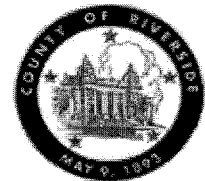


**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

792



**FROM:** Waste Management Department

**SUBMITTAL DATE:**

July 21, 2010

**SUBJECT:** Sole Source Agreement for Hydraulic Conductivity Testing and Multi-level Monitoring Well Installation at the Closed Anza Sanitary Landfill

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve a Sole Source Agreement with FLUTE in the amount of \$37,073.95; and
2. Authorize the Chairman to execute the Agreement on behalf of the Department

**BACKGROUND:** Per Waste Discharge Requirements (WDR) Order Number R9-2005-0183, which was issued by the California Regional Water Quality Control Board – San Diego Region (CRWQCB) and regulates activities at the Closed Anza Sanitary Landfill, the Waste Management Department (Department) is required to investigate the deep bedrock aquifer at the landfill site by drilling and installing a groundwater monitoring well; performing hydraulic conductivity testing; and groundwater monitoring. To comply with this requirement, the Department plans to issue two contracts. The first is a public works construction contract to drill a rock corehole, which is not the subject of this Agreement. The second contract is the subject of this motion and is to approve a sole source agreement for hydraulic conductivity testing and the completion of a multi-level monitoring system. The attached memo provides a detailed explanation of the sole source agreement justification.

**REVIEW/APPROVAL:** This procurement was reviewed and approved by the County Purchasing Agent.

Hans W. Kernkamp, General Manager-Chief Engineer

<b>FINANCIAL DATA</b>	Current F.Y. Total Cost:	\$ 37,073.95	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	FY10/11

<b>SOURCE OF FUNDS:</b> Waste Management Enterprise Funds	<b>Positions To Be Deleted Per A-30</b>	<input type="checkbox"/>
	<b>Requires 4/5 Vote</b>	<input type="checkbox"/>

**C.E.O. RECOMMENDATION:** APPROVE  
BY:   
Alex Gann

**County Executive Office Signature**

**Prev. Agn. Ref.:** \_\_\_\_\_ **District:** 3rd **Agenda Number:** \_\_\_\_\_

ATTACHMENTS FILED  
WITH THE CLERK OF THE BOARD

**12.4**

FORM APPROVED BY COUNTY COUNSEL  
BY: DATE: 8/2/10  
NEAL R. KIPNIS

Purchasing:   
Billy Cornett, Purchasing Manager

Dep't Recomm.:  Consent  Policy   
 Per Exec. Ofc.:  Consent  Policy



**Riverside County**  
**Waste Management Department**

*Hans W. Kernkamp, General Manager-Chief Engineer*

**Date:** July 15, 2010

**From:** Hans Kernkamp, General Manager-Chief Engineer  
Riverside County Waste Management Department

**To:** Board of Supervisors

**Via:** Purchasing Agent

**Subject: Sole Source Procurement; Request for Corehole Hydraulic Conductivity Testing and Multi-Level Groundwater Monitoring System**

**Statement of Support:**

The below information is provided in support of my Department's request for approval for a sole source contract. I understand that outside of a duly declared emergency, the time to develop a statement of work or specifications is not in itself justification for sole source.

**Supply/Service Being Requested:**

Federal and State laws specify that the California Regional Water Quality Control Board – San Diego Region (CRWQCB) regulate activities at the Closed Anza Landfill. Per Waste Discharge Requirements (WDR) Order Number R9-2005-0183, which was issued by the CRWQCB, the Waste Management Department (Department) is required to investigate the deep bedrock aquifer, including hydraulic conductivity and groundwater contamination, at the landfill site by drilling and installing a groundwater monitoring well. To comply with this requirement, the Department proposes to investigate the hydraulic properties of the deep bedrock aquifer and to install a multi-level groundwater monitoring system. The Department requests that a specialized contractor, FLUTE™, be authorized to perform these tasks. FLUTE™ has performed this type of specialized work throughout the United States and Canada, and several countries in Europe.

The Department prepared a workplan for the CRWQCB describing the rationale supporting the use of the FLUTE™ technology and the FLUTE™ construction procedures. The CRWQCB subsequently approved the workplan in a letter to the Department, dated April 21, 2010.

The Department prepared a scope of work which was used as the basis of their bid. The FLUTE™ bid price is \$37,073.95. The scope of work and the FLUTE™ bid are attached for reference.

**Supplier being requested:**

FLUTE™

**Alternative suppliers that can or might be able to provide supply/service:**

FLUTE™ has multiple patents pending for the hydraulic conductivity testing and multi-level groundwater monitoring system. FLUTE™ is the only known contractor that can provide hydraulic conductivity testing quickly and efficiently throughout the length of the rock corehole and that fabricates/installs a removable, multi-level, flexible, liner monitoring well.

**Extent of market search conducted:**

The Waste Management Department was first introduced to FLUTE™ during an environmental engineering continuing education class. Following this brief introduction, the Waste Management Department performed an exhaustive search on the internet and researched technical peer reviewed journals (e.g. groundwater [Journal of the Scientists and Engineers Division of NGWA] and Journal of Environmental Engineering [Journal published by ASCE]) to find comparable hydraulic conductivity methods and monitoring systems and to assess the efficacy of the FLUTE™ methods and products. While other methods are available to perform hydraulic conductivity testing and to fabricate/install multi-level monitoring wells, the unique and patent pending methods utilized by FLUTE™ provides technological advantages that other contactors and/or systems are unable to duplicate. The uniqueness of the FLUTE™ method and system has been documented in published, peer reviewed technical science journals.

The market research was conducted by Todd Shibata, P.E. (Senior Civil Engineer, Water Section, Waste Management Department) and the research findings were reviewed by Angela C.M. Dufresne, P.E. (Principal Engineer, Environmental Division, Waste Management Department).

**Unique features of the supply/service being requested from this supplier, which no alternative supplier can provide:**

The uniqueness of the FLUTE™ method and system were described in detail by the Department in the above referenced workplan. A few of the unique features are summarized below.

Hydraulic Conductivity Testing - The descending temporary blank liner of the FLUTE™ system seals the corehole. Therefore, it prevents covered flow paths in the corehole from affecting the hydraulic conductivity profile of the unsealed portion of the corehole. Unlike straddle packer testing (another common hydraulic conductivity testing method), there is no concern about bypass of the liner that can occur through leakage of the liner seal or cross-flow in a permeable formation that flows in the formation around the limited length of a straddle packer. Unlike straddle packer testing, FLUTE™ profiling is not limited to a fixed test interval in the corehole or by various factors that can limit the positions where packers could be placed in the corehole to create an effective seal.

Multi-Level Monitoring System - The Water FLUTE™ fully integrated corehole sealing and multi-level monitoring/sampling system has the following distinguishing features from other multi-level monitoring systems:

- Fabricated to monitor corehole specific conditions (i.e. corehole size and discrete monitoring intervals)
- Quickly placed into the corehole from a shipping reel
- Seals the entire borehole with a potable water pressurized flexible liner of polyurethane coated nylon fabric; the sealing pressure is provided by excess water head in the liner
- Length of discrete monitoring interval can be varied from as small as 1-foot to as long as 5-feet, which allows for sampling according to site specific data collected during hydraulic conductivity testing.
- Draws the groundwater into the central pumping system directly from the formation
- Relatively easy to remove for repairs, replacement or abandonment

**Reasons why my department requires these unique features and what benefit will accrue to the county:**

Potential environmental liabilities exist at all landfills. Groundwater contamination exists in shallow groundwater at the Closed Anza Landfill. The site specific conditions of the Closed Anza Landfill (fractured bedrock) require a specialized technical approach to best understand and assess the hydraulic conditions. Ill-suited or technologically inferior approaches to respond to the CRWQCB requirements could result in increased potential environmental liabilities, and increased long term costs to assess and/or manage those potential environmental liabilities. The FLUTE™ system provides the best solution to minimize contamination of the deeper level groundwater while performing hydraulic conductivity testing and multi-level groundwater monitoring.

**Price Reasonableness:**

As previously discussed, FLUTE™ provides a unique technical approach to hydraulic conductivity testing and multi-level groundwater monitoring. Therefore, an equal comparison between contractors is not feasible.

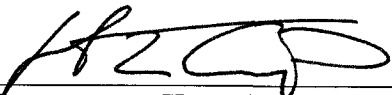
However, the Department has attempted to compare the FLUTE™ cost for the fabrication/installation of the multi-level monitoring system with a traditional, technologically different multi-level monitoring system. The costs for the traditional, technologically different multi-level monitoring system were based upon recent public works construction costs incurred by the Department for the installation of two single-level monitoring wells at a Department landfill site.

The unit cost for the FLUTE™ multi-level monitoring system is approximately \$185/foot. The unit cost for a generic multi-level monitoring system is approximately \$125/foot. While the FLUTE™ system is approximately 50 percent more expensive, the additional

expense is justified by the unique technological advantages provided by the FLUTE™ system and the potential for decreased long term costs.


**Does moving forward on this product or service further obligate the county to future similar contractual arrangements?**

No, once the multi-level groundwater monitoring system is installed by FLUTE™, maintenance of the groundwater monitoring system shall be completed by the Department.

  
\_\_\_\_\_  
Department Head Signature 7/16/10  
Date

**Purchasing Department Comments:**

Approve                      Approve with Condition/s      Disapprove

  
\_\_\_\_\_  
Purchasing Agent 7-22-10  
Date

## AGREEMENT FORM

Page 1 of 2

THIS AGREEMENT entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between Flexible Liner Underground Technologies, Ltd. L.C., hereinafter called the "Contractor", and the County of Riverside, hereinafter called "Owner".

**WITNESSETH:** That the parties hereto have mutually covenanted and agreed as follows:

**CONTRACT:** The complete contract includes all of the Contract Documents, to wit: this Agreement; Exhibit A – Contract Price; Exhibit B – Flute Scope of Work; General Conditions; and Flute general terms of sale for liner systems, liner installations, and services. All Contract Documents are intended to cooperate and become complimentary so that any work called for in one and not mentioned in the other, or vice versa, is to be executed the same as if mentioned in all Contract Documents. In case of conflict between the Contract Documents, the following order of governing documents shall be followed (with the first listed document controlling): 1) Agreement Form, 2) Exhibit A, 3) Exhibit B, 4) General Conditions, 5) Flute general terms of sale for liner systems, liner installations, and services.

**STATEMENT OF WORK:** The Contractor hereby agrees to furnish all tools, equipment, services, apparatus, facilities, transportation, labor, and materials necessary to perform hydraulic conductivity testing and install a multi-port monitoring well, in strict accordance with the FLUTE™ Scope of Work by the Waste Management Department, hereinafter called the "Engineer."

**TIME FOR COMPLETION:** The Contractor shall mobilize to the site, install the blank temporary FLUTE™ liner and perform hydraulic conductivity profiling on the date specified in a written order, which shall be mutually agreed to by the Engineer and Contractor, and no sooner than August 30, 2010. After the Engineer has provided the Contractor with written monitoring intervals for the FLUTE multi-port monitoring well, the Contractor shall fabricate and install said multi-port monitoring well within 28 calendar days. It is expressly agreed that except for extensions of time duly granted in the manner and for the reasons specified in the General Conditions, time shall be of the essence.

**COMPENSATION TO BE PAID TO CONTRACTOR:** The Owner agrees to pay and the Contractor agrees to accept in full consideration for the performance of the Contract, subject to additions and deductions as provided in the General Conditions, the time and materials, not to exceed sum of Thirty-Seven Thousand, Seventy-Three Dollars and Ninety-Five Cents (\$37,073.95). Exhibit A – Contract Price is attached to and incorporated into this Agreement. Contractor represents that it fully understands the payment method for the work.

The compensation described in the Agreement shall be complete and full payment to the Contractor for furnishing all materials, labor, tools, equipment and related items necessary to complete the work; and for all obligations imposed upon the Contractor pursuant to the Contract Documents.

All pricing shall is quoted as F.O.B. destination, (e.g., cash terms less than 30 days should be considered net) including applicable tax, permits, and licenses. The Owner pays California Sales Tax and is exempt from Federal excise tax. In the event of an extension error, the unit price shall prevail.

Pursuant to Labor Code Section 1861, the Contractor gives the following certification: "I am aware of the provisions of section 3700 of the Labor Code which requires every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of work of this contract".

IN WITNESS WHEREOF, the parties hereto on the day and year first above written have executed this agreement.

**AGREEMENT FORM**

Page 2 of 2

Type of Contractor's organization: LLC

If other than individual or Corporation, list names of all members who have authority to bind firm:

\_\_\_\_\_  
\_\_\_\_\_

**IF OTHER THAN CORPORATION EXECUTE HERE:**

Firm Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor's License No.: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

**IF CORPORATION, FILL OUT THE FOLLOWING AND EXECUTE:**

Name of President of Corporation: CARL KELLER

Name of Secretary of Corporation: SYLVIA MARTINEZ

Corporation organized under the laws of the State of NM

Firm Name: FLEXIBLE LINER UNDERGROUND TECH., LLC

Address: 6 EASY ST., SANTA FE, NM

Contractor's License No. \_\_\_\_\_

Signature: Carl Keller

Title: OWNER / PRINCIPAL SCIENTIST

**DO NOT COMPLETE BELOW THIS LINE**

Attest:

Kecia Harper-Ihem, Clerk of the Board

County of Riverside (Owner)

By \_\_\_\_\_  
Deputy  
(Seal)

By \_\_\_\_\_  
Chairman, Board of Supervisors

FORM APPROVED COUNTY COUNSEL  
BY: Neal R. Kipnis DATE 9/2/10

**EXHIBIT A - CONTRACT PRICE**

It is understood that the "Number" listed (except for those shown as "Final" or "Lump Sum") are but estimates only and final payment will be based on actual quantities whatever they may be, subject to such adjustments and alterations as elsewhere provide for in the Contract Documents.

Item Number	Description	Number	Unit	Unit Price	Subtotal
1	blank liner to 110 ft	110	ft	\$ 13.00	\$ 1,430.00
2	Water FLUTE to 110 ft with 4 ports 4" core hole	1	ft	\$ 11,385.00	\$ 11,385.00
3	spacers over the standard 5 ft length	0	ft	\$ 22.00	\$ -
4	transducers for the above ports In Situ level trolls mod. 500	1	ea.	\$ 8,117.95	\$ 8,117.95
5	data reduction for conductivity profiles (\$120/hole)	1	hole	\$ 120.00	\$ 120.00
6	lockable wellhead cover for wellhead and transducer cables.	1	ea.	\$ 610.00	\$ 610.00
7	labor for installation Chief Field Engineer	16	hour	\$ 120.00	\$ 1,920.00
	Assistant Field Engineer	16	hour	\$ 78.00	\$ 1,248.00
	Travel time/labor	16	hour	\$ 99.00	\$ 1,584.00
8	<b>Travel Detail</b>				
	<b>item</b>	<b>number</b>	<b>unit price</b>	<b>subtotal</b>	
	air fare	4	\$ 650.00	\$ 2,600.00	
	hotel	4	\$ 111.00	\$ 444.00	
	per diem	12	\$ 71.00	\$ 852.00	
	Rental vehicle	6	\$ 125.00	\$ 750.00	
	POV	60	\$ 0.45	\$ 27.00	
	parking		\$ 8.00	\$ -	
		total	\$ 4,673.00		
			1 ea.	\$ 4,673.00	\$ 4,673.00
9	pump tube or trimmie for Water FLUTE install (reusable)	120	ft	\$ 1.05	\$ 126.00
10	wellhead roller rental	1	month	\$ 550.00	\$ 550.00
11	profiling machine (\$850/hole or \$2700 max for two weeks)	1	hole	\$ 795.00	\$ 795.00
12	winch plate rental	1	month	\$ 340.00	\$ 340.00
13	bubbler monitor rental	1	month	\$ 120.00	\$ 120.00
14	pump plate rental	1	month	\$ 250.00	\$ 250.00
15	Grundfos pump system (pump and controller)	1	trip	\$ 450.00	\$ 450.00
16	liner reels				
			blanks		
			Water FLUTES		
		1	ea.	\$ 45.00	\$ 45.00
		1	ea.	\$ 1,050.00	\$ 1,050.00
17	Shipping	1	ea.	\$ 1,645.00	\$ 1,645.00
18	liners and equip. to site return from the site	1	ea.	\$ 615.00	\$ 615.00

**Total Cost \$ 37,073.95**

**Conditions:**

1. System is warranted to be fully functional when installed by FLUTE
2. Warranty is limited to repair or replacement of goods for manufacturing defects
3. Travel and labor assumes two trips; one for profiling/blank liner install and one for Water FLUTE install.
4. \$850 refund for return of each liner reel.



## EXHIBIT B – SCOPE OF WORK

### General Terms:

FLUTE™ shall furnish all materials, equipment and tools, and perform all necessary labor for the following items of work:

1. Install a blank temporary FLUTE™ liner.
2. Perform hydraulic conductivity profiling. Provide the County with a transmissivity profile of the corehole.
3. Manufacture and install a Water FLUTE™ with 4 ports.

### Site Information and Conditions:

1. The closed Anza Sanitary Landfill is owned by the Riverside County Waste Management Department (County).
2. The landfill is located at 40329 Terwilliger Road, south of the intersection of Terwilliger Road and Wellman Road, in the Anza area of unincorporated Riverside County. A location and vicinity map can be seen in the attached Project Drawings.
3. The landfill can experience severe weather conditions, ranging from freezing/snowing conditions to high temperatures in excess of 100°F. High wind conditions can also exist at the landfill site. FLUTE™ shall be aware of these severe weather conditions and be prepared to work in these conditions.
4. Installation of the blank FLUTE™ liner and Water FLUTE™ liner will occur in August 2010.
5. A 5 to 6-inch diameter conductor casing will exist from the ground surface to a depth of 20 feet below the ground surface.
6. A 4 inch-diameter corehole will exist from a depth of 20 feet below the ground surface to 110 feet below the ground surface. The corehole will be drilled in formation locally referred to as the basement complex. The basement complex consists of igneous and metamorphic rocks composed of granite, tonalite, diorite, gneiss, hornblend and mica schist with xenolith inclusions and pegmatite dikes.

### Materials to be provided by the County:

1. Minimum 200 gallons of potable water to fill the interior of the blank FLUTE™ liner.
2. Minimum 200 gallons of potable water to fill the interior of the Water FLUTE™.
3. 110V AC power supply.
4. Industrial grade compressed nitrogen.
5. The County will transport materials/equipment shipped to the County facility, from the County facility to the project site.

### Materials to be provided/manufactured by FLUTE™:

1. Blank FLUTE™ liner – Provide liner composed of material compatible with chlorinated VOC groundwater contamination. VOC concentrations could be as high as 100 mg/l. The liner shall be new or decontaminated. FLUTE™ shall provide the County with rinsate lab test results that demonstrate that the rinsate does not contain detectable concentrations of EPA Test Method 8260B standard list compounds.
2. Water FLUTE™ liner – Provide a new liner composed of materials compatible with chlorinated VOC groundwater contamination. VOC concentrations could be as high as 100 mg/l. Manufactured with 4 discrete sampling ports, including dedicated pressure transducers. The County will specify the depths of the sampling ports, following review of the transmissivity log.
3. Wellhead Cover – Provide a lockable wellhead cover that is completely integrated with the Water FLUTE™ liner, tether and sample ports.

COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

**GENERAL:** The services set forth in this Agreement shall be furnished by Contractor subject to all the terms and conditions listed here in which Contractor in accepting an order agrees to be bound by and to comply with in all particulars. No other terms or conditions shall be binding upon the parties unless hereafter accepted by them in writing. Written acceptance or the beginning of performance of all or any portion of the services herein shall constitute unqualified acceptance of all these terms and conditions.

**TERMS**

**1.0 CONTRACTING OFFICER:** The County has designated the Purchasing Agent and/or his designee (County).

**2.0 ASSIGNMENT:** Contractor shall not delegate or assign any interest in this Agreement, whether by operation of law or otherwise, without the prior written consent of County.

**3.0 PUBLICATION REPRODUCTION AND USE OF MATERIAL:** The Contractor agrees that all materials, reports or products in any form, including electronic, created by Contractor for which Contractor has been compensated by County pursuant to this Agreement shall be the sole property of the County; and may be used by the County for any purpose County deems to be appropriate, including, but not limit to, duplication and/or distribution within the County or to third parties. Contractor agrees not to release or circulate in whole or part such materials, reports or products without prior written authorization of the County.

**4.0 HOLD HARMLESS/INDEMNIFICATION:** Contractor shall indemnify and hold harmless the County of Riverside, its Agencies, Districts, Special Districts and Departments, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives from any liability, claim, damage or action whatsoever, based or asserted upon any act or omission of Contractor, its officers, employees, subcontractor, agents or representatives arising out of or in any way relating to this Agreement, including but not limited to property damage, bodily injury, or death. Contractor shall defend, at its sole cost and expense, including but not limited to attorney fees, cost of investigation, defense and settlements or awards, the County of Riverside, its Agencies, Districts, Special Districts and Departments, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives in any such action or claim. With respect to any action or claim subject to indemnification herein by Contractor, Contractor shall, at its sole cost, have the right to use counsel of its own choice and shall have the right to adjust, settle, or compromise any such action or claim without the prior consent of County; provided, however, that any such adjustment, settlement or compromise in no manner whatsoever limits or circumscribes Contractor's indemnification of County. Contractor's obligations hereunder shall be satisfied when Contractor has provided to County the appropriate form of dismissal (or similar document) relieving the County from any liability for the action or claim involved. The specified insurance limits required in this Agreement shall in no way limit or circumscribe Contractor's obligations to indemnify and hold harmless the County.

**4.1** In the event there is conflict between this clause and California Civil Code Section 2782, this clause shall be interpreted to comply with Civil Code 2782. Such interpretation shall not relieve the Contractor from indemnifying the County to the fullest extent allowed by law.

**4.2** Contractor's indemnification obligations shall also apply to any action or claim regarding actual or alleged intellectual property infringement related to any material or product provided to County pursuant to this Agreement. In the event of any such action or claim, Contractor shall provide immediate notice to County of the action or claim. Contractor may defend or settle the action or claim as Contractor deems appropriate; however, Contractor shall be required to obtain for County the right to continue to use the

COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

material or product (or a similar non-infringing material or product with the same function) on terms identical to those stated in this Agreement.

**5.0 WAIVER OF DEFAULT:** Any waiver by County of any breach of any one or more of the terms of this Agreement shall not be construed to be a waiver of any subsequent or other breach of the same or of any other term of this Agreement. Failure on the part of County to require exact, full and complete compliance with any terms of this Agreement shall not be construed as in any manner changing the terms or preventing County from enforcement of the terms of this Agreement.

**6.0 AVAILABILITY OF FUNDING:** The County obligation for payment of this Agreement beyond the current fiscal year end is contingent upon and limited by the availability of county funding from which payment can be made. No legal liability on the part of the County shall arise for payment beyond June 30 of each calendar year unless funds are made available for such payment. In the event that such funds are not forthcoming for any reason, County shall immediately notify Contractor in writing; and this Agreement shall be deemed terminated and have no further force and effect.

**7.0 INSPECTION OF SERVICE; QUALITY CONTROL/ASSURANCE:** All performance (which includes services, workmanship, materials, supplies and equipment furnished or utilized in the performance of this Agreement) shall be subject to inspection and test by the County or other regulatory agencies at all times. The Contractor shall provide adequate cooperation to any inspector or other County representative to permit him/her to determine the Contractor's conformity with the terms of this Agreement. If any services performed or products provided by Contractor are not in conformance with the terms of this Agreement, the County shall have the right to require the Contractor to perform the services or provide the products in conformance with the terms of the Agreement at no additional cost to the County. When the services to be performed or the products to be provided are of such nature that the difference cannot be corrected, the County shall have the right to: (1) require the Contractor immediately to take all necessary steps to ensure future performance in conformity with the terms of the Agreement; and/or (2) reduce the Agreement price to reflect the reduced value of the services performed or products provided. The County may also terminate this Agreement for default and charge to Contractor any costs incurred by the County because of the Contractor's failure to perform.

**7.1** Contractor shall establish adequate procedures for self-monitoring and quality control and assurance to ensure proper performance under this Agreement; and shall permit a County representative or other regulatory official to monitor, assess or evaluate Contractor's performance under this Agreement at any time upon reasonable notice to Contractor.

**8.0 TERMINATION:** County may terminate this Agreement without cause upon 30 days written notice served upon the Contractor stating the extent and effective date of termination.

**8.1** County may, upon five (5) days written notice, terminate this Agreement for Contractor's default, if Contractor refuses or fails to comply with the terms of this Agreement or fails to make progress so as to endanger performance and does not immediately cure such failure. In the event of such termination, the County may proceed with the work in any manner deemed proper by County.

**8.2** After receipt of the notice of termination, Contractor shall:

- (a) Stop all work under this Agreement on the date specified in the notice of termination; and
- (b) Transfer to County and deliver in the manner as directed by County any materials, reports or other products which, if the Agreement had been completed or continued, would have been required to be furnished to County.

COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

8.3 After termination, County shall make payment only for Contractor's performance up to the date of termination in accordance with this Agreement and at the rates set forth in the executed Agreement or proposal accepted by the County.

8.4 Contractor's rights under this Agreement shall terminate (except for fees accrued prior to the date of termination) upon dishonesty or a willful or material breach of this Agreement by Contractor; or in the event of Contractor's unwillingness or inability for any reason whatsoever to perform the terms of this Agreement. In such event, Contractor shall not be entitled to any further compensation under this Agreement.

8.5 The rights and remedies of County provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or this Agreement.

9.0 **DISPUTES:** The parties shall attempt to resolve any disputes amicably at the working level. If that is not successful, the dispute shall be referred to the senior management of the parties. Any dispute relating to this Agreement which is not resolved by the parties shall be decided by the County's Compliance Contract Officer who shall furnish the decision in writing. The decision of the County's Compliance Contract Officer shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary, or so grossly erroneous as necessarily to imply bad faith. The Contractor shall proceed diligently with the performance of this Agreement pending the resolution of a dispute.

9.1 Prior to the filing of any legal action related to this Agreement, the parties shall be obligated to attend a mediation session in Riverside County before a neutral third party mediator. A second mediation session shall be required if the first session is not successful. The parties shall share the cost of the mediations.

10.0 **ALTERATION OR CHANGES TO THE AGREEMENT:** The Board of Supervisors and the County Purchasing Agent and/or his designee are the only authorized County representatives who may at any time, by written order, make alterations to this Agreement. If any such alteration causes an increase or decrease in the cost of, or the time required for the performance under this Agreement, an equitable adjustment shall be made in the Agreement price or delivery schedule, or both, and the Agreement shall be modified by written amendment accordingly.

10.1 Any claim by the Contractor for additional payment related to this Agreement shall be made in writing by the Contractor within 30 days of when the Contractor has or should have notice of any actual or claimed change in the work which results in additional and unanticipated cost to the Contractor. If the County Purchasing Agent decides that the facts provide sufficient justification, he may authorize additional payment to the Contractor pursuant to the claim. Nothing in this section shall excuse the Contractor from proceeding with performance of the Agreement even if there has been a change.

11.0 **INDEPENDENT CONTRACTOR:** The Contractor is, for purposes relating to this Agreement, an independent CONTRACTOR and shall not be deemed an employee of the County. It is expressly understood and agreed that the Contractor (including its employees, agents and subcontractors) shall in no event be entitled to any benefits to which County employees are entitled, including but not limited to overtime, any retirement benefits, worker's compensation benefits, and injury leave or other leave benefits. There shall be no employer-employee relationship between the parties; and Contractor shall hold County harmless from any and all claims that may be made against County based upon any contention by a third

COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

party that an employer-employee relationship exists by reason of this Agreement. It is further understood and agreed by the parties that the Contractor in the performance of this Agreement is subject to the control or direction of County merely as to the results to be accomplished and not as to the means and methods for accomplishing the results.

**12.0 SUBCONTRACT FOR WORK OR SERVICES:** No contract shall be made by the Contractor with any other party for furnishing any of the work or services under this Agreement without the prior written approval of the County; but this provision shall not require the approval of contracts of employment between the Contractor and personnel assigned under this Agreement, or for parties named in the proposal and agreed to under this Agreement.

**13.0 INTEREST OF CONTRACTOR:** Contractor shall not provide any services or products subject to any chattel mortgage or under a conditional sales contract or other agreement by which an interest is retained by a third party. The Contractor warrants that it has good title to all materials or products used by Contractor or provided to County pursuant to this Agreement, free from all liens, claims or encumbrances.

**14.0 CONDUCT OF CONTRACTOR:** The Contractor covenants that it presently has no interest, including, but not limited to, other projects or contracts, and shall not acquire any such interest, direct or indirect, which would conflict in any manner or degree with Contractor's performance under this Agreement. The Contractor further covenants that no person or subcontractor having any such interest shall be employed or retained by Contractor under this Agreement. The Contractor agrees to inform the County of all the Contractor's interests, if any, which are or may be perceived as incompatible with the County's interests.

**14.1** The Contractor shall not, under circumstances which could be interpreted as an attempt to influence the recipient in the conduct of his/her duties, accept any gratuity or special favor from individuals or firms with whom the Contractor is doing business or proposing to do business, in accomplishing the work under this Agreement.

**14.2** The Contractor or its employees shall not offer gifts, gratuity, favors, and entertainment directly or indirectly to County employees.

**15.0 NON-DISCRIMINATION:** CONTRACTOR shall not be discriminate in the provision of services, allocation of benefits, accommodation in facilities, or employment of personnel on the basis of ethnic group identification, race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status or sex in the performance of this Agreement; and, to the extent they shall be found to be applicable hereto, shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code 12900 et. seq), the Federal Civil Rights Act of 1964 (P.L. 88-352), the Americans with Disabilities Act of 1990 (42 U.S.C. S1210 et seq.) and all other applicable laws or regulations.

**16.0 DISALLOWANCE:** In the event the Contractor receives payment under this Agreement which is later disallowed by County for nonconformance with the terms of the Agreement, the Contractor shall promptly refund the disallowed amount to the County on request; or at its option the County may offset the amount disallowed from any payment due to the Contractor.

COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

**17.0 GOVERNING LAW/SEVERABILITY:** This Agreement shall be governed by the laws of the State of California. Any legal action related to the performance or interpretation of this Agreement shall be filed only in the Superior Court of the State of California located in Riverside, California, and the parties waive any provision of law providing for a change of venue to another location. In the event any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

**18.0 INSURANCE:** Without limiting or diminishing the Contractor's obligation to indemnify or hold the County harmless, Contractor shall procure and maintain or cause to be maintained, at its sole cost and expense, the following insurance coverage's during the term of this Agreement:

**18.1 Workers' Compensation:** If the Contractor has employees as defined by the State of California, the Contractor shall maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less than \$1,000,000 per person per accident. The policy shall be endorsed to waive subrogation in favor of the County of Riverside, and, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement.

**18.2 Commercial General Liability:** Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products and completed operations liability, personal and advertising injury covering claims which may arise from or out of Contractor's performance of its obligations hereunder. Policy shall name all Agencies, Districts, Special Districts, and Departments of the County of Riverside, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds. Policy's limit of liability shall not be less than \$1,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence limit.

**18.3 Vehicle Liability:** If vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then Contractor shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an amount not less than \$1,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this Agreement or be no less than two (2) times the occurrence limit. Policy shall name all Agencies, Districts, Special Districts, and Departments of the County of Riverside, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds.

**18.4 Professional Liability Insurance (If applicable):** Contractor shall maintain Professional Liability Insurance providing coverage for the Contractor's performance of work included within this Agreement, with a limit of liability of not less than \$1,000,000 per occurrence and \$2,000,000 annual aggregate. If Contractor's Professional Liability Insurance is written on a claims made basis rather than an occurrence basis, such insurance shall continue through the term of this Agreement and Contractor shall purchase at his sole expense either 1) an Extended Reporting Endorsement (also known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) demonstrate through Certificates of Insurance that Contractor has Maintained continuous coverage with the same or original insurer. Coverage provided under items; 1), 2) or 3) will continue for a period of five (5) years beyond the termination of this Agreement.

COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

**18.5 General Insurance Provisions - All lines:**

a) Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are waived, in writing, by the County Risk Manager. If the County's Risk Manager waives a requirement for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

b) The Contractor's insurance carrier(s) must declare its insurance deductibles or self-insured retentions. If such deductibles or self-insured retentions exceed \$500,000 per occurrence such deductibles and/or retentions shall have the prior written consent of the County Risk Manager before the commencement of operations under this Agreement. Upon notification of deductibles or self insured retention's unacceptable to the County, and at the election of the Country's Risk Manager, Contractor's carriers shall either; 1) reduce or eliminate such deductibles or self-insured retention's as respects this Agreement with the County, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.

c) Contractor shall cause Contractor's insurance carrier(s) to furnish the County of Riverside with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, or 2) if requested to do so orally or in writing by the County Risk Manager, provide original Certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that thirty (30) days written notice shall be given to the County of Riverside prior to any material modification, cancellation, expiration or reduction in coverage of such insurance. In the event of a material modification, cancellation, expiration, or reduction in coverage, this Agreement shall terminate forthwith, unless the County of Riverside receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein and the insurance required herein is in full force and effect. *Contractor shall not commence operations until the County has been furnished original Certificate (s) of Insurance and certified original copies of endorsements or policies of insurance including all endorsements and any and all other attachments as required in this Section. An individual authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance.*

d) It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary insurance, and the County's insurance and/or deductibles and/or self-insured retention's or self-insured programs shall not be construed as contributory.

e) The County's Reserved Rights--Insurance. If, during the term of this Agreement or any extension thereof, there is a material change in the scope of services; or, there is a material change in the equipment to be used in the performance of the scope of work (such as the use of aircraft or watercraft) the County reserves the right to adjust the types of insurance required under this Agreement and the monetary limits of liability for the insurance coverage's currently required herein, if; in the County Risk Manager's reasonable judgment, the amount or type of insurance carried by the Contractor has become inadequate.

f) Contractor shall pass down the insurance obligations contained herein to all tiers of subcontractors working under this Agreement.

g) The insurance requirements contained in this Agreement may be met with a program(s) of self-insurance acceptable to the County.

**19.0 AIR, WATER POLLUTION CONTROL, SAFETY AND HEALTH:** Contractor shall comply with all air pollution control, water pollution, safety and health ordinances, statutes or regulations which apply to performance under this Agreement.

COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

**20.0 RIGHT TO ACQUIRE EQUIPMENT AND SERVICES:** Nothing in this Agreement shall prohibit the County from acquiring the same type or equivalent equipment, products, materials or services from other sources, when deemed by the County to be in its best interest. The County reserves the right to purchase more or less than the quantities specified in this Agreement.

**21.0 USE BY POLITICAL ENTITIES:** The Contractor agrees to extend the same pricing, terms and conditions as stated in this Agreement to each and every political entity, special district, and related non-profit entity in Riverside County and under certain circumstances entities located in the State of California. It is understood that other entities shall make purchases in their own name, make direct payment, and be liable directly to the Contractor; and County shall in no way be responsible to Contractor for other entities' purchases.

**22.0 LICENSING AND PERMITS:** Contractor shall comply with all State or other licensing requirements, including but not limited to the provisions of Chapter 9 of Division 3 of the Business and Professions Code. All licensing requirements shall be met at the time proposals are submitted to the County. Contractor warrants that it has all necessary permits, approvals, certificates, waivers and exemptions necessary for performance of this Agreement as required by the laws and regulations of the United States, the State of California, the County of Riverside and all other governmental agencies with jurisdiction, and shall maintain these throughout the term of this Agreement.

**23.0 OSHA Regulations:** Contractor shall comply with all requirements of the Occupational Safety and Health Administration (OSHA) standards and codes as set forth by the U.S. Department of Labor and the State of California (Cal/OSHA).

**24.0 CONFLICT OF INTEREST:** Contractor shall comply with all applicable Federal, State and local laws and regulations. Contractor will comply with all applicable County policies and procedures. In the event that there is a conflict between the various laws or regulations that may apply, the Contractor shall comply with the more restrictive law or regulation.

**25.0 CONTRACTOR'S RESPONSIBILITY:** Contractor represents that it has the skills, experience and knowledge necessary to fully and adequately perform under this Agreement and the County relies upon this representation. Contractor shall perform to the satisfaction of the County and in conformance to and consistent with the highest standards of firms/professionals in the same discipline in the State of California. Acceptance by the County of the Contractor's performance under this Agreement does not operate as a release of Contractor's responsibility for full compliance with the terms of this Agreement.

**25.1** The Contractor shall not use for personal gain or make other improper use of privileged or confidential information which is acquired in connection with this Agreement. The term "privileged or confidential information" includes but is not limited to: unpublished or sensitive technological or scientific information; medical, personnel, or security records; anticipated material requirements or pricing/purchasing actions; County information or data which is not subject to public disclosure; County operational procedures; and knowledge of selection of Contractors, subcontractors or suppliers in advance of official announcement.

**25.2** The Contractor shall protect from unauthorized disclosure names and other identifying information concerning persons receiving services pursuant to this Agreement, except for general statistical information not identifying any person. The Contractor shall not use such information for any purpose other than carrying out the Contractor's obligations under this Agreement. The Contractor shall promptly transmit to the County all third party requests for disclosure of such information. The Contractor shall not disclose,



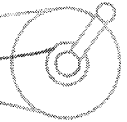
COUNTY OF RIVERSIDE  
GENERAL CONDITIONS - PERSONAL/PROFESSIONAL SERVICES

except as otherwise specifically permitted by this Agreement or authorized in advance in writing by the County, any such information to anyone other than the County. For purposes of this paragraph, identity shall include, but not be limited to, name, identifying number, symbol, or other identifying particular assigned to the individual, such as finger or voice print or a photograph.

**25.3** The Contractor is subject to and shall operate in compliance with all relevant requirements contained in the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Public Law 104-191, enacted August 21, 1996, and the related laws and regulations promulgated subsequent thereto.

**26.0** **FORCE MAJEURE:** If either party is unable to comply with any provision of this Agreement due to causes beyond its reasonable control, and which could not have been reasonably anticipated, such as acts of God, acts of war, civil disorders, or other similar acts, such party shall not be held liable for such failure to comply.

**27.0** **EDD REPORTING REQUIREMENTS:** In order to comply with child support enforcement requirements of the State of California, the County may be required to submit a Report of Independent Contractor(s) form **DE 542** to the Employment Development Department. The Contractor agrees to furnish the required data and certifications to the County within 10 days of notification of award of Agreement when required by the EDD. This data will be transmitted to governmental agencies charged with the establishment and enforcement of child support orders. Failure of the Contractor to timely submit the data and/or certificates required may result in the contract being awarded to another Contractor. In the event a contract has been issued, failure of the Contractor to comply with all federal and state reporting requirements for child support enforcement or to comply with all lawfully served Wage and Earnings Assignments Orders and Notices of Assignment shall constitute a material breach of Agreement. If Contractor has any questions concerning this reporting requirement, please call (916) 657-0529. Contractor should also contact its local Employment Tax Customer Service Office listed in the telephone directory in the State Government section under "Employment Development Department" or access their Internet site at [www.edd.ca.gov](http://www.edd.ca.gov).



## **FLUTE general terms of sale for liner systems, liner installations, and services**

Flexible Liner Underground Technologies, LLC (FLUTE) is a small business founded for the purpose of development of better ground water measurements and other flexible liner applications. FLUTE provides flexible liner systems and liner installations to those referenced herein as customers. Those customers are directly responsible for a clear definition of the service and products to be supplied by FLUTE. FLUTE is responsible for the proper manufacturing and installation of those products. The installation circumstances are highly varied depending upon the geologic circumstances, the borehole condition, and conditions at the time of the installations. This contract describes the general responsibilities of FLUTE to the customer and the limitations of those responsibilities.

### **Manufactured products**

FLUTE uses high quality components in the fabrication of its various systems and will replace any system which is defective due to material or manufacturing faults. This does not imply that the flexible liners can withstand any and all circumstances. In particular, damage due to sharp objects in the borehole (manmade or natural) can be repaired at the customer's expense. If the customer supplies FLUTE with a clear video log of the borehole, FLUTE will determine if there are any obvious hazards not covered by the FLUTE warranty.

FLUTE does not accept any liability for consequential damages due to any failure of its products to perform as expected. FLUTE's liability is limited to the repair or replacement of the product and then only to the limit of the initial purchase price. Current QA/QC procedures have reduced the incidence of manufacturing defects to near zero. A major advantage of the fact that FLUTE liners are removable is that the liners can be examined for the nature of any suspected defect and the warranty can be fairly executed.

### **Notice of liner effects on ground water samples**

Whereas several reports of liner effect on ground water samples are especially erroneous (e.g., Ballesterro, et al paper (2002) comparing several sampling procedures), there are several

interactions of liners with the environment that are listed here for the customers' information. Toluene is used in the manufacture of the high quality coated fabrics used for FLUTE liners. It is seen to leach from the liner materials in small quantities (10-70ppb) for several months. The rate of return to ND levels depends upon the ground water flow conditions. The addition of a diffusion barrier in the standard Water FLUTE spacer design since April 2008 has been shown by extensive tests to prevent diffusion out of the liner and has essentially eliminated the effect, however traces of toluene (< 10 ppb) for a few months are still possible. Another contaminant leached from the liner is due to a small amount of arsenic that is added to the coating material to meet a military specification for prevention of mildew. The leaching of arsenic is also prevented by the diffusion barrier. The toluene and the arsenic are largely removed from the vicinity of the liner and from inclusion in any samples by the extensive purge volume prescribed for sampling Water FLUTE systems. Reports of significant TOC production from earlier liners have been disproven by extensive leaching tests and comparisons of samples from Water FLUTE systems with nearby cluster well concentrations. The standard purging procedure draws the sample water from a substantial distance from the borehole and reduces any borehole effect better than many traditional sampling procedures. If arsenic is a contaminant of concern, FLUTE can use an arsenic free coated fabric for an extra charge. Experience with those liner materials is lacking, but no adverse effects are expected except that mildew formation is likely above the water table.

FLUTE NAPL liner cover dyes are non-toxic and contain no Sudan IV.

#### **Payment of invoices**

FLUTE payment terms are net thirty days after the invoice date, unless special terms have been agreed. Thereafter FLUTE has the right to collect 1.5% per month on any late payments. FLUTE invoices for its products only when shipped or after field services have been provided. Some expenses such as travel expenses and shipping costs are not defined until after the project completion. FLUTE charges the actual expense plus 15% on travel expenses, and actual cost for shipping expenses.

If payment is not received in a reasonable time after due, FLUTE reserves the right to collect those payments plus any costs associated with that collection.

#### **FLUTE labor and labor charges**

FLUTE labor is charged at the quoted rate. FLUTE fielding personnel are trained in the 40 hr. Hazwoper courses and refresher classes required for hazardous site workers. They are also provided the required medical examinations.

#### **FLUTE Insurance and safety record**

FLUTE has the insurance coverage normally required for its operations in the field and the plant. Exceptional liability limits can be provided at the customer's expense. FLUTE has an excellent record of no lost time injuries in 12 years of operations. Safety is a very important matter with FLUTE personnel.

### **Special warranty considerations**

FLUTE provides its standard products manufactured of its standard materials. If special equipment additions are requested, such as the inclusion of pressure transducers in the system, FLUTE provides those additions as a service to the customer and normally at the retail price of the addition. However, the warranty of those additions is only that of the manufacturer. FLUTE does not warrant such additions beyond their being fully functional as tested immediately after installation in the prescribed borehole. Any subsequent performance issues of that equipment not manufactured by FLUTE are the responsibility of the special equipment manufacturer. We recommend that the customer contact the special equipment manufacturer directly for warranty services. Whereas FLUTE can remove a liner system for repair of the special equipment as needed, that removal and repair must be at the customer's expense.

### **FLUTE service in general**

FLUTE is proud of its customer service and the timely repair of any failures of FLUTE products. FLUTE personnel are well trained in the installation of FLUTE systems and are capable of such installations even in very adverse weather conditions. However, in extreme conditions, FLUTE may not be able to perform the work as scheduled. In that case, every effort will be made to reschedule the installations as quickly as possible. Down time for exceptional weather delays or other short delays of FLUTE work while in a fielding situation which are not due to FLUTE, are expected to be paid at half the normal fielding rate. Additional travel expenses due to such delays must also be reimbursed at cost. Additional costs are not expected unless the delay exceeds two hours.

### **Customer provided equipment**

In many cases it is more practical for the customer to provide some of the fielding equipment such as heavy compressors and generators. FLUTE fielding personnel will specify the equipment requirements (e.g., the generator must be able to power the compressor under starting loads, or water hoses of at least 2 inch diameter with 2" camlock fittings). If that agreed equipment is not supplied or is defective and must be obtained by FLUTE in order to perform the work, the extra labor time, travel expenses and rental costs will be billed to the customer as additional reasonable expense.

It is also necessary that the field situation be compatible with the FLUTE equipment provided. A common problem is that the flush mount vault dimensions are too small for the FLUTE equipment. FLUTE will provide a drawing of the necessary minimum vault dimensions. Under special circumstances, FLUTE can provide at a reasonable additional cost custom designed wellhead completions.

In all cases, the fielding preparations should be discussed with the FLUTE engineer who will be doing the field installation (505-883-4032). Normally the FLUTE fielding staff assigned to the installation will contact the customer. The FLUTE staff will provide to the customer a detailed list of the field equipment that he is to provide.

### **Instructions in the use of FLUTE liners**

FLUTE has extensive educational materials for the proper installation of FLUTE liners in those situations where the customer may do the installation (e.g., blank liner installations). FLUTE personnel are available to coach new installers in the proper methods (505-883-4032 or 888-333-2433). If those instructions are not followed carefully, the FLUTE warranty may not cover damage to the FLUTE liner. Particular examples are the installation of liners with excessive head inside the liners, or removal of blank liners with a vehicle instead of a hand winch.

However, all liner installation or removals by other than FLUTE personnel are usually not covered by the general FLUTE warranty. This is especially important for the installation or removal of Water FLUTE systems.

### **Rental equipment**

FLUTE installations usually require the use of special ancillary equipment designed and built by FLUTE. That equipment is relatively expensive to buy and is usually rented to the customer for an installation. The equipment is shipped to the customer by the most economical means compatible with the equipment. It is usually rented for either a 2 week or 1 month period depending upon the device. It must be returned to FLUTE at the customer's expense, within the allotted rental period, and in good repair. Damage by the customer or inadequate packaging will be billed to the customer at a reasonable price to repair the equipment. If FLUTE personnel use the equipment, they will usually arrange for its return shipping. Any ancillary equipment missing in the returned containers will be billed to the customer (e.g., carabiners, snatch blocks, strong rope, winch handles, hoses and fittings, etc...). Normal wear and tear will not be charged to the customer.

### **Other considerations**

It is important that the customer communicate to FLUTE the site circumstances that are important to the FLUTE equipment function and installation. Those facts are such things as the water table in the borehole, whether artesian conditions are known to exist, extreme upward or downward flows observed in the open hole, hole diameter, hole depth, wellhead geometry, and other parameters unique to the liner system to be supplied. It is also useful to provide to FLUTE additional information helpful to assessing the borehole circumstances such as caliper logs of the holes, borehole videos, and the like. Whereas this information is not required, it is helpful to the overall quality and efficiency of installation and performance. For artesian wells or those with very shallow water tables (< 5 ft below the ground surface), it may be necessary to install a weighted-mud fill in the liner after its installation to obtain a sufficient excess head in the liner. That mud fill can be provided at an additional current expense of \$8/ft, at the time of the installation, for liners less than 7 inches in diameter. Temporary blank liners are provided with a special wellhead to allow pressurization of the liner at a modest additional cost for artesian conditions.

11/16/08

Page 5 of 5

