advantage
Auto connect	Yes

4.4.16 Press OK to save, then press Clear.

4.4.17 At this point the *Configuration* screen will be displayed. If all settings have been made and the time and date are correct, press the Clear key to return to the *Main menu*. If the time and/or date need to be set due to time change or loss of power, remain in the *Configuration* screen. Use the arrow keys to highlight *Time and date*, and press Enter. The *Time and date* screen is displayed. Input the settings as follows:

24-hour clock	Yes or no (your preference)
Time	enter current time (if 24-hour clock is set to Yes, use military time, ex. 1:00 pm = 13:00). A space or colon (F1) must be entered between hours, minutes, and seconds and if 24-hour clock is set to No, am (F2) or pm (F3) must be entered at the end of the time. Examples for 1:00 pm are: 1:00:00 pm - when 24-hour clock is No; 13:00:00 - when 24-hour clock is Yes
Date fmt	MM/DD/YYYY
Date	enter current date. When entering the date, a space or slash (F1) must be entered between the month, date, and year. Correct input for January 1, 1999 would be 01/01/1999.

Note: If the datalogger is connected to a GPS when setting time and date, the *Now* (F4) softkey can be used to set time and the *Today* (F2) softkey can be used to set the date.

4.4.18 When time and date are set correctly, press OK to save and press Clear to return to the *Main menu* screen.

4.4.19 The datalogger can now be turned off by pressing the Func key and then the Clear key.

4.5 Creating a File - TDC1

4.5.1 Prior to collecting GPS data, the user must create a file in the datalogger in which to store the data.

4.5.2 To create this file, turn the datalogger on (connection to the ProXR is not required). Select *Data capture* by pressing Enter. The *Data capture* screen is displayed. Highlight *Create rover file* and press Enter, which displays the *Create file* screen.

4.5.3 Enter a name for the file using up to eight (8) letters and/or numerals.

4.5.4 Select Data dictionary to be used[5].

4.5.5 Set Carrier mode to Off

4.5.6 Free space displays amount of memory available for use. This cannot be set by the user.

4.5.7 Press the OK key. This action saves the file and displays the *Start feature* screen. If GPS data is not to be collected at this time, press Clear, answer Yes (either F2 or Y) to the message *"Please confirm Exit data capture"*, press Clear and turn the datalogger off. Once a file has been created and GPS data saved to it, the file can be used for only one week. After that time, the program will not allow the file to be reopened and used to store GPS data. Standard procedure is to create a new file daily, or as dictated by the program for which the GPS is being used.

4.6 TSC1 Datalogger Settings

4.6.1 As stated earlier, there are two models of dataloggers that interface with the ProXR. The TSC1 is the newer of the two, with different keys, key arrangements, and menus. The standard settings can be entered into the TSC1 datalogger by following the instructions below (note - keystroke actions are underlined, while text that appears on the different screens of the datalogger is italicized). Figure 2, found at the end of this document, is an example of the TSC1 datalogger.

4.6.2 With the datalogger turned on (connection to the ProXR is not required) use the round button in the upper middle of the keypad to highlight the *Configuration* option. The round button/pad acts as the up/down and left/right arrow keys. Also, in any screen EXCEPT the Main menu, the right arrow is used as a Select key, much like the Enter key on the older TDC1, while the Enter key on this model is used as a Save key, similar to the OK key on the TDC1.

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[5] A data dictionary is an "electronic form" to be filled out while collecting GPS data. For more information on data dictionaries, see the Data Dictionary section later in this document.

[7] Integrated GPS/Beacon/Satellite is the correct setting for the ProXRS

Note: If these settings need to be entered due to datalogger battery failure, skip to the time and date section. If this is not performed first, standard settings input will be frequently interrupted by a warning message to enter current time and date.

4.6.3 With the *Configuration* option highlighted press the Enter key. This action displays the *Configuration menu* screen. Highlight *GPS rover options* and press Enter or Right arrow. Highlight *Logging options* and press Enter or Right arrow. The Logging options screen is displayed. Input the following settings on this screen:

Logging intervals

Point features	1s
Line/area	5s
Not in feature	None
Velocity	None
Confirm end feature	Yes
Minimum positions	30

Carrier Phase

Carrier mode	Off
Minimum time	10 mins
Dynamics mode	Land
Audible click	Yes
Log DOP data	Yes
Log PPRT data	Yes
Log QA/QC data	Yes

4.6.4 Press Enter to save settings and return to the *GPS rover options* screen. Highlight and select *Position filters* to open the *Position filters* screen. Input the following settings on this screen:

Position mode	Manual 3D
Elevation mask	15^0
SNR mask	6
PDOP mask	6
PDOP switch	6

Apply real-time	Yes
RTK mode	Off

4.6.5 Press Enter to save and return to the *GPS rover options* screen. Highlight and select *Antenna options* and input the following settings:

Height	2.00
Measure	Vertical
Confirm	Once per file
Type	Integrated GPS/Beacon[7]
Part number selected)	29653-00 (this will be set when the correct Type is

4.6.6 Press Enter to save and return to the *GPS rover options* screen. Press Esc key to return to the *Configuration* screen. Highlight and select *Communication options*, then *select Real-time input options*. These settings should be correct as is, but the last line, *Age limit*, should be checked to be sure it is set to 20s. If not, set to 20. At the very bottom of the screen there are two options: DGPS and *RTK.* Select *DGPS* by pressing the F1 key. This will display the *Integrated DGPS* screen. Check that these settings are as follows[8]:

Source	Beacon
Mode	Auto range
Frequency	N/A

4.6.7 Press Enter to save. Press Enter again, and then the Esc key. The *Configuration* screen will be displayed. Highlight and select *Units and display*. In the *Units and display* screen input the following settings:

Distance	Feet (recommended - by pressing the Right arrow key a pick-list will be displayed, select preferred units)
Area	Select preferred area units (same method as in distance)
Velocity	Miles/Hour (again, select preference)
Angles	Degrees
Angle format	DD.ddd
Order	Latitude/Longitude
North reference	Magnetic
Magnetic declination	Auto

[8] The preferred settings may differ if the ProXRS is employed.

Null string	leave blank
Language	English

4.6.8 Press Enter to save and return to *Configuration* screen. Highlight and *select Time and date*. Input the following settings in the *Time and date* screen:

24-hour clock	Yes or No (select preference)
Time	enter current time. (if 24-hour clock is set to Yes, use military time, ex. 1:00 pm = 13:00) A space or colon (F1) must be entered between hours, minutes, and seconds and if 24-hour clock is set to No, am (F2) or pm (F3) must be entered at the end of the time. Examples for 1:00 pm are: 1:00:00 pm - when 24-hour clock is No, 13:00:00 - when 24-hour clock is Yes
Date format	MM/DD/YYYY
Date	enter current date. When entering the date, a space or slash (F1) must be entered between the month, date, and year. Correct input for January 1, 1999 would be 01/01/1999.

Note: If the datalogger is connected to a GPS when setting time and date, the *Now* (F4) key can be used to set time and the *Today* (F2) key can be used to set the date.

4.6.9 Press Enter to save and return to the *Configuration* screen. Highlight and select *External sensors*. In the *Select sensor* screen, highlight *Laser* and press Enter. This will place a "check" by *Laser*. Then press the F1 key for *Setup* of laser. The *Laser range-finder* screen will be displayed. Input the following settings:

Type	Atlanta Advantage
Auto connect	Yes
Serial port	Top

4.6.10 Press Enter to save and then the Esc key to return to the *Configuration* screen. Press Esc key again to return to the Main menu. All pertinent settings should have been set in the TSC1 or confirmed that they are correct at this point. The TSC1 can be turned off or a file created in which to collect GPS data.

4.7 Creating a File - TSC1

4.7.1 Prior to collecting GPS data, the user must create a file in the datalogger in which to store the data.

4.7.2 To create this file, turn the datalogger on; (connection to the ProXR is not required). Select *Data collection* by pressing Enter. The *Data collection* screen is displayed. Highlight *Create rover file* and press Enter, which displays the *Create file* screen.

4.7.3 Enter a name for the file using up to eight (8) letters and/or numerals.

4.7.4 Select Data dictionary to be used[9].

4.7.5 Storage disk - TSC1 will be displayed unless a removable memory card has been installed in the datalogger. Then the user will have the option of selecting the card or TSC1.

4.7.6 Free space - displays amount of memory available for use. The user cannot set this.

4.7.7 Press the Enter key. This action saves the file and displays the *Start feature* screen. If GPS data is not to be collected at this time, press Esc, answer Yes (either F1 or Y) to the message *"Please confirm Exit data capture"*, press Esc and turn the datalogger off. Once a file has been created and GPS data saved to it, the file can be used for only one week. After that time, the program will not allow the file to be reopened and used to store GPS data. Standard procedure is to create a new file daily, or as dictated by the program for which the GPS is being used.

Section 5.0 Data Dictionaries

5.1 As previously mentioned a data dictionary must be selected when a rover file is created in the datalogger. A data dictionary is an "electronic form" that is used to describe the feature for which the location is being collected.

5.2 A generic data dictionary is always available on the data logger. A generic data dictionary allows for a single line of input to describe the feature and permits up to 32 characters of input. A generic data dictionary is typically used for unanticipated data collection. The generic data dictionary should be used when only minimal descriptive information, – (attributes) is needed to describe the feature of interest and when the type of work being performed was not anticipated to be repeated.

5.3 Another type is a custom designed data dictionary. This type of data dictionary is only available to the user if the data dictionary has been created and downloaded to the datalogger. The custom designed data dictionary should be used when the work to be performed is on going and more than one type of attribute information is required for the feature of interest. Attributes with any of several formats: menu, text, numerical, date and time fields can be created in the data

[9] A data dictionary is an "electronic form" to be filled out while collecting GPS data. For more information on data dictionaries, see the Data Dictionary section in this document.

dictionary. Field length can be specified, or menu fields can provide a list of choices for the user to choose from. Also, the user can define default values to reduce repetitious input and some data can be automatically entered.

5.4 A well-designed data dictionary requires planning and forethought and collaboration by field personnel and by the GIS data user, as well as the end user of the data. In addition, the custom designed data dictionary should be field-tested and the data handled by all the users before a data dictionary is deemed acceptable and usable. The actual creation of a custom data dictionary shall only be performed using Trimble Pathfinder Office software supplied with the ProXR and by qualified personnel experienced and trained with the software.

Section 6.0 Data Collection

6.1 Only someone who is familiar with this SOP and with the GPS equipment discussed herein should perform GPS data collection. Department personnel who have not previously used the Trimble Pro-XR must be trained by a qualified instructor in the use and care of this equipment before they may use it.

6.2 The overall methodology for data collection is the same regardless of which datalogger is used, the TDC1 or the TSC1. However, keystroke actions for each datalogger are different and the steps to collect GPS data are described below.

6.3 Data Collection - TDC1

6.3.1 Collecting GPS data using the TDC1 datalogger follows the same methodology as the TSC1, only the keys and keystrokes are different. For a layout of the keys on the TDC1 datalogger, see Figure 1 at the end of this SOP.

6.3.2 With the datalogger and all pertinent cables/batteries and antenna properly connected, turn on the datalogger. This action will also power-up the GPS unit. Once the datalogger has completed its start-up routines, select *Data capture* by highlighting and pressing <u>Enter</u>. If a rover file was previously created for the GPS work about to be performed, highlight and select *Reopen rover file*, and re-open the rover file. If a file was not previously created, select *Create rover* file and follow the instructions in the Creating Rover File section of this SOP. Regardless of which actions were taken, Reopen file or Create file, once completed, the datalogger will display the *Start feature* screen. STOP!

WARNING! Before continuing, the GPS antenna must be placed over/on or at the start point of the feature of interest. As noted previously, a feature can be a point, line or area. Collection methods for each type of feature are as follows:

6.3.3 Point Feature

6.3.3.1 A point feature's location is determined by averaging the several positions measured. To properly perform this operation, do the following:

6.3.3.2 Place the GPS antenna on or over the point of interest. The antenna position must remain fixed for the entire time of data collection for this point.

6.3.3.3 At the bottom of the display screen, three items of information will be displayed prior to collecting data. On the left side will be the number of satellites, displayed as "SV #1/#2", where #1 is the number of satellites used by the GPS and #2 is the number of satellites seen by the GPS. The #1 must be 4 or more. #2 will always be equal to or greater than #1. Example: SV 4/6.

6.3.3.4 The next item to the right of SV will be PDOP[10] followed by a number. This number must be 6 or less. Example: PDOP 2.1.

6.3.3.5 Farther to the right is the real-time radio beacon indicator. If the unit is receiving the real-time correction signal, an "R" will be displayed. If the datalogger has been properly set up, all three of these conditions must be met before the GPS will record data for either a point, line or area feature.

6.3.3.6 When all three of these conditions are met, the antenna is properly located for the point of interest, and the datalogger is in the *Start feature* screen, select the type of point for which GPS data is to be collected and press the Enter key. If a generic data dictionary is used there is only one type of point feature available, point-generic. If a custom data dictionary has been developed, there may be several types of point features available. Select appropriate feature from the list.

6.3.3.7 The user will note that to the right of the "R", at the lower right corner of the display, a counter will start at 1, and will increase by 1 about every second. The counter indicates that the GPS is currently measuring positions. Attribute (descriptive data) is entered while in this mode. Attribute data can range from a one-line description (generic data dictionary) to several items of descriptive information depending on the complexity of the custom data dictionary used.

6.3.3.8 After all attribute data has been entered and the counter has reached 30 or more positions, the point can be saved by pressing the OK key. Any other keystroke will not save the point and may cause the data to be lost. Typically the datalogger will give the user another opportunity to save the point if an incorrect keystroke is made. Be sure to read and understand all

[10] PDOP (Position Dilution of Precision) is a unitless number, which indicates the suitability of the geometry of the currently selected group of satellites. Smaller numbers indicate better geometry.

messages and warnings that appear on the screen before pressing any keys.

6.3.3.9 There are two important items that the user needs to remember when storing a feature, the OK key = Save, and once the feature is saved it cannot be reopened to correct errors. If the user determines that an error was made, such as incorrect attribute entry, the feature must be recorded again. Notes should be made in the field logbook describing the error so the incorrect feature can be deleted from the file once it has been downloaded. This condition applies to all types of features (points, lines, and areas).

6.3.3.10 Once the point is saved, the display will return to the *Start feature* screen. The operator may now move to the next feature to be recorded.

6.3.4 Line Feature

6.3.4.1 A line feature's geometry is determined and located by connecting the series of positions measured. Collecting GPS data for a line feature is very similar to a point feature. The same conditions must be met: SV = 4 or more, PDOP = 6 or less, and the "R" must be displayed. To properly perform this operation, do the following:

6.3.4.2 Select *Line-generic* (generic data dictionary) or the type of line feature as determined by a custom data dictionary, and press Enter. For line (or area) features, positions are recorded at 5-second intervals and there is no minimum number of positions required.

6.3.4.3 After pressing Enter, wait until 1 position is recorded, then move the GPS unit along the path of the line for which data is being recorded. Attribute data is entered at this time. If the line being recorded has one or more turns or corners, proceed to first turn. Wait until one position (let the counter increase by one) is recorded at this turn and then continue along the line to each subsequent turn, waiting to record a position at each turn.

6.3.4.4 When the end of the line feature is reached, allow one more position to be recorded, then press the OK key to save the line feature. By allowing the GPS to collect positions at the beginning and end, and at each turn, the line feature will be delineated more accurately.

6.3.4.5 After the line feature is saved, the *Start feature* screen is displayed again. The next point, line or area feature can now be recorded.

6.3.5 Area Feature

6.3.5.1 An area feature's geometry is determined and located by connecting the series of positions measured just as with a line feature. Additionally, the

last position measured is tied back to the first point measured. This closes out the area. To properly perform this operation, do the following:

6.3.5.2 To collect area feature GPS data, follow the same instructions as described for a line feature, selecting appropriate area type as dictated by the data dictionary used. Start the area feature in the same manner as a line feature, being sure to collect positions at the start point and at each turn point of the area, and enter required attribute data for the area feature.

6.3.5.3 There are two ways to end an area feature.

6.3.5.3.1 *Option One:* completely traverse the entire perimeter of the area with the GPS unit, returning to the starting point, then saving the area feature by pressing the OK key.

6.3.5.3.2 *Option Two:* traverse the perimeter of the area until the last turn or corner of the area has been reached and a position recorded. There should now be a straight line back to the starting point for the area. Press the OK key to save the area feature. The GPS unit will automatically close the area. This capability is useful if there is an obstruction, such as a fence or ditch, to prevent returning to the starting point of the area.

6.3.5.4 As before, the *Start feature* screen is displayed, and the next feature can be recorded.

6.3.5.5 When all features of interest have been recorded, the unit should be powered down. This is accomplished by pressing the Clear key, answer Yes (F2 or Y) to the question *"Please confirm Exit data capture?"*, press the Clear key again, returning to the Main menu, then press the Func key followed by the Clear key. This will turn off the datalogger and power down the GPS unit also.

6.4 Data Collection - TSC1

6.4.1 Collecting GPS data using the TSC1 datalogger follows the same methodology as the TDC1, only the keys and keystrokes are different. For a layout of the keys on the TSC1 datalogger, see Figure 2 at the end of this SOP.

6.4.2 With the datalogger and all pertinent cables/batteries and antenna properly connected, turn on the datalogger. This action will also power-up the GPS unit. Once the datalogger has completed its start-up routines, select *Data capture* by highlighting and pressing Enter. If a rover file was previously created for the GPS work about to be performed, highlight and select *Reopen rover file*, and re-open the rover file. If a file was not previously created, select *Create rover* file and follow the instructions in the Creating Rover File section of this SOP.

Regardless of which actions were taken, Reopen file or Create file, once completed, the datalogger will display the *Start feature* screen. STOP!

WARNING! Before continuing, the GPS antenna must be placed over/on or at the start point of the feature of interest. As noted previously, a feature can be a point, line or area. Collection methods for each type of feature are as follows:

6.4.3 At the lower portion of the TSC1 screen a combination of symbols and text are used to indicate the status of the GPS. The first symbol on the left indicates the charge state of the battery. The next symbol, when present indicates that the GPS is receiving the real-time correction signal. The next symbol indicates the number of satellites the GPS is currently using. Next are the letters PDOP followed by a number.

6.4.4 For the GPS unit to record data the radio beacon symbol must be displayed, the number of satellites must be 4 or more, and the PDOP must be 6 or less. If these conditions are not met, data cannot be recorded.

6.4.5 Point Feature

6.4.5.1 A point feature's location is determined by averaging the several positions measured. To properly perform this operation, do the following:

6.4.5.2 Place the GPS antenna on or over the point of interest. The antenna position must remain fixed for the entire time of data collection for this point.

6.4.5.3 When all three of the above conditions are met, (radio beacon symbol displayed, 4 or more satellites, and PDOP = 6 or less), the antenna is properly located for the point of interest, and the datalogger is in the *Start feature* screen, select the type of point for which GPS data is to be collected and press the Enter key. If a generic data dictionary is used there is only one type of point feature available, point-generic. If a custom data dictionary has been developed, there may be several types of point features available. Select appropriate feature from the list.

6.4.5.4 The user will note that in the lower right corner of the display, a counter will start at 1, and will increase by 1 about every second. The counter

indicates that the GPS is currently measuring positions. Attribute (descriptive data) is entered while in this mode. Attribute data can range from a one-line description (generic data dictionary) to several items of descriptive information depending on the complexity of the custom data dictionary used.

6.4.5.5 After all attribute data has been entered and the counter has reached 30 or more positions, the point can be saved by pressing the Enter key, then answer yes to confirm saving the data. The user will note that the "OK" key is gone from the TSC1 datalogger and that the Enter key is now used to save the data. Any other keystroke will not save the point and may cause the data to be lost. Typically the datalogger will give the user another opportunity to save the point if an incorrect keystroke is made. Be sure to read and understand all messages and warnings that appear on the screen before pressing any keys.

6.4.5.6 There are two important items that the user needs to remember when storing a feature, for the TSC1, the Enter key = Save, and once the feature is saved it cannot be reopened to correct errors. If the user determines that an error was made, such as incorrect attribute entry, the feature must be recorded again. Notes should be made in the field logbook describing the error so the incorrect feature can be deleted from the file once it has been downloaded. This condition applies to all types of features (points, lines, and areas).

6.4.5.7 Once the point is saved, the display will return to the *Start feature* screen. The operator may now move to the next feature to be recorded.

6.4.6 Line Feature

6.4.6.1 A line feature's geometry is determined and located by connecting the series of positions measured. Collecting GPS data for a line feature is very similar to a point feature. The same conditions must be met: the radio beacon symbol must be displayed, the number of satellites must be 4 or more, PDOP = 6 or less. To properly perform this operation, do the following:

6.4.6.2 Select *Line-generic* (generic data dictionary) or the type of line feature as determined by a custom data dictionary, and press Enter. For line (or area) features, positions are recorded at about 5-second intervals and there is no minimum number of positions required.

6.4.6.3 After pressing Enter, wait until 1 position is recorded, then move the GPS unit along the path of the line for which data is being recorded. Attribute data is entered at this time. If the line being recorded has one or more turns or corners, proceed to first turn. Wait until one position (let the

counter increase by one) is recorded at this turn and then continue along the line to each subsequent turn, waiting to record a position at each turn.

6.4.6.4 When the end of the line feature is reached, allow one more position to be recorded, then press the Enter key, and then yes (F1) to save the line feature. By allowing the GPS to collect positions at the beginning and end, and at each turn, the line feature will be delineated more accurately.

6.4.6.5 After the line feature is saved, the *Start feature* screen is displayed again. The next point, line or area feature can now be recorded.

6.4.7 Area Feature

6.4.7.1 An area feature's geometry is determined and located by connecting the series of positions measured just as with a line feature. Additionally, the last position measured is tied back to the first point measured. This closes out the area. To properly perform this operation, do the following:

6.4.7.2 To collect area feature GPS data, follow the same instructions as described for a line feature, selecting appropriate area type as dictated by the data dictionary used. Start the area feature in the same manner as a line feature, being sure to collect positions at the start point and at each turn point of the area, and enter required attribute data for the area feature.

6.4.7.3 There are two ways to end an area feature.

6.4.7.3.1 *Option One:* completely traverse the entire perimeter of the area with the GPS unit, returning to the starting point, then saving the area feature by pressing the Enter key, then F1.

6.4.7.3.2 *Option Two:* traverse the perimeter of the area until the last turn or corner of the area has been reached and a position recorded. There should now be a straight line back to the starting point for the area. Press the Enter key, then F1 to save the area feature. The Pro-XR will automatically close the area. This capability is useful if there is an obstruction, such as a fence or ditch, to prevent returning to the starting point of the area.

6.4.7.4 As before, the *Start feature* screen is displayed, and the next feature can be recorded.

6.4.7.5 When all features of interest have been recorded, the unit should be powered down. This is accomplished by pressing the Escape key, answer Yes (F1 or Y) to the question *"Please confirm Exit data collection?"*, press the Escape key again, returning to the Main menu, then hold down the green key at the lower left of the keyboard until the datalogger beeps. This will turn off the datalogger and power down the GPS unit also.

Section 7.0 Collecting Point Feature Data with the Laser Range-finder

7.1 The Laser Atlanta laser range finder can be used in conjunction with the Trimble Pro-XR GPS unit to collect point feature data only. Using the laser range finder is useful when the point of interest is inaccessible or satellite signals are blocked due to overhead structures or trees. The laser range finder cannot be used to collect line or area features[11].

7.2 The method to collect point data with the laser range finder is the same for either datalogger and requires only two additional steps.

7.2.1 First, the range finder must be correctly attached to the GPS unit (demonstrated in the required GPS class).

7.2.2 Second, prior to saving the point feature, aim the laser range finder at the point feature. Pull and hold the trigger on the range finder. When a range is displayed in the heads-up display, release the trigger. The datalogger should emit a tone or beep, and the message, *"offset received"* should appear at the bottom of the datalogger screen.

NOTE: The laser range finder should be positioned close to the GPS antenna, as the offset determined by the laser is from the laser to the point of interest. Any additional distance between the laser and the antenna is unaccounted for and will likely increase the error in the final position determination.

7.3 Once the offset has been received and all other requirements for collecting a point feature are met, the point can be saved in the normal fashion.

7.4 There are a few items of which the user should be aware. The offset data is sent to the GPS upon the release of the laser trigger therefore, the offset received message will appear only after the trigger is released. If the laser is inadvertently activated (trigger pulled and released), this offset will replace the previous one. However, if the offset is determined to be incorrect, simply re-aim the laser at the point of interest and pull and release the trigger to overwrite the incorrect offset. These actions can only be taken prior to the point being saved. Once the point is saved, its offset may not be changed in the field.

WARNING! Do NOT use the range finder while attached to the GPS unit unless the GPS is in the data-capturing mode. Repeated trigger pulls can cause the datalogger to "lock-up" and can take several minutes before it returns to normal operation.

[11] See Section 10.0 Special Cases, for exceptional uses of the LASER/GPS combination.

Section 8.0 Data Management

8.1 This section will discuss "what to do" with GPS data once it has been collected in the field. Basically two avenues will be addressed. First will be for divisions that currently own the Pro-XR GPS equipment, then for those divisions that do not own the equipment and must "borrow" GPS equipment.

8.2 In either case, geographical data (lat/long) should only be used that has been downloaded from the datalogger and derived using the required software. The latitude and longitude that can be displayed on the datalogger is less accurate than that derived from the software and may be displayed in the wrong datum.

8.3 It is Departmental policy that only real-time corrected GPS data that has been downloaded to the required GPS software will be accepted. The only exception to this is when autonomous data has been differentially corrected through post-processing by qualified personnel.

8.4 Division Owned Equipment

8.4.1 Divisions that own GPS equipment must develop their own procedures for handling and maintaining GPS data.

8.4.2 At a minimum, these procedures should set forth who will download the data, to whom the data will be forwarded, and where the data will be stored. These procedures may vary depending upon particular projects and required use of the GPS data. However it is the goal of the department that <u>all</u> GPS data be stored in the Department's GIS Center database. It will be the responsibility of each division, which owns GPS equipment, to ensure that GPS data is forwarded to the GIS Center.

8.5 Non-Division Owned Equipment

8.5.1 For those divisions that do not own the Trimble Pro-XR GPS equipment, the following guidelines will apply:

8.5.1.1 Personnel requesting the use of GPS equipment will contact the GIS Center for availability of equipment.

8.5.1.2 GIS Center personnel will then confirm that requesting personnel have received the required training in the operation and care of the GPS equipment.

8.5.1.3 GPS equipment will be checked out to the requesting personnel and fieldwork completed.

8.5.1.4 Upon return of GPS equipment, GIS Center personnel will inspect the equipment to ensure that it is in proper working condition and that all components are present. Lost equipment or components or damage due

to misuse or neglect will be replaced or repaired at the expense of the responsible division.

8.5.1.5 GIS Center personnel will download and store GPS data in the GIS Center's database.

8.5.1.6 GIS Center personnel will provide the GPS data to division in question in the format required by them. This format may include creating a map, exporting to a database or a printout of the data.

9 8.5.1.7 Documentation in regard to the accuracy, datum, and units will accompany any Department-derived GPS data released by the GIS Center.

Section 9.0 Training

9.1 In order for the Department to collect accurate and defensible GPS data, the GPS user must have more than a passing knowledge of the operation of the Department's GPS equipment. To achieve this, the Department has established a GPS training class to provide a prospective user with the knowledge necessary to acquire GPS data that meets the accuracy requirements of the Department.

9.2 For prospective GPS users to receive the required training, a memorandum requesting GPS training must be submitted to Paul Zundel, Assistant Director/GIS, signed by their division administrator. The memorandum will justify the need for requesting personnel's training. When a sufficient number of applications have been received, a training session will be scheduled, and participants will be notified.

Section 10.0 Special Cases

10.1 There is no time when GPS data gathering techniques will be totally exempt from this SOP. However, there are special circumstances where alternative methods will be needed. These situations are outlined below and will be considered on a case-by-case basis.

10.2 Two areas of the state, extreme northwest and west central are not well covered by the NavBeacon signal. For GPS work to be performed in these areas, the GIS Center has two Pro-XRS GPS units available. These units utilize a satellite correction signal and will work in these areas of the state. On those rare occasions when the real-time correction signal cannot be received with the Pro-XR or Pro-XRS equipment, GPS data can be collected autonomously. Autonomous data collection is strongly discouraged and should only be performed with approval and direction from GIS Center personnel. Any autonomous GPS data collected must be post-processed by GIS Center personnel in order to achieve the accuracy the Department requires.

10.3 These exemptions from this SOP must be pre-approved by GIS Center personnel and will be considered on a case-by-case basis.

10.4 The SOP for LASER/GPS combined use is confined to collecting point features. There may arise situations in which the SOP for collecting line (area) features cannot be made to work due to inaccessibility (terrain, foliage, or safety considerations). At such times individual points along a line or area feature may be collected using the LASER/GPS offset method for point features.

10.5 To do this one collects each position along the line (area) feature as if it was a point feature and by good note keeping the GIS personnel will be shown the points collected which need to be connected along the line (area) feature.

Section 11.0 Definitions

ATTRIBUTE: Information that describes a feature, such as name, ID, depth, date, time, weather conditions, etc. Type and number of attributes entered depends on the complexity of the data dictionary used.

AUTONOMOUS POSITIONS: Receiving uncorrected data that must be corrected later to improve its accuracy.

DATA DICTIONARY: An "electronic form" to be filled out while collecting GPS data. Data dictionaries can be either generic or custom designed.

DIFFERENTIAL CORRECTION: The method by which autonomous or uncorrected data is corrected.

FEATURE: A point, line, or area for which geographic location and attribute data can be collected. Examples of each are: A point can be a sampling location, water well, outfall, etc. A line can be a trail, road, stream, sidewalk, etc. An area can be a wastewater lagoon, parking lot, baseball park, etc.

FIX: Same as a position, one fix or position is one set of X, Y, & Z (lat/long/elevation) coordinates determined by the GPS.

LOGGING INTERVAL: Determines how often the GPS will collect a fix. For point features set this to one per second. For line and area features it is usually set to one position every five seconds.

PDOP: Position Dilution of Precision. This is a unitless number that indicates the suitability of the geometry of the currently selected group of satellites. Smaller numbers indicate better geometry.

POSITIONS: Positions are the GPS “fixes” collected that make up the feature, whether it is a point, line, or area feature. When collecting a point feature, a minimum of 30 positions must be collected.

REAL-TIME MODE: Collection of only corrected data, as opposed to autonomous or uncorrected data.

Figure 1 TDC1 Datalogger

Figure 2 TSC1 Datalogger

COMPLIANCE INSPECTION REPORT FOR UNDERGROUND STORAGE TANKS

AI #:		**FID #:**			
AI NAME:			**INSPECTION DATE(S):**		
Physical Location					
		LA	**Parish:**		
	(City)	(State)			
Mailing Address:					
	(Address)	(City)		(State)	(Zip)
Facility Representative/Title:					
Facility Representative Telephone No:					
Lead Inspector:					
Other Inspector(s):					
Summary of Findings/Comments					
Report By:					
	Your Name, Title			(Date)	
Reviewed By:					
	Reviewer Name, Environmental Scientist Supervisor / Manager			(Date)	

Note: All questions are to be answered. If unable to determine, write 'unknown' and explain in narrative.
Use narrative / summary of findings area to describe your areas of concern in greater detail.

AI #:		FID #:		
AI NAME:			INSPECTION DATE(S):	

Section A Registration Requirements **(Further Explanation Attached ☐)**

1. Please indicate the number, size, product stored, installation date, and upgrade date for each tank registered at the facility? Tanks installed on or before Dec 22, 1988 are considered existing tanks.

DEQ ASSIGNED TANK NO.	SIZE OF TANK (GALLONS)	PRODUCT STORED	INSTALLATION DATE	UPGRADE DATE

Latitude: Degrees: Minutes: Seconds:

Longitude: Degrees: Minutes: Seconds:

Front Gate Location

Significant Operational Compliance Components (SOC)

SOC - Release Prevention

Section B Standards for New Underground Storage Tanks **(Further Explanation in Narrative ☐)**

1. Is each tank properly designed and constructed to prevent corrosion in any portion, which routinely contains product? (303.B.1) ☐ Yes ☐ No ☐ N/A
2. What is the corrosion protection method for the tanks?
   a. Fiberglass reinforced plastic (303.B.1.a) ☐ Yes ☐ No ☐ N/A
   b. Tank constructed of metal and cathodically protected e.g. metal tank coated with dielectric material; impressed current (303.B.1.b)
   Specify: ☐ Yes ☐ No ☐ N/A
   c. metal-fiberglass reinforced plastic composite (ACT-100) (303.B.1.c) ☐ Yes ☐ No ☐ N/A
   d. Records available to document that Corrosion Protection is not necessary. (509.B.1) ☐ Yes ☐ No ☐ N/A
   e. Other corrosion protection Specify: ☐ Yes ☐ No ☐ N/A

Section C Standards for New UST Piping System **(Further Explanation in Narrative ☐)**

1. Is the piping that routinely contains regulated substances and is in contact with the ground or water designed, constructed, and protected to prevent corrosion? (303.B.2) ☐ Yes ☐ No ☐ N/A
2. What method of corrosion protection is used for the piping?
   a. Fiberglass-reinforced plastic piping (303.B.2.a) ☐ Yes ☐ No ☐ N/A
   b. Constructed of metal and cathodically protected e.g. coated w/dielectric material etc. (303.B.2.b)
   Specify: ☐ Yes ☐ No ☐ N/A
   c. Metal piping without additional corrosion protection measures. (303.B.2.c)
   Specify: ☐ Yes ☐ No ☐ N/A
   d. Records available to document CP is not necessary. (509.B.1) ☐ Yes ☐ No ☐ N/A

Section D Spill and Overfill for New UST Systems **(Further Explanation in Narrative ☐)**

1. Is **each** tank equipped with Spill Prevention Equipment to prevent a release of product when the transfer hose is detached from the fill pipe? (303.B.3.a.i)
   Date Installed: ☐ Yes ☐ No ☐ N/A
2. Is each tank equipped with Overfill Prevention Equipment? (303.B.3.a.ii)
   Date Installed: ☐ Yes ☐ No ☐ N/A
3. Is the Overfill Prevention Equipment designed to:
   a. Automatically shut off flow to the tank when the tank is no more than 95% full? e. g. butterfly valve (303.B.3.a.ii.(a)) (device not tampered with or inoperable) ☐ Yes ☐ No ☐ N/A
   b. Automatically alert the transfer operator when the tank is no more than 90 % full? (Is the alarm near the fill port? Does it work?) (303.B.3.a.ii.(b)) e.g. overfill alarm ☐ Yes ☐ No ☐ N/A
   c. Restrict the flow 30 minutes prior to overfilling or alert the operator one minute before overfilling? (303.B.3.a.ii(c)) e.g. ball float valves ☐ Yes ☐ No ☐ N/A
4. What type of Overfill Prevention Equipment being used? (303.B.3.b)

Note: All questions are to be answered. If unable to determine, write ‘unknown’ and explain in narrative. Use narrative / summary of findings area to describe your areas of concern in greater detail.

AI #:		FID #:		
AI NAME:			INSPECTION DATE(S):	

Section E Upgrading Existing UST Systems to New System Standards (Further Explanation in Narrative ☐)

1	Does the Existing UST system comply with one of the following requirements:	
a.	Was the system upgraded to meet the standards for New UST systems? (303.C.1.a)	☐ Yes ☐ No ☐ N/A
b.	Was the system upgraded with cathodic protection? (303.C.1.b) If yes, complete Section H.	☐ Yes ☐ No ☐ N/A
2.	What method of corrosion protection is used for each tank?	
a.	Metal tank retrofitted with interior lining (303.C.3.a) Date Lining Installed:	☐ Yes ☐ No ☐ N/A
b.	Is lining inspected periodically? Date of Last Inspection:	☐ Yes ☐ No ☐ N/A
c.	Metal tank retrofitted with cathodic protection (303.C.3.b)	☐ Yes ☐ No ☐ N/A
d.	Internal Lining combined with cathodic protection (303.C.3.c)	☐ Yes ☐ No ☐ N/A
e.	Other corrosion protection. Specify:	☐ Yes ☐ No ☐ N/A

Section F Piping Upgrading Requirements (Further Explanation in Narrative ☐)

1.	Is the piping protected from corrosion? If yes, complete Section C. (303.C.4)	☐ Yes ☐ No ☐ N/A

Section G Spill and Overfill for Existing Tanks (Further Explanation in Narrative ☐)

1.	Is each tank equipped with Spill and Overfill Prevention Equipment? (303.C.5) If yes complete questions Section D.	☐ Yes ☐ No ☐ N/A

Section H Release Prevention Operation and Maintenance (Further Explanation in Narrative ☐)

1.	Is the corrosion protection system continuously operated and maintained to provide corrosion protection to metal components of external portions of the tanks and piping that routinely contain regulated substance and are in contact with the ground or water? (503.A.1)	☐ Yes ☐ No ☐ N/A
2.	Are the cathodic protection systems inspected by qualified testers? (503.A.2)	☐ Yes ☐ No ☐ N/A
3.	Was the cathodic protection system tested within six months after installation? (503.A.2.a)	☐ Yes ☐ No ☐ N/A
4.	Is the system tested at least every three years? (503.A.2.a)	☐ Yes ☐ No ☐ N/A
5.	Does the inspection meet the requirements of a code of practice developed by a nationally recognized association? (503.A.2.b)	☐ Yes ☐ No ☐ N/A
6.	Does the facility have copies of the last two cathodic protection inspections? (503.B.2)	☐ Yes ☐ No ☐ N/A
7.	If the UST system has an impressed current, is the rectifier inspected every 60 days? (503.A.3)	☐ Yes ☐ No ☐ N/A
8.	Does the facility have copies of the last three years rectifier inspections? (503.B.1)	☐ Yes ☐ No ☐ N/A
9.	Are all records of UST system repairs being retained for the operating life of the UST system? (507.B)	☐ Yes ☐ No ☐ N/A
a.	Is a tightness test performed on the tank and/or piping within 30 days of a repair if applicable? (507.A.5)	☐ Yes ☐ No ☐ N/A
b.	Is the cathodic protection systems tested within six months of a repair? (507.A.6)	☐ Yes ☐ No ☐ N/A
c.	Documentation of operation of corrosion protection equipment (509.B.2.)	☐ Yes ☐ No ☐ N/A

SOC - Release Detection

Section I Release Detection Requirements for System (Further Explanation in Narrative ☐)

1.	Does the facility perform an approved method of release detection? (703.A.1)	☐ Yes ☐ No
2.	Is the method of release detection capable of detecting a release from any portion of the tank that routinely contains product? (703.A.1.a)	☐ Yes ☐ No ☐ N/A
3.	Is the release detection system installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions including routine maintenance, etc.? (703.A.1.b)	☐ Yes ☐ No ☐ N/A
4.	Does the release detection system meet the performance standards outlined in 703.A.1.c? (Check third party certification against equipment or method present) (703.A.1.c)	☐ Yes ☐ No ☐ N/A

Section J Release Detection Record Keeping (Further Explanation in Narrative ☐)

1.	As outlined in 705.A.1, does the facility maintain all written performance claims and documentation provided by the release detection vendor throughout the operating life of the equipment? (509.B.4)	☐ Yes ☐ No ☐ N/A
2.	Are the following records, listed in 705 A.2 & 3, retained for at least three years as required? (509.B.4)	☐ Yes ☐ No ☐ N/A
a.	sampling records	☐ Yes ☐ No ☐ N/A
b.	equipment testing;	☐ Yes ☐ No ☐ N/A
c.	monitoring results;	☐ Yes ☐ No ☐ N/A
d.	calibration records;	☐ Yes ☐ No ☐ N/A
e.	maintenance records;	☐ Yes ☐ No ☐ N/A
f.	leak detection equipment repairs	☐ Yes ☐ No ☐ N/A
3.	According to 705.A.2, are all tank tightness-testing records retained until the next test is conducted? (509.B.4)	☐ Yes ☐ No ☐ N/A
4.	As outlined in 705.A.3, are schedules of required calibration and maintenance for release detection equipment retained for 5 years from date of installation? (509.B.4)	☐ Yes ☐ No ☐ N/A

Note: All questions are to be answered. If unable to determine, write 'unknown' and explain in narrative. Use narrative / summary of findings area to describe your areas of concern in greater detail.

AI #:		FID #:		
AI NAME:			INSPECTION DATE(S):	

Section K Release Reporting (Further Explanation in Narrative ☐)

Suspected Releases

1.	Facility has notified the department of a suspected release as required (703.A.2)	☐ Yes ☐ No ☐ N/A
2.	Facility has resolved suspected release in accordance with procedures outlined in 707 or 711.	☐ Yes ☐ No ☐ N/A

Spills and Overfills

1.	Facility has notified department of spills and overfills as required. (713.A)	☐ Yes ☐ No ☐ N/A

Section L Release Detection Methods for Tanks (Further Explanation in Narrative ☐)

Is release detection being performed on the UST system's tanks? If yes, check the method(s) utilized by the facility? ☐ Yes ☐ No ☐ N/A

☐ 1. Inventory Control with Tank Tightness Testing (701.A.1) Deadline date:

a.	Are inputs, withdrawals, and amts remaining in tank recorded daily or on each operating day? (701.A.1.a)	☐ Yes ☐ No ☐ N/A
b.	Is the measuring equipment capable of measuring the level of the product over the full range of the tank's height to the nearest one-eighth of an inch? (701.A.1.b)	☐ Yes ☐ No ☐ N/A
c.	Are inputs reconciled with delivery receipts? (701.A.1.c)	☐ Yes ☐ No ☐ N/A
d.	Are the deliveries made through a drop tube which extends to within one foot of bottom? (701.A.1.d)	☐ Yes ☐ No ☐ N/A
e.	Is measurements of the water level made to the nearest one-eighth of an inch at least once a month? (701.A.1.f)	☐ Yes ☐ No ☐ N/A
f.	Is TTT method capable of detecting a 0.1 gal/hr leak rate from any portion of the tank routinely containing product? (703.B.1.a)	☐ Yes ☐ No ☐ N/A
g.	Is the TTT conducted every 5 years as required? (703.B.1.a)	☐ Yes ☐ No ☐ N/A
	Date of Last Test:	
h.	TTT is conducted following the manufacturer's instructions or third party certification conditions. (703.A.1.c)	☐ Yes ☐ No ☐ N/A

☐ 2. Manual Tank Gauging (MTG) (tanks <2000 gal) (701.A.2)

a.	If tank is >550 gal and < 2000 gal is annual tank tightness being conducted? (703.B.1.b) Date of last test:	☐ Yes ☐ No ☐ N/A
b.	Tank size is appropriate for using MTG (701.A.2)	☐ Yes ☐ No ☐ N/A
c.	Method is being conducted properly (701.A.2.d)	☐ Yes ☐ No ☐ N/A
d.	No liquid is added to or taken out of tank during test. (701.A.2.a)	☐ Yes ☐ No ☐ N/A
e.	Equipment is capable of 1/8-in measurement (701.A.2.c)	☐ Yes ☐ No ☐ N/A

☐ 3. Automatic Tank Gauging (ATG) (701.A.4)

Make and Model: Probe Type:

a.	Is the ATG capable of detecting a leak of 0.2 gal/hr leak rate? (701.A.4.a.i)	☐ Yes ☐ No ☐ N/A
b.	If ATG is not capable of 0.2 gal/hr leak rate, is inventory control (or other equivalent performance test) being conducted in accordance with monthly leak detection requirements? (701.A.4.a.ii.)	☐ Yes ☐ No ☐ N/A
c.	As the sole method of release detection, the ATG must test the tank at least once per month in a manner that can detect a 0.2 gal/hr release from any portion of the UST system with a probability of detection of 0.95 and a probability of false alarm of no greater than 0.05 (701A.4.b)	☐ Yes ☐ No ☐ N/A
d.	The ATG will generate a hard copy which contains the following:	
	i. the time and date of the test (701.A.4.b.i);	☐ Yes ☐ No ☐ N/A
	ii. the tank identification (701.A.4.b.ii);	☐ Yes ☐ No ☐ N/A
	iii. the fuel volume in the tank at the time of the test (701.A.b.iii);	☐ Yes ☐ No ☐ N/A
	iv. the qualitative result either "pass" or "fail" (701.A.b.iv);	☐ Yes ☐ No ☐ N/A
e.	Is the test being conducted according to Third Party Certification Conditions? (703.A.1.c)	☐ Yes ☐ No ☐ N/A

☐ 4. External Release Detection Devices (701.A.5)

General Requirements for Vapor and Liquid Monitoring

a.	Do the RDDs meet the general requirements for construction? (701.A.5.a)	☐ Yes ☐ No ☐ N/A
b.	Are the release detection devices clearly marked where applicable? (701.A.5.b.vii , 701.A.5.c.vi)	☐ Yes ☐ No ☐ N/A
c.	Wells are properly designed and positioned	☐ Yes ☐ No ☐ N/A
d.	Type of backfill:	
e.	Site assessment has been performed for vapor or ground water monitoring?	☐ Yes ☐ No ☐ N/A

☐ **Groundwater Monitoring** (701.A.5.c.)

a.	Ground water in the monitoring well is never more than 20 feet from the ground surface.	☐ Yes ☐ No ☐ N/A
b.	Can the continuous monitoring device or manual method detect 1/8-in of free product?	☐ Yes ☐ No ☐ N/A

Note: All questions are to be answered. If unable to determine, write 'unknown' and explain in narrative. Use narrative / summary of findings area to describe your areas of concern in greater detail.

AI #:		FID #:		
AI NAME:			INSPECTION DATE(S):	

☐ **Vapor Monitoring**

a. Vapor monitoring well is not affected by high ground water. (701.A.5.b.iii) ☐ Yes ☐ No ☐ N/A

☐ **5. Interstitial Monitoring** (701.A.6.)

a. Describe the UST system which uses IM e.g. double walled tank, secondary barrier: Explain: ☐ Yes ☐ No ☐ N/A

b. Secondary containment can be used to detect a release. (701.A.6.a) ☐ Yes ☐ No ☐ N/A

c. Sensor properly positioned. (701.A1.b.) ☐ Yes ☐ No ☐ N/A

☐ **6. Statistical Inventory Reconciliation (SIR) (701.A.7)**

a. Can the SIR method detect a release of 0.2 gal/hr from any portion of the UST System that routinely contains product with a probability of detection of at least 0.95 and a probability of false alarm no greater than 0.05 (701.A.7.a). ☐ Yes ☐ No ☐ N/A

b. Did the owner/operator received the monthly report(s) from the SIR provider/vendor who performs the analysis within 15 days following the last day of the calendar month for which the analyst was performed (701.A.7.b). ☐ Yes ☐ No ☐ N/A

c. Did the SIR analysis report include the following information:

i. the name of the SIR provider/vendor and the name and version of the SIR method used 701.A.7.b.i); ☐ Yes ☐ No ☐ N/A

ii the name of the company and individual who performed the analysis (701.A.7.b.ii); ☐ Yes ☐ No ☐ N/A

iii the name and address of the facility at which the analysis was performed (701.A.7.b.iii); ☐ Yes ☐ No ☐ N/A

iv a description of the UST system for which the analysis was performed (701.A.7.b.iii); ☐ Yes ☐ No ☐ N/A

v. a quantitative statement, in gallons/hr, for each UST system monitored for the month, of the leak threshold, minimum detectable leak rate, and the indicated leak rate (701.A.b.iv); ☐ Yes ☐ No ☐ N/A

vi a quantitative statement of "pass," "fail," or "inconclusive" for each UST system monitored (701.A.b.v). ☐ Yes ☐ No ☐ N/A

☐ **7. Other Method**: (701.A.8) Specify Method:

a. Method can detect 0.2 gal/hr leak rate or a release of 150 gal within a month; & meet the 95/5 probability requirement. (701.A.8.a) **OR** ☐ Yes ☐ No ☐ N/A

b. EPA/LDEQ has approved the method as being as effective as Tank Tightness testing, ATG, vapor monitoring, ground water monitoring, or interstitial monitoring and operator complies with any conditions imposed by the agency. (701.A.8.b) ☐ Yes ☐ No ☐ N/A

2. Are the release detection methods monitored at least every 30 days? (703.B.1) ☐ Yes ☐ No ☐ N/A

Section M Methods of Release Detection for Piping (Further Explanation in Narrative ☐)

Is release detection performed on the UST system's piping? If yes, check the appropriate piping system. ☐ Yes ☐ No ☐ N/A

☐ **1. Pressurized Piping**

1. Which of the following methods of leak detection does the facility use for pressurized piping? (703.B.2.a)

a. Automatic Line Leak Detectors (ALLD) (one of the following methods is required) (703.B.2.a.i) ☐ Yes ☐ No ☐ N/A

i. Automatic flow restrictor or ☐ Yes ☐ No ☐ N/A

ii. Automatic shutoff or ☐ Yes ☐ No ☐ N/A

iii. Continuous audible or visual alarm ☐ Yes ☐ No ☐ N/A

iv. Is a performance test conducted every 12 months on the line leak detector according to manufacturer's requirements **and** also by simulating a release in order to determine if the system is fully operational? (701.B.1) ☐ Yes ☐ No ☐ N/A

AND b. One other method (703.B.2.a.ii) ☐ Yes ☐ No ☐ N/A

i A line tightness test conducted every 12 months (703.B.2.a.ii); Date of last test: ☐ Yes ☐ No ☐ N/A

ii. Is LTT method capable of detecting a 0.1 gal/hr leak rate from any portion of the tank routinely containing product? (703.B.2.a.ii) ☐ Yes ☐ No ☐ N/A

iii. Is the Tightness Test conducted following manufacturer's instructions and third party certification? (703.1.A.c) ☐ Yes ☐ No ☐ N/A

OR

iv. Monthly interstitial monitoring or ☐ Yes ☐ No ☐ N/A

v. Monthly vapor monitoring or ☐ Yes ☐ No ☐ N/A

vi. Monthly groundwater monitoring or ☐ Yes ☐ No ☐ N/A

vii. Monthly statistical reconciliation or ☐ Yes ☐ No ☐ N/A

viii. Other monthly monitoring Specify: ☐ Yes ☐ No ☐ N/A

☐ **2. Suction Piping**

1. Which of the following leak detection methods does the facility use for suction piping? (703.B.2.b)

a. (Safe Suction) No leak detection if the piping has enough slope to drain product back into tank **and** has only one check valve located beneath the pump in the dispensing unit **OR** (703.2.b) ☐ Yes ☐ No ☐ N/A

b. Line tightness test every 3 years? Dates of last test: ☐ Yes ☐ No ☐ N/A

Note: All questions are to be answered. If unable to determine, write 'unknown' and explain in narrative. Use narrative / summary of findings area to describe your areas of concern in greater detail.

AI #:		FID #:		
AI NAME:			INSPECTION DATE(S):	

Is tightness test conducted according to manufacturer's instructions and/or third party certification conditions?	☐ Yes ☐ No ☐ N/A
OR	
c. One of the other methods listed in Section K.2.b.ii-vi above and verified (703.B.2.b.v) Specify:	☐ Yes ☐ No ☐ N/A

Section N Requirements for Temporary Closure (Further Explanation in Narrative ☐)

1. For UST systems in temporary closure; has the facility (903.A)	
a. Notified the Department of the temporary closure status (903.B.3)	☐ Yes ☐ No ☐ N/A
b. Removed all the liquids from the system. If all liquids were removed, go to Section N. If greater than 1 inch of liquids remain, please complete this section and sections L &M. (903.A)	☐ Yes ☐ No ☐ N/A
c. If applicable, has the Cathodic Protection been maintained? (903.A)	☐ Yes ☐ No ☐ N/A
2. If the UST system was temporarily closed for 3 months or less, did the owner/operator comply with the following: (903.B)	☐ Yes ☐ No ☐ N/A
a. Leave vent line open and functional (903.B.1)	☐ Yes ☐ No ☐ N/A
b. Cap and secure all other lines, pump, manways, and ancillary equipment (903.B.2)	☐ Yes ☐ No ☐ N/A
c. Perform a tank tightness test within five days after the system was brought back into service (903.D)	☐ Yes ☐ No ☐ N/A

NON-Significant Operational Compliance Components

Section O Additional Paperwork Requirements (Further Explanation in Narrative ☐)

1. Is the information on the registration form current and accurate? (301.A.3 or 301.B)	☐ Yes ☐ No ☐ N/A
2. Is a copy of the current registration form kept on-site or at the nearest staffed facility? (301.C.3)	☐ Yes ☐ No ☐ N/A
3. Has the owner/operator submitted the following information to the department:	☐ Yes ☐ No ☐ N/A
a. Registration form for all UST systems, including installation certification and installer verification for new tank systems (509.A.1)	☐ Yes ☐ No ☐ N/A
b. Reports of all releases, suspected releases, spills and overfills, and confirmed releases (509.A.2)	☐ Yes ☐ No ☐ N/A
c. Descriptions of corrective action plans, site characterizations, free product removal investigation of soil and groundwater cleanup, and corrective action plan (509.A.3)	☐ Yes ☐ No ☐ N/A
d. Notification before permanent closure or change-in-service (509.A.4)	☐ Yes ☐ No ☐ N/A
e. Results of site assessment conducted at permanent closure (509.A.5)	☐ Yes ☐ No ☐ N/A
4. Has the owner/operator maintained the following documents:	
a. Documentation of UST system repairs (509.B.3)	☐ Yes ☐ No ☐ N/A
b. A copy of the most current registration form filed with department (509.B.5)	☐ Yes ☐ No ☐ N/A
5. Was the facility able to provide the records in a timely fashion as required by the inspector? (509.C)	☐ Yes ☐ No ☐ N/A

Section P General Requirements (Further Explanation in Narrative ☐)

1. Are the materials being stored compatible with the materials or liner in the UST system? (505.A)	☐ Yes ☐ No ☐ N/A

Section Q Temporary Closure Continued (Further Explanation in Narrative ☐)

1. If the UST system is temporarily closed for more than 6 months has the owner/operator permanently closed the system (903)	☐ Yes ☐ No ☐ N/A
2. If the UST system is temporarily closed for more than 24 months, has the owner/operator (903.D)	
a. performed a site assessment in accordance with 907;	☐ Yes ☐ No ☐ N/A
b. were the results of the site assessment submitted to DEQ within 60 days following the end of the 24 month period. or	☐ Yes ☐ No ☐ N/A
c. Applied for an extension to perform a site assessment.	☐ Yes ☐ No ☐ N/A

Section R Financial Responsibility (Further Explanation in Narrative ☐)

1. Has the facility paid its annual monitoring and maintenance fee (Current Certificate)? (307.D)	☐ Yes ☐ No ☐ N/A
2. Can the owner/operators demonstrate financial responsibility for taking corrective action etc, i.e. how is he going to pay for the cleanup of a release? What type of financial responsibility is used? Explain:	☐ Yes ☐ No ☐ N/A

Section S Failure to Comply

Has the facility failed to comply with any of the regulations or any order issued by the department? If so,	☐ Yes ☐ No ☐ N/A

Note: All questions are to be answered. If unable to determine, write 'unknown' and explain in narrative. Use narrative / summary of findings area to describe your areas of concern in greater detail.

AI #:		**FID #:**		
AI NAME:			**INSPECTION DATE(S):**	
this constitutes a violation of the Act.				

Note: All questions are to be answered. If unable to determine, write ‘unknown’ and explain in narrative.
Use narrative / summary of findings area to describe your areas of concern in greater detail.

Louisiana Department of Environmental Quality
FIELD INTERVIEW FORM

Agency Interest #: _____ Inspection Date: _____ Time of Arrival: _____
Departure Date: _____ Time of Departure: _____

Facility Name: _____ Phone #: _____
Location: _____

Parish Name: _____

Mailing Address: _____ LA
Street/P.O. Box City State Zip

Facility Representative: _____ Title: _____

Inspection Type: _____ Program Involved: ☐ Air ☐ Waste ☐ Water Other _____

Inspector's Observations: (e.g. Areas and Equipment Inspected, Problems, Deficiencies, Remarks, Verbal Commitments from Facility Representatives)

Areas of Concern	Explanation	Resolved?
		☐YES ☐ NO
		☐YES ☐ NO
		☐YES ☐ NO
		☐YES ☐ NO

Photos Taken? ☐ YES ☐ NO Samples Taken? ☐ YES ☐ NO (Attach Chain-of-Custody)

Received by: Signature: _____ Title: _____

Print Name: _____
(NOTE: Signature DOES NOT indicate agreement with Inspector's Notes)

Inspector(s): _____ Attachments: _____

Reviewer: _____

NOTE: The information contained on this form reflects only the preliminary observations of the inspector(s). It should not be interpreted as a final determination by the Department of Environmental Quality or any of its officers or personnel as to any matter, including, but not limited to, a determination of compliance or lack thereof by the facility operator with any requirements of statutes regulations or permits. Each day of non-compliance constitutes a separate violation of the regulations and/or the Louisiana Environmental Quality Act.

Facility Name: AI:
City: Parish: Photographer:
Date: Reason: Other ID #:

SOW Enclosure D

Photo #: 1 of 2 Time: Date:
Description:

Photo #: 2 of 2 Time: Date:
Description:

Louisiana Department of Environmental Quality
Agency Interest GPS Location Form

Agency Interest #: _____ **Date GPS Location Point Acquired:** _____

Facility Name: _____ **Phone #:** _____
Facility Location: _____

Parish Name: _____

Mailing Address: _____
Street/P.O. Box **City** **State** **Zip**

Facility Representative: _____ **Title:** _____

Program Involved:	☐	**IAS**	☐	**Hazardous Waste**	☐	**UST**	☐	**Solid Waste**	☐	**Other:**	
Media Involved:	☐	**Air**	☐	**Waste**	☐	**Water**	☐	**Other:**			

	GPS Point Location		**GPS Point Location**
☐	Main Gate/Main Entrance	☐	Other – Write Description Below
☐	Monitoring Well	☐	
☐	Tank Hold	☐	
☐	Dispenser Island	☐	
☐	Treatment System	☐	
☐	Store or Building – Write Description Below	☐	
☐	Above Ground Tanks	☐	
☐	Water body (ponds, etc)	☐	
☐	Drum Designation Area	☐	
☐		☐	

GPS Point Location Description (If not listed above)
and GPS Latitude and Longitude from GIS TEMPO Form

_____

Latitude (from GIS report): _____

Longitude (from GIS report): _____

Inspector(s): _____ **Attachments:** _____

_____
_____ _____

LDEQ GPS Accuracy Document

If the geo-referenced information is provided to Louisiana Department of Environmental Quality (LDEQ) with the use of Global Positioning System (GPS) equipment of lesser accuracy than land survey grade, then these standards must be followed. A geo-referenced position or feature collected by GPS must meet LDEQ's GPS accuracy standards of equal to or better than three meters (3m) 2DRMS[1[1]]. All GPS features are collected using differential correction either *real-time* or *post processed.* If available turn on the Log post-processing real time (PPRT) data, this allows GPS positions that were corrected in real-time (RCTM) can be re-processed in the office using post-processing GPS software. It allows for both post-processing of both real-time corrected and uncorrected geo-referenced positions.

The geo-referenced information and QA/QC information must be record in digital format and transmitted to LDEQ. The equipment must be setup with the critical settings (in the data logger) of:

A) **Logging intervals**,
   a) Point feature: The satellite location is logged at one (1) second, and
   b) Line and Area feature**:** The satellite location is logged every five (5) seconds.

B) **Minimum positions logged** (in data logging): To acquire a point feature is:
   a) If Real-time Differential Corrected a position count of 30, which is averaged to get the geo-referenced position, or
   b) If Post-processed Differential corrected a position count of 180, which is averaged to get the geo-referenced position.
   c**)** Position Filters**: Position Mode [Manual 3D] GPS receiver uses as many satellites as it is capable of using (but at least 4) to compute positions. LDEQ requires the use of 3D mode and 4 or more satellites. If not the GPS receiver ceases computing GPS positions. Elevation Mask: Restrict the GPS receiver to use only those satellites above a certain elevation in the sky by imposing an elevation mask. LDEQ requires an elevation mask of 15°.**

D) **Signal to Noise Ratio Mask**: The quality of a GPS position is degraded if the signal level (SNR) of one or more satellites in the constellation falls below six 6. **LDEQ requires the SNR of 6 or above.** If not the GPS receiver ceases computing GPS positions.

E) **PDOP Mask**: Data collector logs values of PDOP, HDOP, VDOP, and TDOP whenever the PDOP value varies by 0.1 or more provide the PDOP is below the configured PDOP mask (6). This provides a good record of each PDOP situation that occurred throughout a data collection session. Set the upper bound of

[1[1]] Accuracy specifications assume a properly operating device under normally good conditions.

PDOP value to 6. When the PDOP goes above this value (6) then the receiver ceases computing GPS positions. **LDEQ requires a PDOP of 6 or below.**

F) **Coordinate System**: Latitude / Longitude
Datum: WGS-1984 World Geodetic System 1984
Altitude Units: Meters
Altitude Reference: MSL
Geoid Model: DMA 10 X 10 (Global)

If survey quality GPS equipment is not being used then log the Quality Assurance/Quality Control (QA/QC) data to provide a degree of quality assurance for the position data collected. All QA/QC information must be collected in order to provide proof of the accuracy of each geo-referenced feature (point, line, and area). These attributes must be turned on in the GPS equipment to collect this data for each feature:

A) **All Feature Types** (Points, lines, areas).
a) PDOP: The maximum PDOP for each feature logged.
b) Correction Status: The type of correction that has been applied to the positions within a feature. I.e.: 3D real-time Differential or 3D Differential.
c) Receiver Manufacture: The receiver manufactures name [i.e. Trimble].
d) Receiver Type: The receiver type of the GPS receiver that collected the GPS positions within a feature [i.e. ProXR].
e) Date Recorded: The date when the feature was collected. Format is "MM/DD/YYYY".
f) Time Recorded: The time of day when the features was collected. Format is "HH:MM:SS" 24 hours
g) Feature Name: The name of the feature.
h) Total Positions: The number of positions collected and averaged to make up the geo-referenced feature.

B) **Points Features**.
a) Height – export the height (elevation) of the geo-referenced feature reference and units as specified in the Coordinate System field (Latitude / Longitude and Meters).
b) Standard Deviation – export the standard deviation of the geo-referenced positions that were averaged to make the exported point feature. Only filtered positions are used to calculate the standard deviation.
c) Horizontal Precision – export the horizontal precision of the averaged position. The exported attribute will be in the distance units specified in the Units field (Meters).
d) Vertical Precision – export the vertical precision of the averaged position of the feature. The exported attribute will be in the distance units (Meters).

C) **Line Features**.

a) Length – The length is computed using a two-dimensional coordinate that is the exported length in the same as if you measured it directly off a map. Length is exported in the units specified in the distance units' field (Meters).

b) Average Horizontal Precision – The exported attribute will be in the distance units specified in the units field (Meters) and the confidence level specified in the GPS software's units.

c) Average Vertical Precision – export the average vertical precision. The exported attribute will be in the distance units specified in the units field (Meters) and the confidence level specified in the GPS software's units.

d) Worst Horizontal Precision – The exported attribute will be in the distance units (Meters) and the confidence level specified in the GPS software's units.

e) Worst Vertical Precision – The exported attribute will be in the distance units (Meters) and the confidence level specified in the GPS software's units.

D) **Area Features**.

a) Area – The area is computed using a two-dimensional coordinate, which is the exported area, is the same as if you calculated it from a map. Areas are exported in the units specified in the area units' field (Square Meters).

b) Perimeter – The perimeter is computed using a two-dimensional coordinate, which is the exported perimeter, is the same as if you measured it directly off a map.

c) Average Horizontal Precision - The exported attribute will be in the distance units specified in the units field (Meters) and the confidence level specified in the GPS software's units.

d) Average Vertical Precision - The exported attribute will be in the distance units specified in the units field (Meters) and the confidence level specified in the GPS software's units.

e) Worst Horizontal Precision - The exported attribute will be in the distance units specified in the units field (Meters) and the confidence level specified in the GPS software's units.

f) Worst Vertical Precision - The exported attribute will be in the distance units specified in the units field (Meters) and the confidence level specified in the GPS software's units.

This geo-referenced information must also meet and be recorded in the Federal Metadata format. Also the geo-referenced information must contain all the QA/QC information needed to prove in a court of law the accuracy of the information. All this information must be provided in a digital format to LDEQ. The LDEQ GIS Center must be contacted to determine what format this information is to be submitted. If the GPS used is Trimble ProXR, ProXRS, or GeoExplorer® then submit the SSF file to the LDEQ GIS Center. If survey grade GPS equipment is used (4000 series) then submit the Trimble Geomatics Office™ data files for CAD or GIS to LDEQ GIS Center. If GPS equipment is to be leased (rented) then Trimble ProXR or ProXRS equipment is to be used and the SSF files to be provided to LDEQ GIS Center. For more information contact the Assistant Director of the GIS Center.

Louisiana Department of Environmental Quality
Geographical Information System Standards

Geographical Information System (GIS) is a method for capturing, storing, checking, integrating, manipulating, analyzing and displaying spatially referenced data both digitally (softcopy) and through hardcopy maps. All Section 319 funded projects/activities that have a GIS component must follow GIS guidelines in order to be compatible with and acceptable by LDEQ. If the applicant involved is not capable of following these guidelines, the proposed GIS project will not be eligible for funding as this may affect the technical competency of the project.

Acceptable Digital Formats:

There is a definite need to ensure basic consistency concerning the data entered and used in a GIS. GIS data developed for EPA and LDEQ must be easily transferable to the LDEQ GIS database, to EPA, and other stakeholders. Therefore all Section 319 funded projects that contain a GIS component shall adhere to EPA and LDEQ required standards. The following statement will be included in such projects and resultant products shall conform to the statement:

" All geospatial data created for LDEQ will be consistent with Federal Geographic Data Committee (FGDC) endorsed standards. Digital coverages/products will be delivered as ArcInfo export coverages, ArcView shapefiles, or ArcGIS geodatabase with associated HTML containing metadata."

The following web sites provide information to assist the project manager in meeting the above requirements:

1. Federal Geographic Data Committee Standards
   www.fgdc.gov/publications/publications.html

2. National Map Accuracy Standards
   http://rockyweb.cr.usgs.gov/nmpstds.html

3. Tools Available for Metadata Documentation: SMSS Commercial Product
   www.enabletech.com/html/smms/smms.htm

4. Tools Available for Metadata Documentation: ArcView Metadata Collector
   www.csc.noaa.gov/metadata/text/download.html

Acceptable Map Projections:

Various map projections are acceptable for various purposes. All map projections will be in the North American Datum (NAD) 83. Map or digital data set deliverables in a geographic reference system (available as a projection option in ArcInfo and ArcView) are preferred.

1. Geographical Reference System. Units shall be in decimal degrees with additional fields containing degrees, minutes, seconds as following:
   DD MM SS.SS

2. Universal Transverse Mercator. Units shall be in meters and in Zone 15. Activities within Zone 16 shall be re-projected into Zone 15. Additional fields shall include the locations projected to decimal degrees.

3. Albers Conic Equal Area . Units shall be in feet.
   1St standard parallel 29° 32' 30.00";
   2nd standard parallel 32° 18' 30.00";
   Central Meridian -91° 34' 00.00";
   Latitude of projection origin 30° 55' 30";
   Spheroid GRS80; NAD83.

Acceptable Locational Accuracy:

Locational information acquired using Global Positioning System (GPS) equipment shall meet LDEQ Map Accuracy Standards of 3 meters or less.

ATTACHMENT 3 – RELEVANT EXPERIENCE
"Underground Storage Tank Compliance Evaluation Inspections"
(Enlarge or duplicate table as necessary)

Client Name and Address	Contact Person and Telephone Number	Project Title and Contract Number	Dates of Project/ Dollar Amount of Contract	Description of Project

ATTACHMENT 4. SCHEDULE OF PRICES

"Underground Storage Tank Compliance Evaluation Inspections"
Louisiana Department of Environmental Quality

TASK	UNIT	MAX NO. OF UNITS	UNIT RATE[1]	EXTENDED TOTAL
Commencement Conference to Discuss Overall Contract SOW Sections 3.1 and 6.1	Lump sum	1	$	$
Training Meeting SOW Sections 3.2 and 6.2	Lump sum	1	$	$
Compliance Evaluation Inspections SOW Sections 3.3 (3.3.1 through 3.3.7) and 6.3	Lump sum per inspection	700	$	$
Availability for Legal Support SOW Sections 3.4 and 6.4	Hour	8	$	$
Travel Related to Legal Support SOW Sections 3.4 and 6.5	Hour	1	$	$

TASK	UNIT	MAX NO. OF UNITS	UNIT RATE[1]	EXTENDED TOTAL
Overall Contract Final Report SOW Sections 4.3.2 and 6.6	Lump sum	1	$	$
			[2]Total Evaluation Price	$

[1]Note: All unit rates shall include all direct costs, indirect costs, and profit.

[2]Price evaluation for all proposers will be based upon the 700 inspections included in the Schedule of Prices, as well as other Schedule of Prices line items; however, LDEQ reserves the right to decrease the number of inspections upon contract award based upon the successful proposer's prices and available funding.

ATTACHMENT 5. SAMPLE LDEQ CONTRACT

"Underground Storage Tank Compliance Evaluation Inspections"

The contract offered to the successful proposer will have the following form and content:

THIS CONTRACT, made and entered into this _____ day of _____, 2007, by and between the Department of Environmental Quality of the State of Louisiana, hereinafter referred to as "LDEQ" or "the Department", and _____, officially domiciled at _____, hereinafter referred to as the "Contractor."

WITNESSETH:

WHEREAS, LDEQ desires to retain the Contractor to provide technical information and professional expertise as hereinafter described; and

WHEREAS, a fee for the services to be provided by the Contractor pursuant to this contract has been mutually agreed upon by all parties;

NOW THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

LDEQ hereby employs and retains the Contractor who agrees to proceed, after proper notice and receipt of written authorization by LDEQ, with all services necessary to the performance, in proper sequence and in the time specified, of the items of work for the project as hereinafter set forth.

1. PROJECT IDENTITY

This contract will be identified as **"Underground Storage Tank Compliance Evaluation Inspections"** with the Contract Number assigned as set forth above. All invoices and other correspondence submitted to LDEQ in connection with this contract shall be identified by this Contract Number.

2. ENTIRE AGREEMENT AND ORDER OF PRECEDENCE

This contract, together with the Request for Proposals (the RFP) and addenda issued thereto by LDEQ, the proposal submitted by the Contractor in response to LDEQ's RFP (the Proposal), and any exhibits specifically incorporated therein by reference constitutes the entire agreement between the parties with respect to subject matter.

This contract shall, to the extent possible, be construed to give effect to all provisions contained therein. However, where provisions are in conflict, first priority shall be given to the provisions of the contract excluding the RFP and the Proposal; second priority shall be given to the provisions of the RFP and amendments thereto; and third priority shall be given to the provisions of the Proposal.

3. CONTRACT TERM

The term for the fulfillment of services to be performed pursuant to this contract shall be from December 1, 2007 through November 30, 2008. This period shall be known as the base contract. LDEQ reserves the right to, at its discretion and at any time during the term of the contract, renew the contract for one or more periods. However, the sum of the base contract and all extensions shall not exceed thirty-six (36) months. All term extensions shall be made by written amendment and approved by the Office of Contractual Review. All extensions shall include the same payment terms and conditions as the base contract and shall be contingent upon funding by the Louisiana State Legislature.

4. SCOPE OF SERVICES

The Contractor shall provide the necessary personnel, materials, services, and facilities to perform the work as set forth in and Appendix A, Contractor's Proposal, and Appendix B, RFP Attachment 2, Statement of Work, attached hereto and made a part hereof.

5. NOTICE TO PROCEED

The Contractor shall proceed with the work only after receipt of an executed contract which has been approved by the Division of Administration's Office of Contractual Review, and participation in a post-award conference to be scheduled by LDEQ at its offices.

6. COMPENSATION

The amount which LDEQ agrees to pay and the Contractor agrees to accept for satisfactory completion of the services to be rendered pursuant to this contract shall not exceed a total sum of ***[insert price of contract]***. The prices resulting from the RFP process shall form the basis of payment, and shall remain in effect for the duration of the contract. Work performed by the Contractor during the term of the contract shall be paid at the unit rates listed in the Schedule of Prices. Travel and other allowable costs shall constitute part of the maximum payable under the terms of this contract.

LDEQ will pay the Contractor only for actual work performed, and LDEQ does not guarantee a maximum payment amount to be earned by the Contractor. LDEQ will reject any and all claims from the Contractor for damages, anticipated profits, or other related causes resulting from any difference between the amount paid for work actually performed and materials actually furnished and the maximum price of the contract.

The Contractor shall not perform out-of-scope work not authorized by written amendment prior to the expiration date of the contract. Any out-of-scope work performed by the Contractor without written authorization from LDEQ in the form of an approved contract amendment shall not entitle the contractor to any compensation for any corresponding effort. Verbal directives from any employee of LDEQ that would result in the performance of out-of-scope work shall carry no authority.

Any increases to the maximum amount shall be made by written amendment, approved by the

Office of Contractual Review, and shall be contingent upon funding by the Louisiana State Legislature. Any additional or out-of-scope work performed by the Contractor without written authorization from LDEQ in the form of an approved amendment shall not entitle the Contractor to payment or an increase in the maximum contract price.

7. FISCAL FUNDING

The continuation of this contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the legislature. If the legislature fails to appropriate sufficient monies to provide for the continuation of the contract, or if such appropriation is reduced by the veto of the Governor or by any means provided in the appropriations act to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the contract, the contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated.

8. LDEQ OBJECTIVES, MONITORING PLAN, AND PERFORMANCE MEASURES

As required by R.S. 39:1498(7) and (8), LDEQ provides the following information:

a. The goals and objectives of this contract are to perform Compliance Evaluation Inspections (CEI) at Underground Storage Tank Facilities (UST) throughout Louisiana.

b. LDEQ will monitor the progress of the Contractor during the contract by:

(1) designating LDEQ staff to act as the Project and Contract Managers;

(2) meeting with the Contractor as necessary to provide guidance or answer questions;

(3) ensuring that deliverables are submitted within the time frame of the contract;

(4) reviewing, requiring correction as necessary, and approving all deliverables and submittals; and

(5) requiring Weekly Progress Reports.

c. LDEQ will measure the successful performance of the Contractor by reviewing and evaluating the acceptability of all deliverables and submittals.

9. INVOICING AND PAYMENT

a. Payment:

Payment to the Contractor for services rendered shall be made according to the rates provided in the contract Schedule of Prices for the actual work accepted as completed by LDEQ. The rates included in the contract Schedule of Prices shall be applied for the term of the contract. Payment for work performed under this contract shall not exceed the agreed contract amount. Such payments will be considered partial payments under the

contract, and retainage will not be withheld.

The rate for each line item in the contract Schedule of Prices shall include all associated direct costs (labor, supplies, equipment, incidentals and expendables, duplication/copying, communications, postage, shipping and handling, transportation, taxes, etc.), all indirect costs (fringes, overheads, general and administrative costs), travel and profit.

b. Payment procedure:

The Contractor shall submit an invoice within 21 days after inspections. Invoices must include:

(1) the name and address of the Contractor;

(2) identification of the inspection site and period of performance;

(3) services performed and prices according to the Schedule of Prices;

(4) the LDEQ Contract Number;

(5) total contract amount;

(6) invoice amount;

(7) total invoiced to date; and

(8) contract balance.

The Contractor shall submit an original and one copy of each invoice to:

Louisiana Department of Environmental Quality
Accounts Payable
P.O. Box 4303
Baton Rouge, LA 70821-4303

Payments will be made by LDEQ within approximately thirty (30) days after receipt of an original and one (1) copy of a correct and complete invoice which has been first approved for payment by LDEQ's Office of Environmental Compliance.

c. Reporting Requirements:

The Contractor shall submit all required reports (see Attachment 2, Statement of Work).

Additionally, the Contractor shall submit Weekly Progress Reports and a procurement summary detailing purchases from Minority/Women Business Enterprises (Appendix C), prior to issuance of payments.

10. DELIVERABLES

The Contractor shall provide to LDEQ the items specified in RFP Attachment 2, Statement of Work, as products of the services rendered under this contract. LDEQ reserves the right to reject any deliverable that is unsatisfactory. The Contractor shall correct any omissions or errors and resubmit the deliverable.

11. CORRECTION OF DEFICIENT WORK

If required by LDEQ, prior to payment, the Contractor shall promptly, without cost to LDEQ, correct any deficient work performed by him or his subcontractors. Deficient work is defined as work that is (a) unsatisfactory, faulty, or defective, or (b) does not conform to the requirements of the contract documents. If the Contractor does not correct such deficient work within the time specified by LDEQ, LDEQ may have the deficiency corrected by a separate party. All direct and indirect costs for such correction shall be paid by the Contractor. If corrections made to deficient work interfere with any other LDEQ work by other parties, the Contractor shall also bear the expenses caused by that interference.

12. RELEASE OF INFORMATION

The Contractor shall not provide information generated or otherwise obtained in the performance of the Contractor's responsibilities under this contract to any party other than LDEQ or their authorized agents for the life of the contract and for a period of three (3) years after completion of this contract. The Contractor shall not publish, permit to be published, or distribute, use, or disclose to anyone for public consumption, any information, oral or written, concerning the results or conclusions made pursuant to the performance of this contract, without the prior written consent of LDEQ.

13. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this contract, all data collected by the Contractor and all documents, notes, and files collected or prepared specifically in connection with this work, except the Contractor's personnel and administrative files, shall become and be the property of LDEQ and LDEQ shall not be restricted in any way whatever in its use of such material. In addition, at any time during the contract period, LDEQ shall have the right to require the Contractor to furnish copies of any or all data and all documents, notes, and files collected or prepared by the Contractor specifically in connection with this contract within five (5) days of receipt of written notice issued by LDEQ.

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14. SUBSTITUTION OF PERSONNEL

If, during the term of the contract, the Contractor or subcontractor cannot provide the personnel as proposed and requests a substitution, that substitute shall meet or exceed the requirements stated herein. A detailed résumé of the individual's qualifications and a written justification for the

change must be submitted to LDEQ for approval prior to any personnel substitution. It shall be acknowledged by the Contractor that every reasonable attempt shall be made to assign the personnel listed in the Contractor's proposal.

15. CONTRACTOR'S INSURANCE

The Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors. The cost of such insurance shall be included in the Contractor's prices and shall not be separately billed.

A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. Insurance Services Office form number GL 0002 (Ed. 1/73) covering Comprehensive General Liability and Insurance Services Office; form number GL 0404 covering Broad Form Comprehensive General Liability; or Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001). "Claims Made" form is unacceptable. The "occurrence form" shall not have a "sunset clause."

2. Insurance Services Office form number CA 0001 (Ed. 1/78) covering Automobile Liability and endorsement CA 0025 or CA 0001 12 93. The policy shall provide coverage for owned, hired, and non-owned coverage. If an automobile is to be utilized in the execution of this contract, and the vendor/contractor does not own a vehicle, then proof of hired and non-owned coverage is sufficient.

3. Workers' Compensation insurance as required by the Labor Code of the State of Louisiana, including Employers' Liability insurance.

B. MINIMUM LIMITS OF INSURANCE

Contractor shall maintain limits no less than:

1. Commercial General Liability: $1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.

2. Automobile Liability: $1,000,000 combined single limit per accident, for bodily injury and property damage.

3. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by the Labor Code of the State of Louisiana and Employers' Liability coverage.

C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by LDEQ. At the option of LDEQ, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects LDEQ, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages

   a. LDEQ, its officers, officials, employees, Boards and Commissions and volunteers are to be added as "additional insureds" as respects liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to LDEQ, its officers, officials, employees or volunteers. It is understood that the business auto policy under "Who is an Insured" automatically provides liability coverage in favor of the State of Louisiana.

   b. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to LDEQ, its officers, officials, employees, Boards and Commissions or volunteers.

   c. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2. Workers' Compensation and Employers’ Liability Coverage

   The insurer shall agree to waive all rights of subrogation against LDEQ, its officers, officials, employees and volunteers, for losses arising from work performed by the Contractor for LDEQ.

(3) Pollution Liability Insurance

Within fifteen (15) days of award of this contract, the Contractor shall submit to LDEQ written documentation concerning the procurement of pollution liability insurance coverage of at least one million dollars ($1,000,000.00), exclusive of legal defense cost. This documentation shall be in the form of a copy of the policy and declaration page. LDEQ shall be named as an additional insured. Any insurance policy which operates on a "claims-made" basis shall be maintained for the term of this contract.

Every twelve (12) months after the award of the contract, the Contractor must submit written documentation providing proof of continued pollution liability insurance coverage including:

(a) copies of applications submitted to three known underwriters of pollution liability insurance;

(b) a status report of any pollution liability insurance obtained (The report shall include the type of coverage, the premium charged, the limits of coverage, the deductible levels, and any other major terms and conditions of the insurance coverage. A copy of the actual policy and declaration page could be provided in lieu of a written status report.);

(c) if pollution liability coverage was denied by an underwriter, a summary of the reasons why such coverage was denied; and

(d) a status report concerning the alternative pollution liability risk transfer mechanisms that the Contractor has pursued other than commercial pollution liability insurance (e.g., risk retention groups, purchasing groups, etc.).

The Contractor shall not be reimbursed for liabilities that were caused by the conduct of the Contractor (including any conduct of its directors, managers, staff, representatives or employees) which was grossly negligent, constituted intentional misconduct, or demonstrated a lack of good faith. Furthermore, the Contractor shall not be indemnified for liability arising under strict tort liability or any other basis of liability other than negligence.

4. All Coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to LDEQ.

E. SUBCONTRACTORS

Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

F. ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with an A. M. Best's rating of no less than A-:VI. This rating requirement may be waived for workers' compensation coverage only.

G. VERIFICATION OF COVERAGE

Contractor shall furnish LDEQ with certificates of insurance affecting coverage required by this clause (original and one copy). The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf, and must include the Contractor's name, the LDEQ contract number, the effective dates of the policy, and the level of coverage. LDEQ reserves the right to require complete, certified copies of all required insurance policies, at any time. The certificates must be received and approved by LDEQ before the Notice to Proceed will be issued.

The original certificates (and policies when required) shall be sent to:

Laura McDonald
Contracts and Grants Section
Louisiana Department of Environmental Quality
P.O. Box 4303
Baton Rouge, LA 70821-4303

The required copy of all insurance certificates shall be provided to the LDEQ/OMF Contract Manager.

H. RENEWAL OF INSURANCE

In the event that the Contractor provides certificates of insurance valid for a period of time less than the term of the contract, said certificates shall be acceptable, however, the Contractor shall be obligated to renew its insurance policies such that continuous coverage is provided for the entire contract term. The Contractor shall provide LDEQ with valid certificates of renewal of the insurance upon the expiration of the policies. In the event the Contractor fails or refuses to renew any of its insurance policies to the extent required by this contract, or any policy is canceled, terminated, or modified so that the insurance does not meet the requirements of this contract, and the Contractor does not otherwise satisfy the liability guarantees required by this contract, LDEQ may refuse to make payment of any further monies due or coming due under this or other agreements between the Contractor and LDEQ. LDEQ, in its sole discretion, may use monies retained under this paragraph to renew the Contractor's insurance for the periods and amounts referred to above. During any period when any required insurance is not in effect, and the Contractor does not otherwise satisfy the liability guarantees required by this contract, LDEQ, at its option, may either suspend work under this contract, or proceed to default the Contractor and thereby terminate this contract.

I. UNSATISFACTORY INSURANCE

If at any time any of the foregoing policies shall be or become unsatisfactory to LDEQ, as to form or substance, or if a company issuing any such policy shall be or become unsatisfactory to LDEQ, the Contractor shall, upon notice to that effect from LDEQ:

(1) promptly obtain a new policy;

(2) submit the new policy to LDEQ for approval; and

(3) submit a certificate thereof as herein above provided.

Upon failure of the Contractor to furnish, deliver and maintain such insurance as above provided, LDEQ, at its option, may either suspend work under this contract, or proceed to default the Contractor and thereby terminate this contract. Failure of the Contractor to take out and/or maintain or the taking out and/or maintenance of any required insurance, shall not relieve the Contractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with or otherwise limit the obligations of the Contractor concerning indemnification.

J. CANCELLATION OF INSURANCE

The certificates shall provide for thirty (30) days written notice to LDEQ prior to any cancellation, expiration, or non-renewal during the term of insurance required by this contract. Notices of cancellation shall be sent to LDEQ by registered mail, return receipt requested.

K. DISCLAIMER

The Contractor expressly understands and agrees that any insurance protection or other liability guarantees required or requested by this contract shall in no way limit the Contractor's obligations assumed in the contract, and shall not be construed to relieve the Contractor from liability in excess of such coverage or guarantees, nor shall it preclude LDEQ from taking such other actions as are available to it under any provision of this contract or otherwise in law.

16. PAYMENT BOND

The Contractor shall provide a payment bond, executed to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract. The bond shall be in the amount of one hundred percent (100%) of the contract price (Attachment7).

17. INDEMNIFICATION AGREEMENT

The Contractor shall complete and return to LDEQ a signed Indemnification Agreement (Attachment 6), along with the insurance certificates required in Article 15, Contractor’s Insurance.

18. ASSIGNABILITY

The Contractor shall not assign any interest in this contract, and shall not transfer any interest in the same (whether by assignment or novation), without the prior written consent of LDEQ thereto; provided, however, that all claims for money due or to become due to the Contractor under this contract may be assigned to its bank, trust company, or other financial institution without such approval. Notice of any such assignment of transfer shall be furnished promptly to LDEQ.

19. SUCCESSORS AND ASSIGNS

This contract shall be binding upon the successors and assigns of the respective parties hereto.

20. CLAIMS FOR LIENS

The Contractor shall be solely liable for and shall hold LDEQ harmless from any and all claims or liens for labor, services or material furnished to the Contractor in connection with the performance of its obligations under this contract.

21. COMPLIANCE WITH LAWS

The Contractor and its employees, subcontractors, and agents shall comply with all applicable Federal, State and Local laws and ordinances, in carrying out the provisions of this contract.

The Contractor is hereby advised that U.S. Environmental Protection Agency FY08 PPG Grant is being used by the Department to partially fund this contract. Continuation of this agreement after September 30, 2008, is contingent upon grant extension approval.

22. TAX RESPONSIBILITY

The Contractor hereby agrees that the responsibility for payment of taxes from the funds received under this contract shall be the Contractor's obligation and shall be identified under Tax Identification Number _____.

23. EMPLOYMENT OF STATE PERSONNEL

In accordance with LSA-R.S. 39:1498.(4) and 1498.2, the Contractor certifies that it has not employed and will not employ any person to engage in the performance of this contract who is currently an employee of the State of Louisiana.

24. COVENANT AGAINST CONTINGENT FEES

The Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Contractor, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, brokerage fee, gifts, or any other

consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, LDEQ shall have the right to annul this contract without liability, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

25. RECORDS

The State, through the Legislative Auditor, and/or the Office of the Governor, Division of

Administration, the LDEQ Internal Audit Section, or any of their duly authorized representatives, shall be entitled to audit the books, documents, papers, and records of the Contractor and any subcontractors which are reasonably related to this contract.

The Contractor and its subcontractors shall maintain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred. All such materials shall be made available at their respective offices at all reasonable times during the contract period and for three (3) years from date of final payment under this contract for inspection by LDEQ and/or Legislative Auditor. Copies thereof shall be furnished if requested.

26. ANTI-DISCRIMINATION

The Contractor agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, The Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Act of 1975, and the Americans with Disabilities Act of 1990.

The Contractor further agrees not to discriminate in its employment practices, and will render services under this contract without regard to race, color, religion, sex, sexual orientation, national origin, veteran status, political affiliation, or disabilities.

Any act of discrimination committed by Contractor, or failure to comply with these statutory obligations when applicable shall be grounds for termination of this contract.

27. CODE OF ETHICS FOR STATE EMPLOYEES

Contractors may, in certain circumstances, be deemed "public employees" as interpreted by the Louisiana Commission of Ethics for Public Employees. The Contractor shall be responsible for determining that there will be no conflict or violation of the Ethics Code. By signing this contract, the company official certifies that there is no conflict or violation of the Ethics Code.

28. REMEDIES

Any claim or controversy arising out of this contract shall be resolved by the provisions of LSA-R.S. 39:1524 through 1526.

29. MINORITY/WOMEN BUSINESS ENTERPRISE REQUIREMENTS: [if federal money]

The Contractor agrees to ensure that minority/women business enterprises have the maximum opportunity to participate in the performance of this contract and any subcontracts for supplies, equipment, construction, or services that may be let. In this regard, the Contractor shall take all necessary and reasonable steps to ensure that minority/women business enterprises have the maximum opportunity to compete for and perform services relating to this contract.

The following affirmative steps for utilizing MBE/WBEs are required:

1. Solicitations for products or services shall be sent to firms/individuals listed as MBE's and WBE's.

2. Where feasible, divide total requirements into smaller tasks to permit maximum MBE/WBE participation.

3. Where feasible, establish delivery schedules which will encourage MBE/WBE participation.

4. Encourage use of the services of the U. S. Department of Commerce's Minority Business Development Agency (MBD) and the U. S. Small Business Administration to identify MBE/WBE's.

5. Require that each party to a subcontract takes the affirmative steps outlined here.

30. TERMINATION OF CONTRACT FOR CAUSE

If, in the determination of LDEQ, the Contractor fails to fulfill in a timely and proper manner its obligations under this contract or violates any of the covenants, agreements, or stipulations of this contract, LDEQ shall thereupon have the right to terminate this contract by giving written notice sent certified mail (return receipt requested) to the Contractor of such termination and specifying the effective date thereof, at least thirty (30) days before the effective date of such termination.

In that event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports or other material prepared by the Contractor under this contract shall, at the option of LDEQ, become its property, and the Contractor shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents and other materials. LDEQ shall be relieved of liability for costs for any undelivered work as of the effective date of termination and shall be entitled to repayment for any progress payments made on undelivered work.

Notwithstanding the above, the Contractor shall not be relieved of liability to LDEQ for damages sustained by LDEQ by virtue of any breach of the contract by the Contractor, and LDEQ may withhold any payments to the Contractor for the purpose of setoff until such time as the exact amount of damages due LDEQ from the Contractor is determined.

31. TERMINATION FOR THE CONVENIENCE OF LDEQ

LDEQ may terminate this contract for the convenience of LDEQ at any time, by giving written notice to the Contractor by certified mail (return receipt requested) of such termination and specifying the effective date thereof, at least thirty (30) days before the effective date of such termination. In that event, all finished or unfinished documents and other materials as described in the preceding section shall, at the option of LDEQ, become its property. If the contract is terminated by LDEQ as provided herein, the Contractor shall promptly submit a statement showing in detail the actual services performed to date of termination. The Contractor shall then be paid the proportion of the total contract amount which bears the same ratio as the services completed bears to the total scope of services called for in this contract, less payments of compensation previously made.

32. AMENDMENTS

All changes to the contract price or term shall require amendment to the contract. No amendment shall be effective unless it is in writing, signed by duly authorized representatives of both parties, and approved by the Louisiana Office of Contractual Review. Verbal directives from any employee of LDEQ shall carry no authority, and shall not entitle the Contractor to any compensation for any corresponding effort.

LDEQ AND THE CONTRACTOR REPRESENT THAT THIS CONTRACT SUPERSEDES ALL PROPOSALS, ORAL AND WRITTEN, ALL PREVIOUS CONTRACTS, AGREEMENTS, NEGOTIATIONS AND ALL OTHER COMMUNICATIONS BETWEEN THE PARTIES WITH RESPECT TO THE SUBJECT MATTER HEREOF.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their respective officers thereunto duly authorized as of the day and year first above written.

WITNESS: **DEPARTMENT OF ENVIRONMENTAL QUALITY:**

_____ _____

Thomas C. Bickham, III
Undersecretary

_____ _____

Wilbert F. Jordan, Jr., Assistant Secretary
Office of Environmental Assessment

WITNESS: **CONTRACTOR:**

_____ _____

APPENDIX C

MBE/WBE PROCUREMENTS MADE DURING REPORTING PERIOD
EPA Financial Assistance Agreement Number: _____

1. Procurement Made By		2. Business Enterprise		3. $ Value of Procurement	4. Date of Award MM/DD/YY	5. Type of Product or Services[A] (Enter Code)	6. Name/Address/Phone Number of MBE/WBE Contractor or Vendor
Contractor	Sub-Contractor	Minority	Women				

[A]Type of product or service codes:

1 = Construction

2 = Supplies

3 = Services
A = Business Services
B = Professional Services
C = Repair Services
D = Personal Services

4 = Equipment

A good faith effort has been made to obtain MBE/WBE vendors

_____
Signature

_____
Date

ATTACHMENT 6
INDEMNIFICATION AGREEMENT

_____ agrees to protect, defend, indemnify, save, and hold
(Contractor)
harmless the State of Louisiana, all State Departments, Agencies, Boards and Commissions, its officers, agents, servants and employees, including volunteers, from and against any and all claims, demands, expense and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur or in any way grow out of any act or omission of _____, its agents, servants, and employees, or any and all
(Contractor)
costs, expense and/or attorney fees incurred by _____ as a result of
(Contractor)
any claim, demands, and/or causes of action except those claims, demands, and/or causes of action arising out of the negligence of the State of Louisiana, all State Departments, Agencies, Boards and Commissions, its agents, representatives, and/or employees.

_____ agrees to investigate, handle, respond to, provide defense for,
(Contractor)
and defend any such claim, demands, or suit at its sole expense and agrees to bear all other costs and expenses related thereto, even if it (the claim, etc.) is groundless, false or fraudulent.

Accepted by: _____
Company Name

_____
Signature

_____
Title

Date accepted _____
Is the Certificate of Insurance attached? _____ Yes _____ No

Contract No. _____ for _____
(State Agency Number and Name)
Purpose of Contract: _____
_____
_____

ATTACHMENT 7
Payment Bond

"Underground Storage Tank Compliance Evaluation Inspections"
Louisiana Department of Environmental Quality

Therefore, to these presents personally came and intervened herein acting for _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business in the State of Louisiana, as Surety, who declared that having taken cognizance of this contract and of the documents mentioned herein, he hereby in his capacity as its Attorney in Fact obligates his said company, as Surety for the said Contractor, unto LDEQ, for a payment bond, the bond of a sum equal to one hundred percent (100%) of the contract price of Dollars ($ _____).

The condition of this payment bond shall be that should the Contractor herein not pay all persons who have and fulfill obligations to perform labor and/or furnish materials in the prosecution of the work provided for herein, including by way of example workmen, laborers, mechanics, and furnishers of materials, machinery, equipment and fixtures, then said Surety agrees and is bound to make said payment(s).

Provided, that any alterations which may be made in the terms of the contract or in the work to be done under it, or the giving by LDEQ of any extensions of time for the performance of the contract, or any other forbearance on the part of either LDEQ or the Contractor to the other shall not in any way release the Contractor or the Surety from their liability hereunder, notice to the Surety of any such alterations, extensions, or other forbearance being hereby waived.

If the surety on any bond is declared bankrupt, becomes insolvent, or its right to do business in any state where any part of the project is located is revoked, the Contractor shall substitute another bond and surety acceptable to LDEQ. Any substitution shall be made within five (5) days after such declaration.