

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS  
ACTION AGENDA SUMMARY

DEPT: Environmental Resources

BOARD AGENDA # \*B-3

Urgent

Routine

AGENDA DATE August 16, 2011

CEO Concurs with Recommendation YES  NO

4/5 Vote Required YES  NO

(Information Attached)

SUBJECT:

Approval to Enter into a Master Agreement with Tetra Tech BAS, Inc., for Professional Design Services at the Geer Road Landfill

STAFF RECOMMENDATIONS:

1. Authorize the Director of Environmental Resources, or her designee, to enter into Master Agreement No. A072711 with Tetra Tech BAS, Inc., for a not to exceed amount of \$667,955 for professional design services at the Geer Road Landfill through June 30, 2012.
2. Authorize the Director of Environmental Resources, or her designee, to sign individual Project Authorizations during Fiscal Year 2011-2012 providing that the cumulative total does not exceed the contract amount of \$667,955.

(Continued next page)

FISCAL IMPACT:

Approval of a Master Agreement with Tetra Tech BAS, Inc., would allow the following services to be performed on the landfill gas system at the Geer Road Landfill: implementation of remedial recommendations necessary to comply with the Cease and Desist Order issued to Stanislaus County on April 8, 2011, as well as the routine operations, maintenance, monitoring, and reporting through June 30, 2012. The remedial recommendations are estimated to not exceed \$181,067.

(Continued next page)

BOARD ACTION AS FOLLOWS:

No. 2011-476

On motion of Supervisor Chiesa, Seconded by Supervisor Withrow

and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, DeMartini, and Chairman Monteith

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1)  Approved as recommended

2)  Denied

3)  Approved as amended

4)  Other:

MOTION:

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

Approval to Enter into a Master Agreement with Tetra Tech BAS, Inc., for Professional Design Services at the Geer Road Landfill

STAFF RECOMMENDATIONS (Continued):

3. Authorize the Director of Environmental Resources, or her designee, to sign amendments to the Master Agreement for an overall total not to exceed amount of \$667,955.

FISCAL IMPACT (Continued):

The operations, maintenance, monitoring, and reporting services also include extensive system tuning, balancing, and evaluation immediately following the remedial work and this is estimated to not exceed \$455,081 through June 30, 2012. All work performed will be authorized under individual Project Authorizations and will be done on a time and materials, not to exceed basis. Finally, a maximum of 5%, or \$31,807 in contract changes, brings the total not to exceed contract amount to \$667,955. Funds for work of this nature at the Geer Road Landfill are available in the Department of Environmental Resources' approved budget for Fiscal Year 2011-2012.

DISCUSSION:

The Department of Environmental Resources (Department), Landfill Division, performs routine maintenance at the Geer Road Landfill (GRLF). For this closed site, however, specialized services and expertise are needed in the area of environmental monitoring, testing, analyzing, and reporting, as well as for ongoing post-closure maintenance activities.

Following a competitive procurement process in 2006, SCS Engineers (SCS) was awarded a three-year Master Agreement in 2007 to provide these specialized services for Stanislaus County. This initial three-year period extended through June 30, 2010. On May 4, 2010, the Board of Supervisors approved the first of two possible one-year extensions to the Agreement. Most recently, the Board approved the final one-year contract extension on April 5, 2011, which extends the contract term through June 30, 2012.

The Board's April 5, 2011, approval authorized the Department Director to sign individual Project Authorizations for SCS, provided they do not exceed the cumulative five-year total contract amount. Correspondingly, Project Authorization No. 07-003, which covers Operations and Maintenance at the GRLF, was increased by \$152,166.36 to cover FY 2011-2012 expenses. Of that amount, \$77,456.66 is estimated to be necessary for Task 4 - Routine Groundwater System Operations and Maintenance. The remaining balance under Task 4 for work not yet completed is \$55,000. The remaining balance for all other Tasks under Project Authorization No. 07-003 for work not yet completed is \$74,709.70. This balance is available to cover expenses through June 30, 2012. Staff anticipates, however, that not all of this amount will be expended. More detail regarding the individual contract Tasks is included below.

As the Board is aware, the Regional Water Quality Control Board (RWQCB) issued a Draft Cease and Desist Order (CDO) to the County for the GRLF on November 22, 2010. Under the direction of County Counsel, the Department contracted with the law firm of Meyers Nave on

Approval to Enter into a Master Agreement with Tetra Tech BAS, Inc., for Professional Design Services at the Geer Road Landfill

December 9, 2010, to represent the County's interests in the CDO proceedings. Meyers Nave is a firm that specializes in environmental compliance issues such as this, and with the County's consent, they retained Bryan A. Stirrat and Associates (BAS), a firm with extensive expertise in landfill corrective action measures, to conduct a peer review of the County's existing consulting firm: SCS Engineers. The goal was to ensure the approach the County believed was correct for the site, was backed up with science and facts and that the County could realistically comply with any work ordered to be performed by the CDO.

The expert witness testimony BAS provided at the CDO proceedings was pivotal in the County's successful effort to convince the RWQCB of the need to focus the majority of its remedial efforts on controlling landfill gas (LFG) as the source of contamination. Following the CDO hearing, the Board approved an amendment to the Meyers Nave contract on April 26, 2011, which included provisions for having BAS perform additional onsite evaluative work in order to develop specific recommendations for optimizing the LFG system as required by the CDO.

BAS completed their recommendations in late May and in early June, the County asked SCS to consider retaining BAS's field services division, Tetra Tech BAS, Inc. (Tetra Tech), as a sub-contractor in order to implement their recommendations. Over the next several weeks, SCS and Tetra Tech attempted to work out a sub-contracting arrangement whereby Tetra Tech would take over specific LFG system tasks for a period of approximately three months. During this period, Tetra Tech would implement their recommended maintenance items and then spend the next several weeks operating, tuning, balancing, and further evaluating the LFG system.

In July, SCS presented Tetra Tech with a draft sub-contracting agreement, however, Tetra Tech found some of the contract conditions to be unfavorable. Considering that time was running short, staff consulted with County Counsel about how best to proceed. County Counsel opined that the best method for completing these tasks was to remove them from the SCS contract for the remainder of the contract period (June 30, 2012), and to contract directly with Tetra Tech for these services.

County Counsel also opined that while County policy requires a competitive bidding process for professional services, statute does not, and that contracting with Tetra Tech directly is warranted for the following reasons: 1) Tetra Tech has specialized expertise in LFG systems; 2) Tetra Tech has already done significant work on this project through their involvement with the RWQCB CDO issue and preparing reports for the County and Meyers Nave; 3) Tetra Tech developed recommendations specific to the GRLF site and their recommendations are best implemented by their own personnel; 4) A significant amount of time has been invested to date and going through the Request for Proposals process is unlikely to produce someone better qualified; and 5) The County has an impending CDO deadline to optimize the LFG system by September 30, 2011.

Staff recommends that Tetra Tech take over Tasks 1, 6, 7, and 8, identified in Table 1 below, from SCS Project Authorization No. 07-003, which would be modified accordingly if the Board

Approval to Enter into a Master Agreement with Tetra Tech BAS, Inc., for Professional Design Services at the Geer Road Landfill

approves this recommendation. The proposed Tetra Tech Master Agreement (Attachment A) has been written to reflect the Tasks identified below.

The County has the ability to terminate the SCS contract in whole or in part under Section 3.3, Term, of their Master Agreement. By the County removing the identified Tasks from Project Authorization 07-003, it will be terminating a portion of the Agreement. All other terms and conditions will remain unchanged as SCS will continue to provide other environmental monitoring and reporting services for both Fink Road and Geer Road Landfills under separate Project Authorizations. Staff has been in discussion with SCS regarding this change, and SCS has agreed to cooperate. The Tasks which will remain with SCS in Project Authorization No. 07-003 are shown in Table 2.

<b>Table 1 Tasks to be Removed from the SCS Contract and Assigned to Tetra Tech</b>	
Task No.	Task Description
Task 1	Routine Operation, Monitoring, and Maintenance (including reporting)
Task 6	Routine Quarterly RWQCB Reporting
Task 7	LFG Non-routine Emergency Services*
Task 8	LFG Non-routine Scheduled Services*

\*Tasks 7 and 8 will now be split into LFG and groundwater non-routine emergency services and non-routine scheduled services, with SCS retaining the groundwater services.

<b>Table 2 Tasks to be Retained in the SCS Contract Project Authorization No. 07-003</b>	
Task No.	Task Description
Task 2	LFG Surface Emissions Testing and Reporting
Task 3	Flare Emissions Testing and Reporting
Task 4	Routine Groundwater System O&M
Task 5	Title V Compliance Reporting Services
Task 7	Groundwater Non-routine Emergency Services
Task 8	Groundwater Non-routine Scheduled Services

**Approval to Enter into a Master Agreement with Tetra Tech BAS, Inc., for Professional Design Services at the Geer Road Landfill**

**POLICY ISSUE:**

Approval of this agenda item to enter into a Master Agreement with Tetra Tech BAS, Inc., for specialized operations, maintenance, monitoring, and reporting services at the Geer Road Landfill is consistent with the Board's priorities of A Safe Community, A Healthy Community, A Well Planned Infrastructure System, and the Efficient Delivery of Public Services. These services are critical to supporting the Department's mission to promote a safe and healthy environment and improve the quality of life in the community through a balance of science, education, partnerships, and environmental regulation.

**STAFFING IMPACTS:**

There are no staffing impacts associated with this item. Contract oversight and management will be provided by existing staff from the Department of Environmental Resources.

**CONTACT PERSON:**

Jami Aggers, Assistant Director of Environmental Resources  
Telephone: 209-525-6770



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**STANISLAUS COUNTY**  
**MASTER AGREEMENT**  
**FOR**  
**PROFESSIONAL DESIGN SERVICES**

**ATTACHMENT A**

This Master Agreement is made and entered into by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as "County" and Tetra Tech BAS Inc., hereinafter referred to as "Consultant".

**WHEREAS**, the County has an existing Cease and Desist Order from the Regional Water Board, and the County acknowledges that Consultant is taking over a Landfill Gas (LFG) collection and control system that is not currently operating at its optimum and has been hired for the specific purpose of bringing the LFG system to its optimum, within the existing capabilities of the of the system; and

**WHEREAS**, the County has a need for Consultant services involving numerous and different tasks and projects related to the County's Geer Road Landfill and the operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, landfill gas (LFG) collection and control system, to help control LFG migration, as identified in the below Scope of Work and in **Exhibits A and B**, hereby attached and made a part hereof this Agreement; and

**WHEREAS**, the Consultant is specially trained, experienced and competent to perform and has agreed to provide such services; and

**WHEREAS**, SCS Engineers is a third party beneficiary of this contract; and

**WHEREAS**, the Consultant is required to cooperate and coordinate with SCS Engineers in the performance of the work and show proof to the County that the cooperation and coordination is taking place; and

**WHEREAS**, the County and the Consultant wish to execute one agreement that shall govern all of the work or services provided by the Consultant during the term of this Agreement

**NOW, THEREFORE**, for and in consideration of the mutual covenants and conditions contained herein, the parties hereby agree as follows:

**1.0 PROFESSIONAL SERVICES TO BE PROVIDED BY CONSULTANT**

1.1. Scope of Services: Consultant shall provide the professional services described in the Scope of Work attached hereto as Exhibits "A and B".

1.2. The Consultant shall furnish to the County upon receipt of the County's written authorization to proceed, those services and work set forth in the "Project Authorization - Scope of Work" separately approved for each project or task being provided by the Consultant, which Scope of Work are, by this reference, made a part hereof.

1.3. Each project added to and to be performed under this Agreement shall be separately approved by the parties. A Project Authorization issued by the County Department of Environmental Resources Director or her designee, shall approve each project where the cost of work or services does not exceed the total limit of expenditure for this Agreement; projects greater than the total not to exceed

limit of this Agreement shall be approved by resolution of the Board of Supervisors for the County.

1.4. Professional Practices: All professional services to be provided by Consultant pursuant to this Agreement shall be provided by personnel experienced in their respective fields and in a manner consistent with the standards of care, diligence and skill ordinarily exercised by professional consultants in similar fields and circumstances in accordance with sound professional practices. Consultant also represents that it is familiar with all laws that may affect its performance of this Agreement and shall advise County of any changes in any laws that may affect Consultant's performance of this Agreement.

1.5. Representations: Consultant represents that it has reviewed the Scope of Work and that in its professional judgment the services to be performed under this Agreement can be performed within the maximum fee set forth herein below and within the time specified in the Project Schedule attached hereto. Consultant represents that it is qualified to perform the professional services required by this Agreement and possesses the necessary licenses and permits required to perform said services. Consultant represents that it has no interest and shall not acquire any interest direct or indirect which conflicts, or has the appearance of conflicting, in any manner or degree with the performance of the work and services under this Agreement.

1.6. Compliance with Laws. Consultant agrees that it shall perform the services required by this Agreement in compliance with all applicable Federal and California laws including, but not limited to, those laws related to minimum hours and wages; occupational health and safety; fair employment and employment practices; workers' compensation insurance and safety in employment; and all other Federal, State and local laws and ordinances applicable to the services required under this Agreement.

1.7. Non-Discrimination. During the performance of this Agreement, Consultant and its officers, employees, agents, representatives or subcontractors shall not unlawfully discriminate in violation of any federal, state or local law, rule or regulation against any employee, applicant for employment or person receiving services under this Agreement because of race, religion, color, national origin, ancestry, physical or mental disability, medical condition (including genetic characteristics), marital status, age, political affiliation, sex or sexual orientation. Consultant and its officers, employees, agents, representatives or subcontractors shall comply with all applicable Federal, State and local laws and regulations related to non-discrimination and equal opportunity, including without limitation the County's nondiscrimination policy; the Fair Employment and Housing Act (Government Code sections 12900 et seq.); California Labor Code sections 1101, 1102 and 1102.1; the Federal Civil Rights Act of 1964 (P.L. 88-352), as amended; and all applicable regulations promulgated in the California Code of Regulations or the Code of Federal Regulations.

1.8. Non-Exclusive Agreement. Consultant acknowledges that County may enter into agreements with other consultants for services similar to the services that are subject to this Agreement or may have its own employees perform services similar to those services contemplated by this Agreement.

1.9. Delegation and Assignment. This is a personal service contract, and the duties set forth herein shall not be delegated or assigned to any person or entity without the prior written consent of County. Consultant may engage a subcontractor(s) as permitted by law and may employ other personnel to perform services contemplated by this Agreement at Consultant's sole cost and expense.

1.10. Covenant Against Contingent Fees. Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the consultant; to solicit or secure this agreement; and that he/she has not paid or agreed to pay any company or person other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award, or formation of this agreement. For breach or violation of this warranty, the local agency shall have the right to annul this agreement without liability, or at its discretion; to deduct from the agreement price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

**2.0 COMPENSATION AND BILLING**

2.1. Compensation. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "C", attached hereto and made a part of this Agreement (the "Fee Schedule") and for the tasks set forth on separately approved project authorizations or scope of work.. Consultant's compensation shall in no case exceed **Six-Hundred-Sixty-Seven Thousand Nine-Hundred Fifty-Five Dollars (\$667,955.00)**. Consultant will be compensated on a time and materials basis, based on the hours worked by the Consultant's employees or subcontractors at the hourly rates specified in the Fee Schedule. The Fee Schedule rates include direct salary costs, employee benefits, and overhead. The rates stated in the Fee Schedule are not adjustable during the term of this Agreement. The County may retain ten percent of all periodic or progress payments made to the Consultant until completion and acceptance of all work tasks and County shall have right to withhold payment from Consultant for any unsatisfactory service until such time service is performed satisfactorily.

2.2. Reimbursements. In addition to the aforementioned fees, Consultant will be reimbursed for any expenses specifically set forth in each Project Scope of Work. All such reimbursement amounts are limited to those costs and expenses that are reasonable, necessary and actually incurred by the Consultant in connection with the services provided. The County shall not pay a mark up on any item of reimbursement. The County shall not pay for any item of overhead such as cell phone, telephone, facsimile, postage, insurance, equipment maintenance, etc. All requests for reimbursement shall be accompanied by a copy of the original invoice.

2.3. Additional Services. Consultant shall not receive compensation for any services provided outside the scope of services specified in Exhibit A or scope of work contained within a separately approved Project Authorization (Exhibit B), attached hereto and made a part of this Agreement, unless the County, prior to Consultant performing the additional services, approves such additional services in writing by means of an amendment. It is specifically understood that oral requests and/or approvals of such additional services or additional compensation shall be barred and are unenforceable.

2.4. Method of Billing. Consultant may submit invoices to County's Project Manager for approval on a progress basis, but no more often than once each calendar month. Said invoice shall be based on the total of all Consultants' services that have been completed to County's sole satisfaction. County shall pay Consultant's invoice within forty-five (45) days from the date County receives said invoice. Each invoice shall describe in detail, the services performed and the associated percentage of tasks completed. Any additional services approved and performed pursuant to this Agreement shall be designated as "Additional Services" and shall identify the number of the authorized change order, where applicable, on all invoices.

2.5. Records and Audits. Records of Consultant's services relating to this Agreement shall be maintained in accordance with generally recognized accounting principles and shall be made available to County or its Project Manager for inspection and/or audit at mutually convenient times for a period of three (3) years from the termination of this Agreement.

**3.0 TIME OF PERFORMANCE**

3.1. Commencement and Completion of Work. The professional services to be performed pursuant to this Agreement shall commence within five (5) days after County delivers its Notice to Proceed. Said services shall be performed in strict compliance with each separately approved Project Authorization schedule. The Project Schedule may be amended by mutual agreement of the parties. Failure to commence work in a timely manner and/or diligently pursue work to completion may be grounds for termination of this Agreement.

3.2. Excusable Delays. Neither party shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts shall include, but not be limited to, acts of God, fire, strikes, material shortages, compliance with laws or regulations, riots, acts of war, or any other conditions beyond the reasonable control of a party.



**4.0 TERM OF CONTRACT AND TERMINATION**

4.1. Term. This Agreement shall commence upon approval by the County's Board of Supervisors and continue until the work required under each separately approved project authorization let during the term of this Agreement is completed, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

4.2. Notice of Termination. The County reserves and has the right and privilege of canceling, suspending or abandoning the execution of all or any part of the work contemplated by this Agreement, with or without cause, at any time, by providing written notice to Consultant. The termination of this Agreement shall be deemed effective upon receipt of the notice of termination. In the event of such termination, Consultant shall immediately stop rendering services under this Agreement unless directed otherwise by the County.

4.3. Compensation. In the event of termination, County shall pay Consultant for reasonable costs incurred and professional services satisfactorily performed up to and including the date of County's written notice of termination. Compensation for work in progress shall be prorated as to the percentage of work completed as of the effective date of termination in accordance with the fees set forth in Exhibit "C. In ascertaining the professional services actually rendered hereunder up to the effective date of termination of this Agreement, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents pertaining to the services contemplated herein whether delivered to the County or in the possession of the Consultant.

4.4. Documents. In the event of termination of this Agreement, all documents prepared by Consultant in its performance of this Agreement including, but not limited to, finished or unfinished design, development and construction documents, data studies, drawings, maps and reports, shall be delivered to the County within ten (10) days of delivery of termination notice to Consultant, at no cost to County. Any use of uncompleted documents without specific written authorization from Consultant shall be at County's sole risk and without liability or legal expense to Consultant.

**5.0 INSURANCE REQUIREMENTS**

5.1. Minimum Scope and Limits of Insurance. Consultant, at its sole cost and expense, for the full term of this Agreement (and any extensions thereof), shall obtain and maintain, at minimum, compliance with all of the following insurance coverage(s) and requirements. If Consultant normally carries insurance in an amount greater than the minimum amount listed below, that greater amount shall become the minimum required amount of insurance for purposes of this Agreement. The insurance listed below shall have a retroactive date of placement prior to, or coinciding with, the date services are first provided that are governed by the terms of this Agreement:

- (a) Comprehensive general liability, including premises-operations, products/ completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury with a policy limit of not less than Two Million Dollars (\$2,000,000.00), combined single limits, per occurrence and aggregate. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to any act or omission by Consultant under this Agreement or the general aggregate limit shall be twice the required occurrence limit.
- (b) Automobile liability for owned vehicles, hired, and non-owned vehicles, with a policy limit of not less than One Million Dollars (\$1,000,000.00), combined single limits, per occurrence and aggregate.
- (c) Workers' compensation insurance as required by the State of California.
- (d) Professional errors and omissions ("E&O") liability insurance with policy limits of not less than Two Million Dollars (\$2,000,000.00), combined single limit for each occurrence. If Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering

claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than three years following Final Completion of the Project.

5.2. Endorsements. The Consultant shall obtain a specific endorsement to all required insurance policies, except Professional Liability insurance, naming the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers as additional insureds for at least three years after the completion of the work to be performed under this Agreement, but, to the extent that any insurance issued to Consultant in effect after the expiration of three years provides additional insured coverage to parties Consultant agreed in writing to name as an additional insured, then Consultant shall have the obligation under this contract to obtain such additional insured coverage for the County, under any and all policies Consultant has regarding:

- (a) Liability arising from or in connection with the performance or omission to perform any term or condition of this Agreement by or on behalf of the Consultant, including the insured's general supervision of its subcontractors;
- (b) Ongoing services, products and completed operations of the Consultant;
- (c) Premises owned, occupied or used by the Consultant; and
- (d) Automobiles owned, leased, hired or borrowed by the Consultant.
- (e) For Workers' Compensation insurance, the insurance carrier shall agree to waive all rights of subrogation against the County, its officers, officials and employees for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Consultant.

5.3. Deductibles: Any deductibles, self-insured retentions or named insureds must be declared in writing and approved by County. At the option of the County, either: (a) the insurer shall reduce or eliminate such deductibles, self-insured retentions or named insureds, or (b) the Consultant shall provide a bond, cash, letter of credit, guaranty or other security satisfactory to the County guaranteeing payment of the self-insured retention or deductible and payment of any and all costs, losses, related investigations, claim administration and defense expenses. The County, in its sole discretion, may waive the requirement to reduce or eliminate deductibles or self-insured retentions, in which case, the Consultant agrees that it will be responsible for and pay any self-insured retention or deductible and will pay any and all costs, losses, related investigations, claim administration and defense expenses related to or arising out of the Consultant's defense and indemnification obligations as set forth in this Agreement.

5.4. Certificates of Insurance: At least ten (10) days prior to the date the Consultant begins performance of its obligations under this Agreement, Consultant shall furnish County with certificates of insurance, and with original endorsements, showing coverage required by this Agreement, including, without limitation, those that verify coverage for subcontractors of the Consultant. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements shall be received and, in County's sole and absolute discretion, approved by County. County reserves the right to require complete copies of all required insurance policies and endorsements, at any time.

5.5. Non-limiting: Nothing in this Section or the insurance described herein shall be construed as limiting in any way, the indemnification provisions contained in this Agreement, or the liability of Consultant and Consultant's officers, employees, agents, representatives or subcontractors for payments of damages to persons or property.

5.6. Primary Insurance: The Consultant's insurance coverage shall be primary insurance regarding the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers. Any insurance or self-insurance maintained by the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers shall be excess of the Consultant's insurance and shall not contribute with Consultant's insurance. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or its officers, officials and employees. The Consultant'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. Any and all insurances cared by it shall be deemed liability coverage for any and all actions it performs in connection with this Contract.

5.7. Cancellation of Insurance: Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party except after thirty (30) days prior written notice has been given to County. The Consultant shall promptly notify, or cause the insurance carrier to promptly notify, the County of any change in the insurance policy or policies required under this Agreement, including, without limitation, any reduction in coverage or in limits of the required policy or policies. Consultant shall maintain such coverage in effect for three (3) years after substantial completion of the project to the extent it is commercially available at reasonable rates.

5.8. California Admitted Insurer: Insurance shall be placed with California admitted insurers (licensed to do business in California) with a current rating by Best's Key Rating Guide of no less than A-:VII; provided, however, that if no California admitted insurance company provides the required insurance, it is acceptable to provide the required insurance through a United States domiciled carrier that meets the required Best's rating and that is listed on the current List of Eligible Surplus Line Insurers maintained by the California Department of Insurance.

5.9. Subcontractors: Consultant shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein, or shall include all subcontractors as additional insureds under its insurance policies.

## 6.0 INDEMNIFICATION

6.1. Indemnification: To the fullest extent allowed by law, Consultant shall defend, indemnify, and hold harmless the County and its officers, directors, officials, agents, employees, volunteers and representatives (collectively, "Indemnitee") from and against any and all claims, suits, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, (collectively, "losses") which are founded upon, arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the alleged negligence, recklessness, or willful misconduct of Consultant, its officers, agents, employees, volunteers, representatives, contractors and subcontractors, excluding, however, such liabilities caused in part by the sole negligence, active negligence or willful misconduct of the County, its agents, employees, and representatives. These indemnification obligations shall not be limited by any assertion or finding that (1) the person or entity indemnified is liable by reason of non-delegable duty, or (2) the losses were caused in part by the negligence of, breach of contract by, or violation of law by Indemnitee. Nothing in this Agreement, including the provisions of this paragraph, shall constitute a waiver or limitation of any rights which Indemnitee may have under applicable law, including without limitation, the right to implied indemnity.

6.2. Duty to Defend: The duty of Consultant to indemnify and save harmless as set forth herein, shall include both the duty to indemnify and at Consultant's own cost and expense the duty to defend as set forth in Section 2778 of the California Civil Code and as limited in section 2782.8 of the California Civil Code. This duty to defend arises immediately when such claim is made and shall be independent of any finding of negligence and shall arise regardless of any claim or assertion that Indemnitee caused or contributed to the Losses. Consultant shall provide legal counsel acceptable to the County.

6.3. Duty to Cooperate: Each party shall notify the other party within ten (10) days in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Consultant shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

6.4. Patent Rights: Consultant represents that professional services provided by Consultant pursuant to this Agreement does not infringe on any other copyrighted work. Consultant shall defend, indemnify and hold harmless the County from all loss, cost, damage, expense, liability or claims, including attorneys' fees, court costs, litigation expenses and expert consultant or witness fees, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark,

service mark or any other proprietary right of any person or persons in consequence of the use by the County of any articles or services supplied under this agreement.

6.5. The foregoing provisions shall survive the term and termination of this Agreement.

## 7.0 GENERAL PROVISIONS

7.1. Entire Agreement: This Agreement constitutes the entire Agreement between the parties with respect to any matter referenced herein and supersedes any and all other prior writings and oral negotiations. This Agreement may be modified only in writing, and signed by the parties in interest at the time of such modification. The terms of this Agreement shall prevail over any inconsistent provision in any other contract document appurtenant hereto, including exhibits to this Agreement.

7.2. Representatives. The Director of the Stanislaus County Department of Environmental Resources, or her designee, shall be the representative of County for purposes of this Agreement and may issue all consents, approvals, directives and agreements on behalf of the County, called for by this Agreement, except as otherwise expressly provided in this Agreement. Consultant shall designate a representative for purposes of this Agreement who shall be authorized to issue all consents, approvals, directives and agreements on behalf of Consultant called for by this Agreement, except as otherwise expressly provided in this Agreement.

7.3. Project Managers. County shall designate a Project Manager to work directly with Consultant in the performance of this Agreement. Consultant shall designate a Project Manager who shall represent it and be its agent in all consultations with County during the term of this Agreement. Consultant or its Project Manager shall attend and assist in all coordination meetings called by County.

7.4. Designated Personnel: A material covenant of this agreement is that the Consultant shall assign the individuals designated below to perform the functions designated so long as they continue in the employ of the Consultant. The designated individuals shall, so long as their performance continues to be acceptable to County, remain in charge of the services for the Project from beginning through completion of services.

- a. LFG Project Manager: Ghassan Andraos; and
- b. Principal in Charge: Bryan A. Stirrat, P.E.

7.5. Removal of Personnel or Sub-Consultants: If the County, in its sole discretion at any time during the term of this agreement, desires the removal of any person or sub-consultant assigned by Consultant to perform services, then the Consultant shall remove such person or consultant immediately upon receiving notice from the County.

7.6. Notices: Any notices, documents, correspondence or other communications concerning this Agreement or the work hereunder may be provided by personal delivery, facsimile or mail and shall be addressed as set forth below. Such communication shall be deemed served or delivered: a) at the time of delivery if such communication is sent by personal delivery; b) at the time of transmission if such communication is sent by facsimile; and c) 48 hours after deposit in the U.S. Mail as reflected by the official U.S. postmark if such communication is sent through regular United States mail.

### **If to County:**

Stanislaus County  
Department of Environmental Services  
3800 Cornucopia Way, Suite C  
Modesto, CA 95376  
Attn: Susan M. Garcia, C.P.M.

### **If to Consultant:**

Tetra Tech BAS Inc.  
1360 Valley Vista Drive  
Diamond Bar, CA 91765  
Attn: Bryan A. Stirrat, P.E.

7.7. Attorneys' Fees: In the event that litigation is brought by any party in connection with this Agreement, the prevailing party shall be entitled to recover from the opposing party all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party in the exercise of any of its rights or remedies hereunder or the enforcement of any of the terms, conditions, or provisions hereof.

7.8. Governing Law: This Agreement shall be governed by and construed under the laws of the State of California without giving effect to that body of laws pertaining to conflict of laws. In the event of any legal action to enforce or interpret this Agreement, the parties hereto agree that the sole and exclusive venue shall be a court of competent jurisdiction located in Stanislaus County, California.

7.9. Assignment: Consultant shall not voluntarily or by operation of law assign, transfer, sublet or encumber all or any part of Consultant's interest in this Agreement without County's prior written consent. Any attempted assignment, transfer, subletting or encumbrance shall be void and shall constitute a breach of this Agreement and cause for termination of this Agreement. Regardless of County's consent, no subletting or assignment shall release Consultant of Consultant's obligation to perform all other obligations to be performed by Consultant hereunder for the term of this Agreement.

7.10. Independent Contractor: Consultant is and shall be acting at all times as an independent contractor and not as an employee of County. Consultant shall secure, at his expense, and be responsible for any and all payment of Income Tax, Social Security, State Disability Insurance Compensation, Unemployment Compensation, and other payroll deductions for Consultant and its officers, agents, and employees, and all business licenses, if any are required, in connection with the services to be performed hereunder. Consultant hereby indemnifies and holds County harmless from any and all claims that may be made against County based upon any contention by any third party that an employer-employee relationship exists by reason of this Agreement.

7.11. Confidentiality: The Consultant agrees to keep confidential all information obtained or learned during the course of furnishing services under this Agreement and to not disclose or reveal such information for any purpose not directly connected with the matter for which services are provided.

7.12. Ownership of Documents: Any interest, including copyright interests, of Consultant or its contractors or subconsultants in studies, reports, memoranda, computational sheets, drawings, plans or any other documents, including electronic data, prepared in connection with the Services, shall be the property of County. To the extent permitted by law, work product produced under this Agreement shall be deemed works for hire and all copyrights in such works shall be the property of the County. In the event that it is ever determined that any works created by Consultant or its subconsultants under this Agreement are not works for hire, Consultant hereby assigns to County all copyrights to such works. With the County's prior written approval, Consultant may retain and use copies of such works for reference and as documentation of experience and capabilities.

7.13. Reuse of Design Documents: Should the County desire to reuse the documents specified above and not use the services of the Consultant, then the County agrees to require the new consultant to assume any and all obligations for the reuse of the documents, and the County releases Consultant and its subconsultants from all liability associated with the reuse of such documents.

7.14. Public Records Act Disclosure: Consultant has been advised and is aware that all reports, documents, information and data including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, and provided to County may be subject to public disclosure as required by the California Public Records Act (California Government Code Section 6250 et. seq.). Exceptions to public disclosure may be those documents or information that qualifies as trade secrets, as that term is defined in the California Government Code Section 6254.7, and of which Consultant informs County of such trade secret. The County will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The County shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

7.15. Responsibility for Errors: Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

7.16. Order of Precedence: In the event of an inconsistency in this Agreement and any of the attached Exhibits, the terms set forth in this Agreement shall prevail. If, and to the extent this Agreement incorporates by reference any provision of the RFP or the Response, such provision shall be deemed a part of this Agreement. Nevertheless, if there is any conflict among the terms and conditions of this Agreement and those of any such provision or provisions so incorporated by reference, this Agreement shall govern over both the Response and the RFP and the Response shall govern over the RFP.

7.17. Costs: Each party shall bear its own costs and fees incurred in the preparation and negotiation of this Agreement and in the performance of its obligations hereunder except as expressly provided herein.

7.18. No Third Party Beneficiary Rights: This Agreement is entered into for the sole benefit of County and Consultant and no other parties are intended to be direct or incidental beneficiaries of this Agreement and no third party shall have any right in, under or to this Agreement.

7.19. Construction: The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

7.20. Amendments: This Agreement may be amend only by a writing executed by the parties hereto or their respective successors and assigns.

7.21. Waiver: The delay or failure of either party at any time to require performance or compliance by the other of any of its obligations or agreements shall in no way be deemed a waiver of those rights to require such performance or compliance. No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the party against whom enforcement of a waiver is sought. The waiver of any right or remedy in respect to any occurrence or event shall not be deemed a waiver of any right or remedy in respect to any other occurrence or event, nor shall any waiver constitute a continuing waiver.

7.22. Severability: If any provision of this Agreement is determined by a court of competent jurisdiction to be unenforceable in any circumstance, such determination shall not affect the validity or enforceability of the remaining terms and provisions hereof or of the offending provision in any other circumstance. Notwithstanding the foregoing, if the value of this Agreement, based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

7.23. Counterparts: This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

7.24. Corporate Authority: The persons executing this Agreement on behalf of the parties hereto warrant that they are duly authorized to execute this Agreement on behalf of said parties and that by doing so, the parties hereto are formally bound to the provisions of this Agreement.

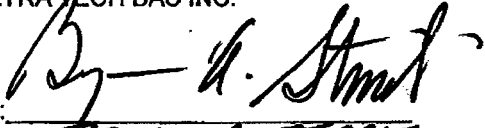
*(Signatures on the next page)*

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by and through their respective authorized officers:

COUNTY OF STANISLAUS  
Department of Environmental Resources

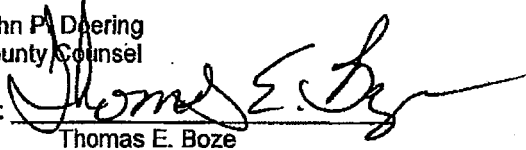
TETRA TECH BAS INC.

By: \_\_\_\_\_  
Sonya K. Harrigfeld  
Director

By:   
Name: BRYAN A. STREET  
Corporate Title PRESIDENT

APPROVED AS TO FORM:

John P. Deering  
County Counsel

By:   
Thomas E. Boze  
Deputy County Counsel

**EXHIBIT A****SCOPE OF WORK**

**Operation, Maintenance and Repair Services  
At  
Geer Road Landfill**

**BACKGROUND**

The Geer Road Landfill is located approximately 10 miles southeast of the City of Modesto in Stanislaus County, on the northern bluff of Stanislaus River in central Stanislaus County. The 176-acre site is jointly owned by Stanislaus County and the City of Modesto. It is classified as a Class III landfill and is currently closed.

When the landfill was in active operation, it was operated by the Stanislaus County Department of Public Works, and accepted municipal and cannery wastes, from November 1970, until July 1990. The site operated as an area/trench fill sanitary landfill between 1970 and 1990. Approximately 144 acres (footprint) were used for refuse disposal. An estimated 4.5 million tons of municipal solid wastes were disposed of at the site. The maximum depth of refuse is estimated to range between 50-60 feet. The Stanislaus County Department of Environmental Resources currently maintains the landfill as a closed facility.

The site is within a meander bend of the Tuolumne River. The landfill was capped in 1995 with a final cover system, a geomembrane on the top deck and clay on the side slopes. The final cover is a modified California Title 23, Chapter 15 design. The top deck cover (approximately 51 acres) consists of a 1-foot foundation layer overlain by a 60-mil High Density Polyethylene (HDPE) geo-membrane that is protected by a 1-foot thick vegetative cover layer. The side-slope has a 1-foot clay barrier in place of the HDPE. The cap was installed to divert rainfall from the landfilled waste and to reduce the generation of leachate. A landfill gas (LFG) extraction system was installed in two phases, with two well fields covering the site, in 1992 and 1995.

On April 24, 2009, the Regional Water Quality Control Board (RWQCB) issued new Waste Discharge Requirements (WDR) and associated Monitoring Response Plan (MRP) Order No. R5-2009-0051 for the Geer Road Landfill. The County was in the process of complying with the requirements of the new WDRs when on April 8, 2011, the RWQCB issued a Cease and Desist Order R5-2011-0021 to the County, which required that the County optimize the existing LFG collection and control system and submit a LFG Extraction System Optimization Report by September 30, 2011. On April 8, 2011, the RWQCB also issued a revised MRP Order No. R5-2011-0022.

On December 9, 2010, the County contracted with Meyers Nave Riback Silver & Wilson, to provide legal advice related to the Geer Road Landfill Cease and Desist Order. Meyers Nave Riback Silver & Wilson, retained Bryan A. Stirrat and Associates on behalf of the County to review existing site data and conduct certain environmental investigations, and develop remedial recommendations for the site. On May 18, 2011, Bryan A. Stirrat and Associates recommended certain remedial action be taken by the County.

**A. SCOPE OF WORK**

This Master Agreement is for operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, landfill gas (LFG) collection and control system and Consultant shall perform the operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, LFG collection and control system, and the extraction well and flare analytical sampling in accordance with the current WDR" to help control LFG migration.

Individually written and executed Project Authorizations (Exhibit B) shall be issued by the County to authorize the work specified in each individual Project Authorization. All terms and conditions in the



Master Agreement shall apply to the Project Authorization. As each project is authorized against this Master Agreement, the Consultant shall develop the project cost based on the unit/task price/rates outlined in the Master Agreement - Exhibit C.

The Consultant shall provide all the labor, material, supplies, tools, license, permits and equipment to perform consultant services involving numerous and different tasks and projects related to the County's Geer Road Landfill, LFG collection and control system. Consultant services shall include monitoring, testing, analyzing and reporting on the LFG system and Consultant shall perform the operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, LFG collection and control system to help control LFG Migration.

All work performed by the Consultant under this Agreement, shall be performed in a manner to bring the County into compliance with the Regional Water Quality Control Board (RWQCB) requirements including the existing Waste Discharge Requirements (WDRs), Monitoring and Reporting Program (MRP) requirements, and the RWQCB Standard Provisions. Operation, monitoring, and maintenance work performed under this Agreement shall be performed in a manner to bring the County into compliance with the operational goals established by the system design engineer, San Joaquin Valley Unified Air Pollution Control District (APCD) and with the rules and regulations of applicable state and local agencies, and other regulatory agencies for control of subsurface LFG migration, surface emissions, as well as, environmental and regulatory reporting requirements.

**B. SERVICE REQUIREMENT**

1. Professional Requirement

The practice of geology must be performed by professional geologists within the meaning of the Business and Professions Code, Division 3, chapter 12.5 (commencing with section 7800). The practice of engineering must be conducted by professional engineers within the meaning of the Business and Professions Code, division 3, chapter 7 (commencing with section 6700). The Business and Professions Code requires all geologic plans and reports and all engineering plans and reports to be prepared by or under the direction of a registered geologist or engineer, respectively, and these plans and reports must be signed by the registered professional in responsible charge.

2. Labor Code Compliance

Prevailing Wage Pursuant to Labor Code Section 1771, certain work under this Agreement is subject to the provision of Article 2 (commencing with section 1770) of Chapter 1 of Part 7 of Division 2 of the Labor Code, and the Consultant shall pay all workers the general prevailing rate per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday and holiday work. These wage rates, which are set forth by the Director of the Department of Industrial Relations, are now on file with the Department of Public Works and are a part of this Agreement. The Consultant shall post a copy of these prevailing wage rates on the job site.

a. Payroll Records Pursuant to and in accordance with the provisions Labor Code Section 1776, the Consultant shall keep accurate payroll records of employees performing work under this Agreement and shall make available for inspection a certified copy such payroll records.

b. 8 Hour Day Pursuant to and in accordance with the provisions of Labor Code Section 1810, 1811 and 1815, the time of service of any laborer, workman, or mechanic employed upon any of the work under this Agreement is limited and restricted to eight (8) hours during any one calendar day, and 40 hours during any one calendar week, except that work performed by employees of contractors in excess of eight (8) hours per day and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

c. Apprentices The Consultant shall comply with all applicable provisions of the Labor Code, including without limitations Section 1777.5 and 1777.6, related to employment of apprentices by the

Consultant and all subcontractors, and Consultant shall be subject to all applicable penalties for non-compliance.

d. Penalties The Consultant shall comply with Labor Code Section 1775. In accordance with Labor Code Sections 1775 and 1813, the Consultant shall forfeit, as a penalty to the County of Stanislaus \$25.00 for (a) each calendar day or portion thereof for each workman paid less than the stipulated prevailing rates for such work or craft in which such workman is employed for any work done under the contract by him or by any subcontractor under him; and (b) each calendar day or week during which any laborer workman or mechanic is required or permitted to labor more than eight hours in any one calendar day or 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing with Section 1810) of Chapter 1, Part 7, Division 2 of the Labor Code. In addition to said penalties, the difference between such stipulated prevailing wage rates and the amount paid to each workman for each calendar day or portion thereof for which each workman was paid less than the stipulated prevailing wage rate shall be paid to each workman by the Consultant.

### 3. Trenching and Excavation

a. Subsurface Conditions Pursuant to Public Contract Code Section 7104, the following provisions shall apply provided the work under this Agreement involves digging trenches or other excavations that extend deeper than four (4) feet below the surface:

(1) The Consultant shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, of any:

(i) Material that the Consultant believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

(ii) Subsurface or latent physical conditions at the site differing from those indicated.

(iii) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

(2) The public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Consultant's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the contract.

(3) In the event that a dispute arises between the public entity and the Consultant whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, the Consultant shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. The Consultant shall retain any and all rights provided either by contract or by law, which pertain to the resolution of disputes and protests between the contracting parties.

b. Excavation Shoring. Pursuant to Labor Code section 6707, if the work under this Agreement involves digging trenches or other excavations that extend deeper than five (5) feet below the surface the Consultant shall provide at its sole cost and expense adequate sheeting, shoring and bracing, or equivalent method, for the protection of life or limb, which shall conform to applicable safety orders.

### **C. SAFETY REQUIREMENTS**

All services and merchandise must comply with current California State Division of Industrial Safety Orders and OSHA.

**D. COMPLIANCE WITH OSHA**

The Consultant shall be responsible for strict compliance with all requirements of the California Occupational Safety and Health Act (OSHA) which are applicable to the work to be accomplished pursuant to this contract. OSHA shall be construed to include, but not be limited to, all applicable safety orders issued by the Division of Industrial Safety, State of California. In the event the Consultant or any of the Consultant's employees shall observe any violation of OSHA in or on the premises on which the Consultant is to perform work pursuant to this contract, the Consultant shall immediately give written notice to the County of such violation.

**E. MULTI-YEAR CONTRACT**

If funds are not appropriated or otherwise made available to support continuation in any fiscal year succeeding the first fiscal year, the County shall have the right to terminate this contract and the Consultant is not entitled to recover any costs not incurred prior to termination.

**F. WORK SCHEDULE**

Consultant is obligated to perform in a timely manner the services and work provided for under this Agreement and the County hereby gives the Consultant notice to proceed with the work as of the effective date of this Agreement. It is understood by Consultant that the performance of these services and work shall require the Consultant to perform the services and work in conformance with the work schedule in Attachment A of each separate Project Authorization agreed to by the parties.

**G. INVOICE TO ADDRESS**

Consultant shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services. Copies of detailed invoices/receipts for reimbursable shall be attached to invoices submitted to the County for payment.

Invoices shall be sent to:

Stanislaus County  
Department of Environmental Resources  
3800 Cornucopia Way  
Suite C  
Modesto, CA 95358  
Attn: Jami Aggers

////

**END OF EXHIBIT**

**SAMPLE**

**EXHIBIT B**

**PROJECT AUTHORIZATION NO. 00-00**

**A. Terms and Conditions**

Except as hereinafter provided, the services provided by the Consultant under this Project shall be subject to the terms and conditions set forth in the *Master Agreement for Professional Design Services* made and entered into by and between the COUNTY OF STANISLAUS ("County") and [COMPANY NAME] ("Consultant"), on \_\_\_\_\_, 2011.

**B. Scope of Work**

The Consultant shall provide services under the Agreement and this scope of work for additional site work requested by the County, as set forth in the below scope of work:

**C. Compensation**

The Consultant shall be compensated for the services provided under the Agreement and this scope of work as follows:

Consultant shall be compensated on a time and material basis based on the rates set forth below to perform the work associated with each task, and not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses.

Description (ie, Staff title, equipment rental, etc)	Unit of Measure	Unit Price	Total	Not to Exceed Total

1. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall not exceed \_\_\_\_\_, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Consultant to perform or to assist in the performance of its work under this Agreement.

**D. Payment and Invoicing**

1. The terms of payment are Net 30 days after approval of the invoice.
2. Consultant shall submit a detailed invoice in duplicate for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate, itemized rental equipment, number of days rented, rate of rental and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services.
3. Consultant shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Consultant 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County  
Department of Environmental Resources  
Attention:  
3800 Cornucopia Way  
Suite C  
Modesto, CA 95358

E. Project Authorization Period

Services will commence on or about \_\_\_\_\_, 2011 and be completed by \_\_\_\_\_, 2011.

IN WITNESS WHEREOF, the parties have executed this Project Authorization No. 00-00 on \_\_\_\_\_, 2011.

**COUNTY OF STANISLAUS**  
Department of Environmental Resources

**CONSULTANT NAME**

By: \_\_\_\_\_  
Sonya K. Harrigfeld  
Director

**SAMPLE**

By: \_\_\_\_\_  
Name  
Title

"Consultant

"County  
APPROVED AS TO FORM:  
John P. Doering  
County Counsel

By: \_\_\_\_\_  
Thomas E. Boze  
Deputy County Counsel

**EXHIBIT C**  
**FEE SCHEDULE**

The Contractor shall provide all the labor, material, supplies, tools, licenses, permits and equipment to perform contractor services involving numerous and different tasks and projects identified in Exhibit A and B that are related to the monitoring, testing, analyzing and reporting on the County's Geer Road Landfill gas systems and Consultant shall perform the operation, monitoring and maintenance of the County's Geer Road landfill gas systems to help control LFG Migration. The work for each site shall be authorized on a separate Project Authorization issued by the County.

The charges for the work shall be in accordance with this fee schedule. **The below fee schedule is in effect through the end of this Agreement.** The following billable rates include: labor, benefits, taxes, overhead/general & administrative (G&A), profit, and ancillary charges such as copies, faxes, telephones, postage, paper clips, binders, company cars, fuel, insurance, vehicle or equipment maintenance, cellular phone charges, computer charges (CADD, word-processing, mapping), etc.

It is important that the Consultant use only the appropriate staff levels for the tasks performed. The Consultant may use a higher billing staff person to perform tasks commonly performed by a lower billing staff person if the billing rate is adjusted downward to correspond to the task performed.

**TETRA TECH BAS, INC., ENGINEERING DIVISION**

The below fee schedule is for Tetra Tech BAS Inc., - Engineering Division:

<u>Description</u>	<u>Billable Hourly Rate</u>
Principal	\$246.00
Project Engineer (PRE)	\$210.00
Principal Solid Waste Planner	\$199.00
Division Engineer (DE)	\$198.00
Principal Administrator (PA)	\$189.00
Senior Project Manager(SM) Chief Engineer (CE)	\$185.00
Project Manager (PM)	\$174.00
Project Engineer (PE) / Administrator (PAD)	\$156.00
Engineer V (E-V)	\$141.00
Engineer IV (E-IV)	\$128.00
Engineer III (E-III)	\$120.00
Engineer II (E-II)	\$113.00
Engineer I (E-I)	\$ 96.00
Engineer (E)	\$ 90.00
Senior Project Designer (SPD)	\$152.00
Project Designer (PD)	\$138.00
Senior Designer (SDD)	\$128.00
CADD Designer / Drafter (CD)	\$124.00
Designer (DD)	\$119.00
Senior Drafter (SD)	\$110.00
Drafter (D)	\$ 96.00
Senior CADD Operator (SCO)	\$ 90.00
CADD Operator (CO)	\$ 74.00
Regulatory Compliance Manager (RCM)	\$146.00
Senior Regulatory Compliance Specialist (SRS)	\$137.00
Regulatory Compliance Specialist (RS)	\$115.00
Senior Environmental Scientist (SNS)	\$145.00
Senior Environmental Specialist (SES)	\$127.00
Environmental Specialist II (ES-II)	\$116.00
Environmental Specialist I (ES-I)	\$102.00
Environmental Specialist (ES)	\$ 91.00
Estimator (E) / Specification Writer (SW)	\$121.00

<u>Description</u>	<u>Billable Hourly Rate</u>
Landscape Architect (LA)	\$118.00
Project Accountant / Analyst (AA)	\$ 83.00
Senior Project Coordinator (SPC)	\$121.00
Project Coordinator (PC)	\$104.00
Senior Technical Editor (STE)	\$ 89.00
Administrative Assistant (ADA)	\$ 93.00
Data (DP) Word Processing Secretary (WP)	\$ 82.00
Office Services Clerk (OS)	\$ 80.00
General Clerk (C) / Typist (Y)	\$ 63.00
Data Analyst (DA)	\$ 92.00
Chief Engineering Technician (CT)	\$118.00
Engineering Technician V (ET- V)	\$104.00
Engineering Technician IV (ET-IV)	\$ 93.00
Engineering Technician III (ET-III)	\$ 81.00
Engineering Technician II (ET-II)	\$ 71.00
Engineering Technician I (ET-I)	\$ 60.00
Engineering Technician (ET)	\$ 39.00
Chief of Survey Parties (CSP)	\$132.00
3-Man Survey Party (SP-3M)	\$290.00
2-Man Survey Party (SP-2M)	\$240.00
1-Man Survey Party (SP-1M)	\$185.00
Court Appearance (Expert Witness, Deposition, etc)	1.5 x hourly rate

**STANDARD FEE SCHEDULE FOR EQUIPMENT AND ANALYSIS**

<b>Type of Equipment</b>	<b>Daily Rate</b>	<b>Weekly Rate</b>	<b>Monthly Rate</b>
4 Gas Range Meter CH4, H2S, CO, O2 (Sentinel 44)	\$75.00	\$200.00	\$500.00
Alpha – 1 Personal Sampling Pump	\$75.00	\$200.00	\$500.00
Disposable Bailer	\$20/each	n/a	n/a
CO2 Calorimetric Analysis Tubes	\$40.00	\$125.00	\$250.00
Downhole Camera	\$75.00	n/a	n/a
Dupont Dosimeter Mark -3 (Personal Sample Pump)	\$50.00	\$150.00	\$300.00
Flow Calibrator (Gilian)	\$50.00	\$150.00	\$300.00
Gas Extraction Monitor (GEM 500/ 2000/ 2000 Plus)	\$125.00	\$350.00	\$900.00
Lung Sampler (Nutech 218)	\$100.00	\$300.00	\$800.00
Mini – Ram Data Logger	\$40.00	\$125.00	\$250.00
Mini – Ram Dust Meter	\$50.00	\$150.00	\$300.00
Organic Vapor Analyzer (OVA128)	\$125.00	\$400.00	\$1,000.00
Photo Ionization Detector (OVM580B)	\$125.00	\$400.00	\$1,000.00
Sample Train (Gas Extraction Pump)	\$50.00	\$150.00	\$300.00
Soil Auger / Sampler	\$30.00	\$90.00	\$180.00
Sounder (Liquid Level Indicator)	\$40.00	\$125.00	\$250.00
Horiba Meter	\$50.00	\$200.00	\$400.00
MiniRae 2000	\$75.00	\$200.00	\$500.00
GT Surveyor	\$75.00	\$200.00	\$50.00
Groundwater Sampling Equipment	\$30/hour	n/a	n/a
Company Vehicle	\$120.00	\$480.00	\$1,250.00
Field Sampling Supplies:	\$100.00	n/a	n/a
Level C (Per Person)	\$150.00	n/a	n/a
Respirator w/cartridge (full or half faced)			
Tyvek Coveralls			
Outer Gloves			
Glove Liners			
Neoprene Boots			

**TETRA TECH BAS, INC., CONSTRUCTION DIVISION**

The below fee schedule is for Tetra Tech BAS Inc., - Construction Division Maintenance Equipment and Maintenance Labor:

<u>Description</u>	<u>Billable Hourly Rate</u>
Principal – Maintenance Services	\$145.00
Maintenance Manager	\$130.00
Maintenance Technician (Piping)	\$ 95.64
Maintenance Technician (Weed Eating, Misc gas system repairs)	\$ 75.00
Equipment Operator	\$105.53
Administrative Assistant	\$ 53.14
Surveyor to set grades on portions of piping	\$135.00
<u>Equipment</u>	<u>Unit Rate</u>
Excavator	\$921.00 / day
Backhoe	\$421.00 / day
Generator 9.7KW	\$ 98.50 / day
Service Truck # 1	\$105.00 / day
Service Truck #2	\$105.00 / day
Service Truck #3	\$105.00 / day
Electrofusion Processor	\$275.00 / day
Asphalt Saw Cutting Machine and Water Tank	\$575.00 / day
Asphalt Paving (Trench Repair)	\$2,650.00 / LS
2" – 4" HDPE Welder	\$ 98.50 / day
6" – 12" HDPE Welder	\$350.00 / day
Mob/Demob Equipment	\$1,800.00 / LS

Note:

1. Scheduled labor rates include overhead, administration, and profit.

2. The Consultant shall not apply the markup to direct charges such as labor. The Consultant shall perform the corrective action work; (e.g., Consultant shall not simply serve as a "broker" and subcontract out all work). Markups shall only be applied to the actual subcontractor or equipment costs paid by the primary corrective action Consultant (e.g., not "list" or other artificial price) plus 10%. Markups shall not be applied to charges from an affiliate or subsidiary company of the primary Consultant. Subcontractor costs shall be reasonable and necessary for corrective action. Consultant shall provide the County a copy of the actual subcontractor invoice (with detail) or equipment purchase receipt with their reimbursement request.

3. Travel and Per Diem (no mark up)

In addition to the aforementioned fees, Consultant shall be reimbursed for the following items, that are reasonable, necessary and actually incurred by the Consultant in connection with the services:

- (a) Expenses, fees or charges for outside printing, reproduction or binding of documents at actual costs (no mark up).
- (b) Travel expenses shall be reimbursed in accordance with the County's travel policy, which is incorporated herein by reference (i.e. Lodging accommodations shall be moderate considering locations and availability. Mileage reimbursement shall be paid according to the current mileage chart maintained by the County's Auditor-Controller's Office.)

Fees plus reimbursable expenses shall not exceed the amounts set forth in each Project Authorization. Payments shall be based upon work documents submitted by the Contractor to the County and accepted by the County as being satisfactory to County's needs, not work in process.

Definitions

The following definitions are listed for the purpose of intent in the use of specific words:



- "Task " refers to a function or a piece of work assigned or done by Consultant as part of the investigation, monitoring, testing of sites designated as Landfill site. The task cost shall include itemization of labor, materials, equipment, rentals, laboratory analysis, etc.
- "Staff Billable Rate" refers to Consultant's Staff responsible for performing the task
- "Laboratory Analysis" refers to rates charged by the laboratory used by the Consultant and the Consultant's mark-up.
- "Equipment" refers to cost for the daily rental of equipment (i.e., Air sample pump, drums, generator, etc.) necessary to perform the investigation, monitoring or testing of the Landfill sites. Cost to include Consultant's mark-up.
- "Fee" refers to cost for fees such as disposal fees.
- "Sampling Vehicles" refers to daily rental from a rental company of vehicles only used to perform investigation, monitoring or testing of Landfill sites. Cost to include Consultant's mark-up.
- "Materials" refers to materials such as pipe costs associated with the investigation, monitoring or testing of Landfill sites.
- "Mark-up" refers to an administrative fee added to a service such as rental equipment, overnight deliveries or items that must be purchased for a specific job. Something that must be purchased for a specific job is chargeable at actual cost plus 10%.

**END OF EXHIBIT**



DEPARTMENT OF ENVIRONMENTAL RESOURCES  
3800 Cornucopia Way, Suite C,  
Modesto, Ca 95358-9492  
Phone: (209) 525-6700  
Fax: (209) 525-6774

AUG 2011  
Received  
Board of  
Supervisors

**STANISLAUS COUNTY  
MASTER AGREEMENT  
FOR  
PROFESSIONAL DESIGN SERVICES**

This Master Agreement is made and entered into by and between the County of Stanislaus, a political subdivision of the State of California, hereinafter referred to as "County" and Tetra Tech BAS Inc., hereinafter referred to as "Consultant".

**WHEREAS**, the County has an existing Cease and Desist Order from the Regional Water Board, and the County acknowledges that Consultant is taking over a Landfill Gas (LFG) collection and control system that is not currently operating at its optimum and has been hired for the specific purpose of bringing the LFG system to its optimum, within the existing capabilities of the of the system; and

**WHEREAS**, the County has a need for Consultant services involving numerous and different tasks and projects related to the County's Geer Road Landfill and the operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, landfill gas (LFG) collection and control system, to help control LFG migration, as identified in the below Scope of Work and in **Exhibits A and B**, hereby attached and made a part hereof this Agreement; and

**WHEREAS**, the Consultant is specially trained, experienced and competent to perform and has agreed to provide such services; and

**WHEREAS**, SCS Engineers is a third party beneficiary of this contract; and

**WHEREAS**, the Consultant is required to cooperate and coordinate with SCS Engineers in the performance of the work and show proof to the County that the cooperation and coordination is taking place; and

**WHEREAS**, the County and the Consultant wish to execute one agreement that shall govern all of the work or services provided by the Consultant during the term of this Agreement

**NOW, THEREFORE**, for and in consideration of the mutual covenants and conditions contained herein, the parties hereby agree as follows:

**1.0 PROFESSIONAL SERVICES TO BE PROVIDED BY CONSULTANT**

1.1. Scope of Services: Consultant shall provide the professional services described in the Scope of Work attached hereto as Exhibits "A and B".

1.2. The Consultant shall furnish to the County upon receipt of the County's written authorization to proceed, those services and work set forth in the "Project Authorization - Scope of Work" separately approved for each project or task being provided by the Consultant, which Scope of Work are, by this reference, made a part hereof.

1.3. Each project added to and to be performed under this Agreement shall be separately approved by the parties. A Project Authorization issued by the County Department of Environmental Resources Director or her designee, shall approve each project where the cost of work or services does not exceed the total limit of expenditure for this Agreement; projects greater than the total not to exceed

limit of this Agreement shall be approved by resolution of the Board of Supervisors for the County.

1.4. Professional Practices: All professional services to be provided by Consultant pursuant to this Agreement shall be provided by personnel experienced in their respective fields and in a manner consistent with the standards of care, diligence and skill ordinarily exercised by professional consultants in similar fields and circumstances in accordance with sound professional practices. Consultant also represents that it is familiar with all laws that may affect its performance of this Agreement and shall advise County of any changes in any laws that may affect Consultant's performance of this Agreement.

1.5. Representations: Consultant represents that it has reviewed the Scope of Work and that in its professional judgment the services to be performed under this Agreement can be performed within the maximum fee set forth herein below and within the time specified in the Project Schedule attached hereto. Consultant represents that it is qualified to perform the professional services required by this Agreement and possesses the necessary licenses and permits required to perform said services. Consultant represents that it has no interest and shall not acquire any interest direct or indirect which conflicts, or has the appearance of conflicting, in any manner or degree with the performance of the work and services under this Agreement.

1.6. Compliance with Laws. Consultant agrees that it shall perform the services required by this Agreement in compliance with all applicable Federal and California laws including, but not limited to, those laws related to minimum hours and wages; occupational health and safety; fair employment and employment practices; workers' compensation insurance and safety in employment; and all other Federal, State and local laws and ordinances applicable to the services required under this Agreement.

1.7. Non-Discrimination. During the performance of this Agreement, Consultant and its officers, employees, agents, representatives or subcontractors shall not unlawfully discriminate in violation of any federal, state or local law, rule or regulation against any employee, applicant for employment or person receiving services under this Agreement because of race, religion, color, national origin, ancestry, physical or mental disability, medical condition (including genetic characteristics), marital status, age, political affiliation, sex or sexual orientation. Consultant and its officers, employees, agents, representatives or subcontractors shall comply with all applicable Federal, State and local laws and regulations related to non-discrimination and equal opportunity, including without limitation the County's nondiscrimination policy; the Fair Employment and Housing Act (Government Code sections 12900 et seq.); California Labor Code sections 1101, 1102 and 1102.1; the Federal Civil Rights Act of 1964 (P.L. 88-352), as amended; and all applicable regulations promulgated in the California Code of Regulations or the Code of Federal Regulations.

1.8. Non-Exclusive Agreement. Consultant acknowledges that County may enter into agreements with other consultants for services similar to the services that are subject to this Agreement or may have its own employees perform services similar to those services contemplated by this Agreement.

1.9. Delegation and Assignment. This is a personal service contract, and the duties set forth herein shall not be delegated or assigned to any person or entity without the prior written consent of County. Consultant may engage a subcontractor(s) as permitted by law and may employ other personnel to perform services contemplated by this Agreement at Consultant's sole cost and expense.

1.10. Covenant Against Contingent Fees. Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the consultant; to solicit or secure this agreement; and that he/she has not paid or agreed to pay any company or person other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award, or formation of this agreement. For breach or violation of this warranty, the local agency shall have the right to annul this agreement without liability, or at its discretion; to deduct from the agreement price or consideration, or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

## 2.0 COMPENSATION AND BILLING

2.1. Compensation. Consultant shall be paid in accordance with the fee schedule set forth in Exhibit "C", attached hereto and made a part of this Agreement (the "Fee Schedule") and for the tasks set forth on separately approved project authorizations or scope of work.. Consultant's compensation shall in no case exceed **Six-Hundred-Sixty-Seven Thousand Nine-Hundred Fifty-Five Dollars (\$667,955.00)**. Consultant will be compensated on a time and materials basis, based on the hours worked by the Consultant's employees or subcontractors at the hourly rates specified in the Fee Schedule. The Fee Schedule rates include direct salary costs, employee benefits, and overhead. The rates stated in the Fee Schedule are not adjustable during the term of this Agreement. The County may retain ten percent of all periodic or progress payments made to the Consultant until completion and acceptance of all work tasks and County shall have right to withhold payment from Consultant for any unsatisfactory service until such time service is performed satisfactorily.

2.2. Reimbursements. In addition to the aforementioned fees, Consultant will be reimbursed for any expenses specifically set forth in each Project Scope of Work. All such reimbursement amounts are limited to those costs and expenses that are reasonable, necessary and actually incurred by the Consultant in connection with the services provided. The County shall not pay a mark up on any item of reimbursement. The County shall not pay for any item of overhead such as cell phone, telephone, facsimile, postage, insurance, equipment maintenance, etc. All requests for reimbursement shall be accompanied by a copy of the original invoice.

2.3. Additional Services. Consultant shall not receive compensation for any services provided outside the scope of services specified in Exhibit A or scope of work contained within a separately approved Project Authorization (Exhibit B), attached hereto and made a part of this Agreement, unless the County, prior to Consultant performing the additional services, approves such additional services in writing by means of an amendment. It is specifically understood that oral requests and/or approvals of such additional services or additional compensation shall be barred and are unenforceable.

2.4. Method of Billing. Consultant may submit invoices to County's Project Manager for approval on a progress basis, but no more often than once each calendar month. Said invoice shall be based on the total of all Consultants' services that have been completed to County's sole satisfaction. County shall pay Consultant's invoice within forty-five (45) days from the date County receives said invoice. Each invoice shall describe in detail, the services performed and the associated percentage of tasks completed. Any additional services approved and performed pursuant to this Agreement shall be designated as "Additional Services" and shall identify the number of the authorized change order, where applicable, on all invoices.

2.5. Records and Audits. Records of Consultant's services relating to this Agreement shall be maintained in accordance with generally recognized accounting principles and shall be made available to County or its Project Manager for inspection and/or audit at mutually convenient times for a period of three (3) years from the termination of this Agreement.

## 3.0 TIME OF PERFORMANCE

3.1. Commencement and Completion of Work. The professional services to be performed pursuant to this Agreement shall commence within five (5) days after County delivers its Notice to Proceed. Said services shall be performed in strict compliance with each separately approved Project Authorization schedule. The Project Schedule may be amended by mutual agreement of the parties. Failure to commence work in a timely manner and/or diligently pursue work to completion may be grounds for termination of this Agreement.

3.2. Excusable Delays. Neither party shall be responsible for delays or lack of performance resulting from acts beyond the reasonable control of the party or parties. Such acts shall include, but not be limited to, acts of God, fire, strikes, material shortages, compliance with laws or regulations, riots, acts of war, or any other conditions beyond the reasonable control of a party.

**4.0 TERM OF CONTRACT AND TERMINATION**

4.1. Term. This Agreement shall commence upon approval by the County's Board of Supervisors and continue until the work required under each separately approved project authorization let during the term of this Agreement is completed, unless previously terminated as provided herein or as otherwise agreed to in writing by the parties.

4.2. Notice of Termination. The County reserves and has the right and privilege of canceling, suspending or abandoning the execution of all or any part of the work contemplated by this Agreement, with or without cause, at any time, by providing written notice to Consultant. The termination of this Agreement shall be deemed effective upon receipt of the notice of termination. In the event of such termination, Consultant shall immediately stop rendering services under this Agreement unless directed otherwise by the County.

4.3. Compensation. In the event of termination, County shall pay Consultant for reasonable costs incurred and professional services satisfactorily performed up to and including the date of County's written notice of termination. Compensation for work in progress shall be prorated as to the percentage of work completed as of the effective date of termination in accordance with the fees set forth in Exhibit "C". In ascertaining the professional services actually rendered hereunder up to the effective date of termination of this Agreement, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents pertaining to the services contemplated herein whether delivered to the County or in the possession of the Consultant.

4.4. Documents. In the event of termination of this Agreement, all documents prepared by Consultant in its performance of this Agreement including, but not limited to, finished or unfinished design, development and construction documents, data studies, drawings, maps and reports, shall be delivered to the County within ten (10) days of delivery of termination notice to Consultant, at no cost to County. Any use of uncompleted documents without specific written authorization from Consultant shall be at County's sole risk and without liability or legal expense to Consultant.

**5.0 INSURANCE REQUIREMENTS**

5.1. Minimum Scope and Limits of Insurance. Consultant, at its sole cost and expense, for the full term of this Agreement (and any extensions thereof), shall obtain and maintain, at minimum, compliance with all of the following insurance coverage(s) and requirements. If Consultant normally carries insurance in an amount greater than the minimum amount listed below, that greater amount shall become the minimum required amount of insurance for purposes of this Agreement. The insurance listed below shall have a retroactive date of placement prior to, or coinciding with, the date services are first provided that are governed by the terms of this Agreement:

- (a) Comprehensive general liability, including premises-operations, products/ completed operations, broad form property damage, blanket contractual liability, independent contractors, personal injury with a policy limit of not less than Two Million Dollars (\$2,000,000.00), combined single limits, per occurrence and aggregate. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to any act or omission by Consultant under this Agreement or the general aggregate limit shall be twice the required occurrence limit.
- (b) Automobile liability for owned vehicles, hired, and non-owned vehicles, with a policy limit of not less than One Million Dollars (\$1,000,000.00), combined single limits, per occurrence and aggregate.
- (c) Workers' compensation insurance as required by the State of California.
- (d) Professional errors and omissions ("E&O") liability insurance with policy limits of not less than Two Million Dollars (\$2,000,000.00), combined single limit for each occurrence. If Consultant cannot provide an occurrence policy, Consultant shall provide insurance covering

claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than three years following Final Completion of the Project.

5.2. Endorsements. The Consultant shall obtain a specific endorsement to all required insurance policies, except Professional Liability insurance, naming the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers as additional insureds for at least three years after the completion of the work to be performed under this Agreement, but, to the extent that any insurance issued to Consultant in effect after the expiration of three years provides additional insured coverage to parties Consultant agreed in writing to name as an additional insured, then Consultant shall have the obligation under this contract to obtain such additional insured coverage for the County, under any and all policies Consultant has regarding:

- (a) Liability arising from or in connection with the performance or omission to perform any term or condition of this Agreement by or on behalf of the Consultant, including the insured's general supervision of its subcontractors;
- (b) Ongoing services, products and completed operations of the Consultant;
- (c) Premises owned, occupied or used by the Consultant; and
- (d) Automobiles owned, leased, hired or borrowed by the Consultant.
- (e) For Workers' Compensation insurance, the insurance carrier shall agree to waive all rights of subrogation against the County, its officers, officials and employees for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Consultant.

5.3. Deductibles: Any deductibles, self-insured retentions or named insureds must be declared in writing and approved by County. At the option of the County, either: (a) the insurer shall reduce or eliminate such deductibles, self-insured retentions or named insureds, or (b) the Consultant shall provide a bond, cash, letter of credit, guaranty or other security satisfactory to the County guaranteeing payment of the self-insured retention or deductible and payment of any and all costs, losses, related investigations, claim administration and defense expenses. The County, in its sole discretion, may waive the requirement to reduce or eliminate deductibles or self-insured retentions, in which case, the Consultant agrees that it will be responsible for and pay any self-insured retention or deductible and will pay any and all costs, losses, related investigations, claim administration and defense expenses related to or arising out of the Consultant's defense and indemnification obligations as set forth in this Agreement.

5.4. Certificates of Insurance: At least ten (10) days prior to the date the Consultant begins performance of its obligations under this Agreement, Consultant shall furnish County with certificates of insurance, and with original endorsements, showing coverage required by this Agreement, including, without limitation, those that verify coverage for subcontractors of the Consultant. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements shall be received and, in County's sole and absolute discretion, approved by County. County reserves the right to require complete copies of all required insurance policies and endorsements, at any time.

5.5. Non-limiting: Nothing in this Section or the insurance described herein shall be construed as limiting in any way, the indemnification provisions contained in this Agreement, or the liability of Consultant and Consultant's officers, employees, agents, representatives or subcontractors for payments of damages to persons or property.

5.6. Primary Insurance: The Consultant's insurance coverage shall be primary insurance regarding the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers. Any insurance or self-insurance maintained by the County of Stanislaus, its Officers, Directors, Officials, Agents, Employees and Volunteers shall be excess of the Consultant's insurance and shall not contribute with Consultant's insurance. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or its officers, officials and employees. The Consultant'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. Any and all insurances cared by it shall be deemed liability coverage for any and all actions it performs in connection with this Contract.

5.7. Cancellation of Insurance: Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party except after thirty (30) days prior written notice has been given to County. The Consultant shall promptly notify, or cause the insurance carrier to promptly notify, the County of any change in the insurance policy or policies required under this Agreement, including, without limitation, any reduction in coverage or in limits of the required policy or policies. Consultant shall maintain such coverage in effect for three (3) years after substantial completion of the project to the extent it is commercially available at reasonable rates.

5.8. California Admitted Insurer: Insurance shall be placed with California admitted insurers (licensed to do business in California) with a current rating by Best's Key Rating Guide of no less than A-:VII; provided, however, that if no California admitted insurance company provides the required insurance, it is acceptable to provide the required insurance through a United States domiciled carrier that meets the required Best's rating and that is listed on the current List of Eligible Surplus Line Insurers maintained by the California Department of Insurance.

5.9. Subcontractors: Consultant shall require that all of its subcontractors are subject to the insurance and indemnity requirements stated herein, or shall include all subcontractors as additional insureds under its insurance policies.

## 6.0 INDEMNIFICATION

6.1. Indemnification: To the fullest extent allowed by law, Consultant shall defend, indemnify, and hold harmless the County and its officers, directors, officials, agents, employees, volunteers and representatives (collectively, "Indemnatee") from and against any and all claims, suits, actions, losses, injuries, damages or expenses of every name, kind, and description, including litigation costs and reasonable attorney's fees incurred, (collectively, "losses") which are founded upon, arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the alleged negligence, recklessness, or willful misconduct of Consultant, its officers, agents, employees, volunteers, representatives, contractors and subcontractors, excluding, however, such liabilities caused in part by the sole negligence, active negligence or willful misconduct of the County, its agents, employees, and representatives. These indemnification obligations shall not be limited by any assertion or finding that (1) the person or entity indemnified is liable by reason of non-delegable duty, or (2) the losses were caused in part by the negligence of, breach of contract by, or violation of law by Indemnatee. Nothing in this Agreement, including the provisions of this paragraph, shall constitute a waiver or limitation of any rights which Indemnatee may have under applicable law, including without limitation, the right to implied indemnity.

6.2. Duty to Defend: The duty of Consultant to indemnify and save harmless as set forth herein, shall include both the duty to indemnify and at Consultant's own cost and expense the duty to defend as set forth in Section 2778 of the California Civil Code and as limited in section 2782.8 of the California Civil Code. This duty to defend arises immediately when such claim is made and shall be independent of any finding of negligence and shall arise regardless of any claim or assertion that Indemnatee caused or contributed to the Losses. Consultant shall provide legal counsel acceptable to the County.

6.3. Duty to Cooperate: Each party shall notify the other party within ten (10) days in writing of any claim or damage related to activities performed under this Agreement. The parties shall cooperate with each other in the investigation and disposition of any claim arising out of the activities under this Agreement. Specifically, Consultant shall take all steps necessary to assist the County in the defense of any claim brought by a contractor hired to construct the Project regarding any errors, flaws, and/or omissions in the plans or specifications of the Project.

6.4. Patent Rights: Consultant represents that professional services provided by Consultant pursuant to this Agreement does not infringe on any other copyrighted work. Consultant shall defend, indemnify and hold harmless the County from all loss, cost, damage, expense, liability or claims, including attorneys' fees, court costs, litigation expenses and expert consultant or witness fees, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark,

service mark or any other proprietary right of any person or persons in consequence of the use by the County of any articles or services supplied under this agreement.

6.5. The foregoing provisions shall survive the term and termination of this Agreement.

## 7.0 GENERAL PROVISIONS

7.1. Entire Agreement: This Agreement constitutes the entire Agreement between the parties with respect to any matter referenced herein and supersedes any and all other prior writings and oral negotiations. This Agreement may be modified only in writing, and signed by the parties in interest at the time of such modification. The terms of this Agreement shall prevail over any inconsistent provision in any other contract document appurtenant hereto, including exhibits to this Agreement.

7.2. Representatives. The Director of the Stanislaus County Department of Environmental Resources, or her designee, shall be the representative of County for purposes of this Agreement and may issue all consents, approvals, directives and agreements on behalf of the County, called for by this Agreement, except as otherwise expressly provided in this Agreement. Consultant shall designate a representative for purposes of this Agreement who shall be authorized to issue all consents, approvals, directives and agreements on behalf of Consultant called for by this Agreement, except as otherwise expressly provided in this Agreement.

7.3. Project Managers. County shall designate a Project Manager to work directly with Consultant in the performance of this Agreement. Consultant shall designate a Project Manager who shall represent it and be its agent in all consultations with County during the term of this Agreement. Consultant or its Project Manager shall attend and assist in all coordination meetings called by County.

7.4. Designated Personnel: A material covenant of this agreement is that the Consultant shall assign the individuals designated below to perform the functions designated so long as they continue in the employ of the Consultant. The designated individuals shall, so long as their performance continues to be acceptable to County, remain in charge of the services for the Project from beginning through completion of services.

- a. LFG Project Manager: Ghassan Andraos; and
- b. Principal in Charge: Bryan A. Stirrat, P.E.

7.5. Removal of Personnel or Sub-Consultants: If the County, in its sole discretion at any time during the term of this agreement, desires the removal of any person or sub-consultant assigned by Consultant to perform services, then the Consultant shall remove such person or consultant immediately upon receiving notice from the County.

7.6. Notices: Any notices, documents, correspondence or other communications concerning this Agreement or the work hereunder may be provided by personal delivery, facsimile or mail and shall be addressed as set forth below. Such communication shall be deemed served or delivered: a) at the time of delivery if such communication is sent by personal delivery; b) at the time of transmission if such communication is sent by facsimile; and c) 48 hours after deposit in the U.S. Mail as reflected by the official U.S. postmark if such communication is sent through regular United States mail.

**If to County:**

Stanislaus County  
Department of Environmental Services  
3800 Cornucopia Way, Suite C  
Modesto, CA 95376  
Attn: Susan M. Garcia, C.P.M.

**If to Consultant:**

Tetra Tech BAS Inc.  
1360 Valley Vista Drive  
Diamond Bar, CA 91765  
Attn: Bryan A. Stirrat, P.E.

7.7. Attorneys' Fees: In the event that litigation is brought by any party in connection with this Agreement, the prevailing party shall be entitled to recover from the opposing party all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party in the exercise of any of its rights or remedies hereunder or the enforcement of any of the terms, conditions, or provisions hereof.



7.8. Governing Law: This Agreement shall be governed by and construed under the laws of the State of California without giving effect to that body of laws pertaining to conflict of laws. In the event of any legal action to enforce or interpret this Agreement, the parties hereto agree that the sole and exclusive venue shall be a court of competent jurisdiction located in Stanislaus County, California.

7.9. Assignment: Consultant shall not voluntarily or by operation of law assign, transfer, sublet or encumber all or any part of Consultant's interest in this Agreement without County's prior written consent. Any attempted assignment, transfer, subletting or encumbrance shall be void and shall constitute a breach of this Agreement and cause for termination of this Agreement. Regardless of County's consent, no subletting or assignment shall release Consultant of Consultant's obligation to perform all other obligations to be performed by Consultant hereunder for the term of this Agreement.

7.10. Independent Contractor: Consultant is and shall be acting at all times as an independent contractor and not as an employee of County. Consultant shall secure, at his expense, and be responsible for any and all payment of Income Tax, Social Security, State Disability Insurance Compensation, Unemployment Compensation, and other payroll deductions for Consultant and its officers, agents, and employees, and all business licenses, if any are required, in connection with the services to be performed hereunder. Consultant hereby indemnifies and holds County harmless from any and all claims that may be made against County based upon any contention by any third party that an employer-employee relationship exists by reason of this Agreement.

7.11. Confidentiality: The Consultant agrees to keep confidential all information obtained or learned during the course of furnishing services under this Agreement and to not disclose or reveal such information for any purpose not directly connected with the matter for which services are provided.

7.12. Ownership of Documents: Any interest, including copyright interests, of Consultant or its contractors or subconsultants in studies, reports, memoranda, computational sheets, drawings, plans or any other documents, including electronic data, prepared in connection with the Services, shall be the property of County. To the extent permitted by law, work product produced under this Agreement shall be deemed works for hire and all copyrights in such works shall be the property of the County. In the event that it is ever determined that any works created by Consultant or its subconsultants under this Agreement are not works for hire, Consultant hereby assigns to County all copyrights to such works. With the County's prior written approval, Consultant may retain and use copies of such works for reference and as documentation of experience and capabilities.

7.13. Reuse of Design Documents: Should the County desire to reuse the documents specified above and not use the services of the Consultant, then the County agrees to require the new consultant to assume any and all obligations for the reuse of the documents, and the County releases Consultant and its subconsultants from all liability associated with the reuse of such documents.

7.14. Public Records Act Disclosure: Consultant has been advised and is aware that all reports, documents, information and data including, but not limited to, computer tapes, discs or files furnished or prepared by Consultant, or any of its subcontractors, and provided to County may be subject to public disclosure as required by the California Public Records Act (California Government Code Section 6250 et. seq.). Exceptions to public disclosure may be those documents or information that qualifies as trade secrets, as that term is defined in the California Government Code Section 6254.7, and of which Consultant informs County of such trade secret. The County will endeavor to maintain as confidential all information obtained by it that is designated as a trade secret. The County shall not, in any way, be liable or responsible for the disclosure of any trade secret including, without limitation, those records so marked if disclosure is deemed to be required by law or by order of the Court.

7.15. Responsibility for Errors: Consultant shall be responsible for its work and results under this Agreement. Consultant, when requested, shall furnish clarification and/or explanation as may be required by the County's representative, regarding any services rendered under this Agreement at no additional cost to County. In the event that an error or omission attributable to Consultant occurs, then Consultant shall, at no cost to County, provide all necessary design drawings, estimates and other Consultant professional services necessary to rectify and correct the matter to the sole satisfaction of County and to participate in any meeting required with regard to the correction.

7.16. Order of Precedence: In the event of an inconsistency in this Agreement and any of the attached Exhibits, the terms set forth in this Agreement shall prevail. If, and to the extent this Agreement incorporates by reference any provision of the RFP or the Response, such provision shall be deemed a part of this Agreement. Nevertheless, if there is any conflict among the terms and conditions of this Agreement and those of any such provision or provisions so incorporated by reference, this Agreement shall govern over both the Response and the RFP and the Response shall govern over the RFP.

7.17. Costs: Each party shall bear its own costs and fees incurred in the preparation and negotiation of this Agreement and in the performance of its obligations hereunder except as expressly provided herein.

7.18. No Third Party Beneficiary Rights: This Agreement is entered into for the sole benefit of County and Consultant and no other parties are intended to be direct or incidental beneficiaries of this Agreement and no third party shall have any right in, under or to this Agreement.

7.19. Construction: The parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises with respect to this Agreement, this Agreement shall be construed as if drafted jointly by the parties and in accordance with its fair meaning. There shall be no presumption or burden of proof favoring or disfavoring any party by virtue of the authorship of any of the provisions of this Agreement.

7.20. Amendments: This Agreement may be amend only by a writing executed by the parties hereto or their respective successors and assigns.

7.21. Waiver: The delay or failure of either party at any time to require performance or compliance by the other of any of its obligations or agreements shall in no way be deemed a waiver of those rights to require such performance or compliance. No waiver of any provision of this Agreement shall be effective unless in writing and signed by a duly authorized representative of the party against whom enforcement of a waiver is sought. The waiver of any right or remedy in respect to any occurrence or event shall not be deemed a waiver of any right or remedy in respect to any other occurrence or event, nor shall any waiver constitute a continuing waiver.

7.22. Severability: If any provision of this Agreement is determined by a court of competent jurisdiction to be unenforceable in any circumstance, such determination shall not affect the validity or enforceability of the remaining terms and provisions hereof or of the offending provision in any other circumstance. Notwithstanding the foregoing, if the value of this Agreement, based upon the substantial benefit of the bargain for any party is materially impaired, which determination as made by the presiding court or arbitrator of competent jurisdiction shall be binding, then both parties agree to substitute such provision(s) through good faith negotiations.

7.23. Counterparts: This Agreement may be executed in one or more counterparts, each of which shall be deemed an original. All counterparts shall be construed together and shall constitute one agreement.

7.24. Corporate Authority: The persons executing this Agreement on behalf of the parties hereto warrant that they are duly authorized to execute this Agreement on behalf of said parties and that by doing so, the parties hereto are formally bound to the provisions of this Agreement.

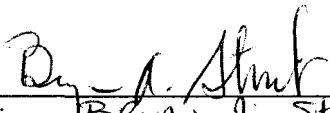
*(Signatures on the next page)*

**IN WITNESS WHEREOF**, the parties hereto have caused this Agreement to be executed by and through their respective authorized officers:

COUNTY OF STANISLAUS  
Department of Environmental Resources

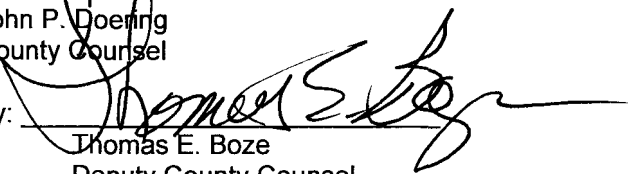
TETRA TECH BAS INC.

By:   
Sonya K. Harrigfeld  
Director

By:   
Name: Bryan A. Stirkat  
Corporate Title PRESIDENT

APPROVED AS TO FORM:

John P. Doering  
County Counsel

By:   
Thomas E. Boze  
Deputy County Counsel

**EXHIBIT A****SCOPE OF WORK**

**Operation, Maintenance and Repair Services  
At  
Geer Road Landfill**

**BACKGROUND**

The Geer Road Landfill is located approximately 10 miles southeast of the City of Modesto in Stanislaus County, on the northern bluff of Stanislaus River in central Stanislaus County. The 176-acre site is jointly owned by Stanislaus County and the City of Modesto. It is classified as a Class III landfill and is currently closed.

When the landfill was in active operation, it was operated by the Stanislaus County Department of Public Works, and accepted municipal and cannery wastes, from November 1970, until July 1990. The site operated as an area/trench fill sanitary landfill between 1970 and 1990. Approximately 144 acres (footprint) were used for refuse disposal. An estimated 4.5 million tons of municipal solid wastes were disposed of at the site. The maximum depth of refuse is estimated to range between 50-60 feet. The Stanislaus County Department of Environmental Resources currently maintains the landfill as a closed facility.

The site is within a meander bend of the Tuolumne River. The landfill was capped in 1995 with a final cover system, a geomembrane on the top deck and clay on the side slopes. The final cover is a modified California Title 23, Chapter 15 design. The top deck cover (approximately 51 acres) consists of a 1-foot foundation layer overlain by a 60-mil High Density Polyethylene (HDPE) geo-membrane that is protected by a 1-foot thick vegetative cover layer. The side-slope has a 1-foot clay barrier in place of the HDPE. The cap was installed to divert rainfall from the landfilled waste and to reduce the generation of leachate. A landfill gas (LFG) extraction system was installed in two phases, with two well fields covering the site, in 1992 and 1995.

On April 24, 2009, the Regional Water Quality Control Board (RWQCB) issued new Waste Discharge Requirements (WDR) and associated Monitoring Response Plan (MRP) Order No. R5-2009-0051 for the Geer Road Landfill. The County was in the process of complying with the requirements of the new WDRs when on April 8, 2011, the RWQCB issued a Cease and Desist Order R5-2011-0021 to the County, which required that the County optimize the existing LFG collection and control system and submit a LFG Extraction System Optimization Report by September 30, 2011. On April 8, 2011, the RWQCB also issued a revised MRP Order No. R5-2011-0022.

On December 9, 2010, the County contracted with Meyers Nave Riback Silver & Wilson, to provide legal advice related to the Geer Road Landfill Cease and Desist Order. Meyers Nave Riback Silver & Wilson, retained Bryan A. Stirrat and Associates on behalf of the County to review existing site data and conduct certain environmental investigations, and develop remedial recommendations for the site. On May 18, 2011, Bryan A. Stirrat and Associates recommended certain remedial action be taken by the County.

**A. SCOPE OF WORK**

This Master Agreement is for operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, landfill gas (LFG) collection and control system and Consultant shall perform the operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, LFG collection and control system, and the extraction well and flare analytical sampling in accordance with the current WDR" to help control LFG migration.

Individually written and executed Project Authorizations (Exhibit B) shall be issued by the County to authorize the work specified in each individual Project Authorization. All terms and conditions in the

Master Agreement shall apply to the Project Authorization. As each project is authorized against this Master Agreement, the Consultant shall develop the project cost based on the unit/task price/rates outlined in the Master Agreement - Exhibit C.

The Consultant shall provide all the labor, material, supplies, tools, license, permits and equipment to perform consultant services involving numerous and different tasks and projects related to the County's Geer Road Landfill, LFG collection and control system. Consultant services shall include monitoring, testing, analyzing and reporting on the LFG system and Consultant shall perform the operation, monitoring, maintenance and reporting of the County's Geer Road Landfill, LFG collection and control system to help control LFG Migration.

All work performed by the Consultant under this Agreement, shall be performed in a manner to bring the County into compliance with the Regional Water Quality Control Board (RWQCB) requirements including the existing Waste Discharge Requirements (WDRs), Monitoring and Reporting Program (MRP) requirements, and the RWQCB Standard Provisions. Operation, monitoring, and maintenance work performed under this Agreement shall be performed in a manner to bring the County into compliance with the operational goals established by the system design engineer, San Joaquin Valley Unified Air Pollution Control District (APCD) and with the rules and regulations of applicable state and local agencies, and other regulatory agencies for control of subsurface LFG migration, surface emissions, as well as, environmental and regulatory reporting requirements.

**B. SERVICE REQUIREMENT**

1. Professional Requirement

The practice of geology must be performed by professional geologists within the meaning of the Business and Professions Code, Division 3, chapter 12.5 (commencing with section 7800). The practice of engineering must be conducted by professional engineers within the meaning of the Business and Professions Code, division 3, chapter 7 (commencing with section 6700). The Business and Professions Code requires all geologic plans and reports and all engineering plans and reports to be prepared by or under the direction of a registered geologist or engineer, respectively, and these plans and reports must be signed by the registered professional in responsible charge.

2. Labor Code Compliance

Prevailing Wage Pursuant to Labor Code Section 1771, certain work under this Agreement is subject to the provision of Article 2 (commencing with section 1770) of Chapter 1 of Part 7 of Division 2 of the Labor Code, and the Consultant shall pay all workers the general prevailing rate per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday and holiday work. These wage rates, which are set forth by the Director of the Department of Industrial Relations, are now on file with the Department of Public Works and are a part of this Agreement. The Consultant shall post a copy of these prevailing wage rates on the job site.

a. Payroll Records Pursuant to and in accordance with the provisions Labor Code Section 1776, the Consultant shall keep accurate payroll records of employees performing work under this Agreement and shall make available for inspection a certified copy such payroll records.

b. 8 Hour Day Pursuant to and in accordance with the provisions of Labor Code Section 1810, 1811 and 1815, the time of service of any laborer, workman, or mechanic employed upon any of the work under this Agreement is limited and restricted to eight (8) hours during any one calendar day, and 40 hours during any one calendar week, except that work performed by employees of contractors in excess of eight (8) hours per day and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

c. Apprentices The Consultant shall comply with all applicable provisions of the Labor Code, including without limitations Section 1777.5 and 1777.6, related to employment of apprentices by the

Consultant and all subcontractors, and Consultant shall be subject to all applicable penalties for non-compliance.

d. Penalties The Consultant shall comply with Labor Code Section 1775. In accordance with Labor Code Sections 1775 and 1813, the Consultant shall forfeit, as a penalty to the County of Stanislaus \$25.00 for (a) each calendar day or portion thereof for each workman paid less than the stipulated prevailing rates for such work or craft in which such workman is employed for any work done under the contract by him or by any subcontractor under him; and (b) each calendar day or week during which any laborer workman or mechanic is required or permitted to labor more than eight hours in any one calendar day or 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing with Section 1810) of Chapter 1, Part 7, Division 2 of the Labor Code. In addition to said penalties, the difference between such stipulated prevailing wage rates and the amount paid to each workman for each calendar day or portion thereof for which each workman was paid less than the stipulated prevailing wage rate shall be paid to each workman by the Consultant.

### 3. Trenching and Excavation

a. Subsurface Conditions Pursuant to Public Contract Code Section 7104, the following provisions shall apply provided the work under this Agreement involves digging trenches or other excavations that extend deeper than four (4) feet below the surface:

(1) The Consultant shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, of any:

(i) Material that the Consultant believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

(ii) Subsurface or latent physical conditions at the site differing from those indicated.

(iii) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

(2) The public entity shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Consultant's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the contract.

(3) In the event that a dispute arises between the public entity and the Consultant whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, the Consultant shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. The Consultant shall retain any and all rights provided either by contract or by law, which pertain to the resolution of disputes and protests between the contracting parties.

b. Excavation Shoring. Pursuant to Labor Code section 6707, if the work under this Agreement involves digging trenches or other excavations that extend deeper than five (5) feet below the surface the Consultant shall provide at its sole cost and expense adequate sheeting, shoring and bracing, or equivalent method, for the protection of life or limb, which shall conform to applicable safety orders.

### C. SAFETY REQUIREMENTS

All services and merchandise must comply with current California State Division of Industrial Safety Orders and OSHA.

**D. COMPLIANCE WITH OSHA**

The Consultant shall be responsible for strict compliance with all requirements of the California Occupational Safety and Health Act (OSHA) which are applicable to the work to be accomplished pursuant to this contract. OSHA shall be construed to include, but not be limited to, all applicable safety orders issued by the Division of Industrial Safety, State of California. In the event the Consultant or any of the Consultant's employees shall observe any violation of OSHA in or on the premises on which the Consultant is to perform work pursuant to this contract, the Consultant shall immediately give written notice to the County of such violation.

**E. MULTI-YEAR CONTRACT**

If funds are not appropriated or otherwise made available to support continuation in any fiscal year succeeding the first fiscal year, the County shall have the right to terminate this contract and the Consultant is not entitled to recover any costs not incurred prior to termination.

**F. WORK SCHEDULE**

Consultant is obligated to perform in a timely manner the services and work provided for under this Agreement and the County hereby gives the Consultant notice to proceed with the work as of the effective date of this Agreement. It is understood by Consultant that the performance of these services and work shall require the Consultant to perform the services and work in conformance with the work schedule in Attachment A of each separate Project Authorization agreed to by the parties.

**G. INVOICE TO ADDRESS**

Consultant shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services. Copies of detailed invoices/receipts for reimbursable shall be attached to invoices submitted to the County for payment.

Invoices shall be sent to:

Stanislaus County  
Department of Environmental Resources  
3800 Cornucopia Way  
Suite C  
Modesto, CA 95358  
Attn: Jami Aggers

////

**END OF EXHIBIT**

**SAMPLE**

**EXHIBIT B**

**PROJECT AUTHORIZATION NO. 00-00**

**A. Terms and Conditions**

Except as hereinafter provided, the services provided by the Consultant under this Project shall be subject to the terms and conditions set forth in the *Master Agreement for Professional Design Services* made and entered into by and between the COUNTY OF STANISLAUS ("County") and [COMPANY NAME] ("Consultant"), on \_\_\_\_\_, 2011.

**B. Scope of Work**

The Consultant shall provide services under the Agreement and this scope of work for additional site work requested by the County, as set forth in the below scope of work:

**C. Compensation**

The Consultant shall be compensated for the services provided under the Agreement and this scope of work as follows:

Consultant shall be compensated on a time and material basis based on the rates set forth below to perform the work associated with each task, and not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses.

Description (ie, Staff title, equipment rental, etc)	Unit of Measure	Unit Price	Total	Not to Exceed Total

1. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall not exceed \_\_\_\_\_, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Consultant to perform or to assist in the performance of its work under this Agreement.

**D. Payment and Invoicing**

1. The terms of payment are Net 30 days after approval of the invoice.
2. Consultant shall submit a detailed invoice in duplicate for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate, itemized rental equipment, number of days rented, rate of rental and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services.
3. Consultant shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
4. The County shall pay the Consultant 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:



Stanislaus County  
Department of Environmental Resources  
Attention:  
3800 Cornucopia Way  
Suite C  
Modesto, CA 95358

E. Project Authorization Period

Services will commence on or about \_\_\_\_\_, 2011 and be completed by \_\_\_\_\_, 2011.

IN WITNESS WHEREOF, the parties have executed this Project Authorization No. 00-00 on \_\_\_\_\_, 2011.

**COUNTY OF STANISLAUS**  
Department of Environmental Resources

**CONSULTANT NAME**

By: \_\_\_\_\_  
Sonya K. Harrigfeld  
Director

**SAMPLE**

By: \_\_\_\_\_  
Name  
Title

"Consultant

"County  
APPROVED AS TO FORM:  
John P. Doering  
County Counsel

By: \_\_\_\_\_  
Thomas E. Boze  
Deputy County Counsel

**EXHIBIT C**  
**FEE SCHEDULE**

The Contractor shall provide all the labor, material, supplies, tools, licenses, permits and equipment to perform contractor services involving numerous and different tasks and projects identified in Exhibit A and B that are related to the monitoring, testing, analyzing and reporting on the County's Geer Road Landfill gas systems and Consultant shall perform the operation, monitoring and maintenance of the County's Geer Road landfill gas systems to help control LFG Migration. The work for each site shall be authorized on a separate Project Authorization issued by the County.

The charges for the work shall be in accordance with this fee schedule. **The below fee schedule is in effect through the end of this Agreement.** The following billable rates include: labor, benefits, taxes, overhead/general & administrative (G&A), profit, and ancillary charges such as copies, faxes, telephones, postage, paper clips, binders, company cars, fuel, insurance, vehicle or equipment maintenance, cellular phone charges, computer charges (CADD, word-processing, mapping), etc.

It is important that the Consultant use only the appropriate staff levels for the tasks performed. The Consultant may use a higher billing staff person to perform tasks commonly performed by a lower billing staff person if the billing rate is adjusted downward to correspond to the task performed.

**TETRA TECH BAS, INC., ENGINEERING DIVISION**

The below fee schedule is for Tetra Tech BAS Inc., - Engineering Division:

<u>Description</u>	<u>Billable Hourly Rate</u>
Principal	\$246.00
Project Engineer (PRE)	\$210.00
Principal Solid Waste Planner	\$199.00
Division Engineer (DE)	\$198.00
Principal Administrator (PA)	\$189.00
Senior Project Manager(SM) Chief Engineer (CE)	\$185.00
Project Manager (PM)	\$174.00
Project Engineer (PE) / Administrator (PAD)	\$156.00
Engineer V (E-V)	\$141.00
Engineer IV (E-IV)	\$128.00
Engineer III (E-III)	\$120.00
Engineer II (E-II)	\$113.00
Engineer I (E-I)	\$ 96.00
Engineer (E)	\$ 90.00
Senior Project Designer (SPD)	\$152.00
Project Designer (PD)	\$138.00
Senior Designer (SDD)	\$128.00
CADD Designer / Drafter (CD)	\$124.00
Designer (DD)	\$119.00
Senior Drafter (SD)	\$110.00
Drafter (D)	\$ 96.00
Senior CADD Operator (SCO)	\$ 90.00
CADD Operator (CO)	\$ 74.00
Regulatory Compliance Manager (RCM)	\$146.00
Senior Regulatory Compliance Specialist (SRS)	\$137.00
Regulatory Compliance Specialist (RS)	\$115.00
Senior Environmental Scientist (SNS)	\$145.00
Senior Environmental Specialist (SES)	\$127.00
Environmental Specialist II (ES-II)	\$116.00
Environmental Specialist I (ES-I)	\$102.00
Environmental Specialist (ES)	\$ 91.00
Estimator (E) / Specification Writer (SW)	\$121.00

<u>Description</u>	<u>Billable Hourly Rate</u>
Landscape Architect (LA)	\$118.00
Project Accountant / Analyst (AA)	\$ 83.00
Senior Project Coordinator (SPC)	\$121.00
Project Coordinator (PC)	\$104.00
Senior Technical Editor (STE)	\$ 89.00
Administrative Assistant (ADA)	\$ 93.00
Data (DP) Word Processing Secretary (WP)	\$ 82.00
Office Services Clerk (OS)	\$ 80.00
General Clerk (C) / Typist (Y)	\$ 63.00
Data Analyst (DA)	\$ 92.00
Chief Engineering Technician (CT)	\$118.00
Engineering Technician V (ET- V)	\$104.00
Engineering Technician IV (ET-IV)	\$ 93.00
Engineering Technician III (ET-III)	\$ 81.00
Engineering Technician II (ET-II)	\$ 71.00
Engineering Technician I (ET-I)	\$ 60.00
Engineering Technician (ET)	\$ 39.00
Chief of Survey Parties (CSP)	\$132.00
3-Man Survey Party (SP-3M)	\$290.00
2-Man Survey Party (SP-2M)	\$240.00
1-Man Survey Party (SP-1M)	\$185.00
Court Appearance (Expert Witness, Deposition, etc)	1.5 x hourly rate

**STANDARD FEE SCHEDULE FOR EQUIPMENT AND ANALYSIS**

<b>Type of Equipment</b>	<b>Daily Rate</b>	<b>Weekly Rate</b>	<b>Monthly Rate</b>
4 Gas Range Meter CH4, H2S, CO, O2 (Sentinel 44)	\$75.00	\$200.00	\$500.00
Alpha – 1 Personal Sampling Pump	\$75.00	\$200.00	\$500.00
Disposable Bailer	\$20/each	n/a	n/a
CO2 Calorimetric Analysis Tubes	\$40.00	\$125.00	\$250.00
Downhole Camera	\$75.00	n/a	n/a
Dupont Dosimeter Mark -3 (Personal Sample Pump)	\$50.00	\$150.00	\$300.00
Flow Calibrator (Gilian)	\$50.00	\$150.00	\$300.00
Gas Extraction Monitor (GEM 500/ 2000/ 2000 Plus)	\$125.00	\$350.00	\$900.00
Lung Sampler (Nutech 218)	\$100.00	\$300.00	\$800.00
Mini – Ram Data Logger	\$40.00	\$125.00	\$250.00
Mini – Ram Dust Meter	\$50.00	\$150.00	\$300.00
Organic Vapor Analyzer (OVA128)	\$125.00	\$400.00	\$1,000.00
Photo Ionization Detector (OVM580B)	\$125.00	\$400.00	\$1,000.00
Sample Train (Gas Extraction Pump)	\$50.00	\$150.00	\$300.00
Soil Auger / Sampler	\$30.00	\$90.00	\$180.00
Sounder (Liquid Level Indicator)	\$40.00	\$125.00	\$250.00
Horiba Meter	\$50.00	\$200.00	\$400.00
MiniRae 2000	\$75.00	\$200.00	\$500.00
GT Surveyor	\$75.00	\$200.00	\$50.00
Groundwater Sampling Equipment	\$30/hour	n/a	n/a
Company Vehicle	\$120.00	\$480.00	\$1,250.00
Field Sampling Supplies:	\$100.00	n/a	n/a
Level C (Per Person)	\$150.00	n/a	n/a
Respirator w/cartridge (full or half faced)			
Tyvek Coveralls			
Outer Gloves			
Glove Liners			
Neoprene Boots			

**TETRA TECH BAS, INC., CONSTRUCTION DIVISION**

The below fee schedule is for Tetra Tech BAS Inc., - Construction Division Maintenance Equipment and Maintenance Labor:

<u>Description</u>	<u>Billable Hourly Rate</u>
Principal – Maintenance Services	\$145.00
Maintenance Manager	\$130.00
Maintenance Technician (Piping)	\$ 95.64
Maintenance Technician (Weed Eating, Misc gas system repairs)	\$ 75.00
Equipment Operator	\$105.53
Administrative Assistant	\$ 53.14
Surveyor to set grades on portions of piping	\$135.00

<u>Equipment</u>	<u>Unit Rate</u>
Excavator	\$921.00 / day
Backhoe	\$421.00 / day
Generator 9.7KW	\$ 98.50 / day
Service Truck # 1	\$105.00 / day
Service Truck #2	\$105.00 / day
Service Truck #3	\$105.00 / day
Electrofusion Processor	\$275.00 / day
Asphalt Saw Cutting Machine and Water Tank	\$575.00 / day
Asphalt Paving (Trench Repair)	\$2,650.00 / LS
2" – 4" HDPE Welder	\$ 98.50 / day
6" – 12" HDPE Welder	\$350.00 / day
Mob/Demob Equipment	\$1,800.00 / LS

Note:

1. Scheduled labor rates include overhead, administration, and profit.

2. The Consultant shall not apply the markup to direct charges such as labor. The Consultant shall perform the corrective action work; (e.g., Consultant shall not simply serve as a "broker" and subcontract out all work). Markups shall only be applied to the actual subcontractor or equipment costs paid by the primary corrective action Consultant (e.g., not "list" or other artificial price) plus 10%. Markups shall not be applied to charges from an affiliate or subsidiary company of the primary Consultant. Subcontractor costs shall be reasonable and necessary for corrective action. Consultant shall provide the County a copy of the actual subcontractor invoice (with detail) or equipment purchase receipt with their reimbursement request.

3. Travel and Per Diem (no mark up)

In addition to the aforementioned fees, Consultant shall be reimbursed for the following items, that are reasonable, necessary and actually incurred by the Consultant in connection with the services:

- (a) Expenses, fees or charges for outside printing, reproduction or binding of documents at actual costs (no mark up).
- (b) Travel expenses shall be reimbursed in accordance with the County's travel policy, which is incorporated herein by reference (i.e. Lodging accommodations shall be moderate considering locations and availability. Mileage reimbursement shall be paid according to the current mileage chart maintained by the County's Auditor-Controller's Office.)

Fees plus reimbursable expenses shall not exceed the amounts set forth in each Project Authorization. Payments shall be based upon work documents submitted by the Contractor to the County and accepted by the County as being satisfactory to County's needs, not work in process.

Definitions

The following definitions are listed for the purpose of intent in the use of specific words:

- "Task " refers to a function or a piece of work assigned or done by Consultant as part of the investigation, monitoring, testing of sites designated as Landfill site. The task cost shall include itemization of labor, materials, equipment, rentals, laboratory analysis, etc.
- "Staff Billable Rate" refers to Consultant's Staff responsible for performing the task
- "Laboratory Analysis" refers to rates charged by the laboratory used by the Consultant and the Consultant's mark-up.
- "Equipment" refers to cost for the daily rental of equipment (i.e., Air sample pump, drums, generator, etc.) necessary to perform the investigation, monitoring or testing of the Landfill sites. Cost to include Consultant's mark-up.
- "Fee" refers to cost for fees such as disposal fees.
- "Sampling Vehicles" refers to daily rental from a rental company of vehicles only used to perform investigation, monitoring or testing of Landfill sites. Cost to include Consultant's mark-up.
- "Materials" refers to materials such as pipe costs associated with the investigation, monitoring or testing of Landfill sites.
- "Mark-up" refers to an administrative fee added to a service such as rental equipment, overnight deliveries or items that must be purchased for a specific job. Something that must be purchased for a specific job is chargeable at actual cost plus 10%.

**END OF EXHIBIT**



DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Cornucopia Way, Suite C, Modesto, CA 95358

Phone: (209) 525-6770

Fax: (209) 525-6773

**Operation, Maintenance and Repair Services  
At  
Geer Road Landfill**

***Project Number 11-001-SMG***

**A. Terms and Conditions**

Except as hereinafter provided, the services provided by the Consultant under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement for Professional Design Services* number A072711 made and entered into by and between the County of Stanislaus ("County") and Tetra Tech BAS Inc. ("Consultant"), on August 18, 2011.

**B. Background**

The Geer Road Landfill is located approximately 10 miles southeast of the City of Modesto in Stanislaus County, on the northern bluff of Tuolumne River in central Stanislaus County. The 167-acre site is jointly owned by Stanislaus County and the City of Modesto. It is classified as a Class III landfill and is currently closed.

When the landfill was in active operation, it was operated by the Stanislaus County Department of Public Works, and accepted municipal and cannery wastes, from November 1970, until July 1990. The site operated as an area/trench fill sanitary landfill between 1970 and 1990. Approximately 144 acres (footprint) were used for refuse disposal. An estimated 4.5 million tons of municipal solid wastes were disposed of at the site. The maximum depth of refuse is estimated to range between 50-60 feet. The Stanislaus County Department of Environmental Resources currently maintains the landfill as a closed facility.

The site is within a meander bend of the Tuolumne River. The landfill was capped in 1995 with a final cover system, a geomembrane on the top deck and clay on the side slopes. The final cover is a modified California Title 23, Chapter 15 design. The top deck cover (approximately 51 acres) consists of a 1-foot foundation layer overlain by a 60-mil High Density Polyethylene (HDPE) geo-membrane that is protected by a 1-foot thick vegetative cover layer. The side-slope has a 1-foot clay barrier in place of the HDPE. The cap was installed to divert rainfall from the landfill waste and to reduce the generation of leachate. A landfill gas (LFG) extraction system was installed in two phases, with two well fields covering the site, in 1992 and 1995.

On April 24, 2009, the Regional Water Quality Control Board (RWQCB) issued new Waste Discharge Requirements (WDR) and associated Monitoring Response Plan (MRP) Order No. R5-2009-0051 for the Geer Road Landfill. The County was in the process of complying with the requirements of the new WDRs when on April 8, 2011, the RWQCB issued a Cease and Desist Order R5-2011-0021 to the County, which required that the County optimize the existing LFG collection and control system and submit a LFG Extraction System Optimization Report by September 30, 2011. On April 8, 2011, the RWQCB also issued a revised MRP Order No. R5-2011-0022.

On December 9, 2010, the County contracted with Meyers Nave Riback Silver & Wilson, to provide legal advice related to the Geer Road Landfill Cease and Desist Order. Meyers Nave Riback Silver & Wilson, retained Bryan A. Stirrat and Associates on behalf of the County to review existing site data and conduct certain environmental investigations, and develop remedial recommendations for the site. On May 18, 2011, Bryan A. Stirrat and Associates recommended certain remedial action be taken by the County.

### **C. Scope of Work**

The Consultant shall provide all the labor, material, supplies, tools and equipment to operate, monitor, maintain and optimize the existing LFG collection and control system at the County's Geer Road Landfill to help control (LFG) migration. Consultant shall exercise generally accepted operation and maintenance practices with respect to the operational goals established by the system design engineer, San Joaquin Valley Unified Air Pollution Control District (APCD) and with the rules and regulations of applicable state and local agencies, and other regulatory agencies for control of subsurface LFG migration, surface emissions, as well as, environmental and regulatory reporting requirements.

#### **1. Regulatory Requirements**

##### **1.1. Permit Requirements**

Consultant shall provide:

- a. Operation and Monitoring of the LFG extraction wells to maintain compliance with site-specific RWQCB, APCD and Title V permits.
- b. Proper maintenance of equipment
- c. Creation and retention of calibration and maintenance records.
- d. Total flow and flare exhaust temperature adjustments not to exceed permitted maximum (site specific).
- e. Calibration of the total flow metering equipment (site specific)
- f. Maintenance of the gas collection system and flare equipment to prevent LFG leaks.
- g. Operation and maintenance of the LFG condensate collection system at the County landfill site (in coordination with the County) in an effort to prevent release of condensate resulting in discharge of odors, toxic air contamination, or reactive organic compounds to the atmosphere.
- h. Operation and maintenance of the LFG system in an effort to reduce instantaneous LFG emissions such that they do not exceed 500 ppmv (as methane) at any surface point (with consideration to permit exceptions) and integrated LFG surface emissions do not exceed 25 ppmv (as methane) from any grid established for compliance with California Code of Regulations (CCR) Title 17.
- i. Operation of the LFG systems to minimize air intrusion into landfill.
- j. Maintenance of flare exit gas temperature between 1,400 and 1,800 degrees Fahrenheit (site-specific).
- k. Maintenance of the flare stack thermocouple in good working condition.
- l. Maintenance of the extraction wellhead shut-off valves in good working condition.
- m. Operation of the LFG collection systems to help maintain methane gas levels at 5 percent or less in perimeter monitoring probes and 1.25 percent or less in on-site structures.
- n. Take whatever action is necessary to protect human health.

##### **1.2 Technical**

Consultant shall provide the following:

- a. O & M of LFG compliance systems to meet permit requirements and to protect on-site personnel and the public.
- b. Database management (Submittal of all data collected to SCS for uploading to it Database).

- c. Trend tracking.
- d. Correlation of performance data with the County with respect to LFG surface emission, subsurface migration control and liquid management.
- e. Operation of gas systems to maintain less than 1.25 percent methane in on-site structures and less than 5 percent methane at County landfill perimeter probes.

1.3 Administrative

Consultant shall provide the following:

- a. Timely reporting
- b. Timely invoicing
- c. Effective cost control
- d. Efficient scheduling
- e. Information and personnel access to the County Project Manager

2. **Scope of Services**

Consultant shall divide LFG system operation, monitoring, maintenance, LFG surface, flare emissions testing and regulatory compliance reporting into the following Tasks:

- Task 1 – Routine LFG system operation, monitoring, and maintenance
- Task 1A – LFG Monitoring and Analytical Testing for Halogenated VOCs
- Task 6 – Quarterly CVRWQCB Reporting
- Task 7 – Non-Routine Emergency Service
- Task 8 – Non-Routine Scheduled Service

**Task 1 – Routine LFG System Operation, Monitoring and Maintenance**

Consultant shall implement the following LFG system routine operation, monitoring and maintenance program:

**1.1 Monitoring:**

1.1.1 Weekly

- a. The South Blower/Flare Station (BFS) shall be monitored. Data shall be collected, recorded, and stored in a computer database for the following:
  - i. Date, time and monitoring personnel
  - ii. Meteorological conditions (i.e., wind velocity, barometric pressure, ambient temperature, weather conditions, etc)
  - iii. Extraction blower operating inlet and outlet temperatures and pressures
  - iv. Observe all compressors for proper operation and all supply to condensate handling system
  - v. Methane gas, oxygen gas, carbon dioxide gas concentrations (CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub>) and pressure at flare station inlet, flare exit gas and operating temperature
  - vi. LFG flow rate to flare
  - vii. Flare combustion louver and flow control valve positions
  - viii. Observe liquid level in KO and holding tank
  - ix. Supply air pressures to LFG condensate handling systems
  - x. Check air compressor/oil level
  - xi. Check pilot ignition system propane storage tank level
  - xii. Monitor strip chart
  - xiii. Check condensate injection systems and storage tanks

1.1.2 Monthly

- a. LFG monitoring probes shall be monitored. Weekly follow-up testing shall be



conducted at monitoring probes, which indicate methane gas concentrations at or above five percent by volume until below five percent by volume or non-detected reading is obtained. Data shall be collected, recorded, and stored in a computer database for the following:

- i. Date, time and monitoring personnel
- ii. Meteorological conditions (i.e., wind velocity, barometric pressure, ambient temperature, weather conditions, etc)
- iii. Static pressure
- iv. Methane gas concentration, Oxygen gas concentration, Carbon dioxide gas concentration (CH<sub>4</sub>, O<sub>2</sub>, CO<sub>2</sub>) and flow
- v. Observe blowers, flame arrestors, flares, control panel, well fields and condensate pump systems for accessibility, vandalism, malfunctions, leaks
- vi. Data Management – EIL system

#### 1.1.3 Bi-Monthly

- a. LFG extraction wells shall be monitored. Bi-monthly follow-up testing and adjusting shall be conducted at extraction wells adjusted in response to system balancing. Data shall be collected, recorded, and stored in computer database for the following:
  - i. Date, time and monitoring personnel
  - ii. Meteorological conditions (i.e., wind velocity, barometric pressure, ambient temperature, weather conditions, etc)
  - iii. Wellhead vacuum and flow (where applicable)
  - iv. Header vacuum (where applicable)
  - v. LFG temperature
  - vi. Well monitoring, LFG temp, static pressure, header static pressure, Methane gas concentration, Oxygen gas concentration Carbon dioxide gas concentration and flow (CH<sub>4</sub>, O<sub>2</sub>, CO<sub>2</sub>)
  - vii. Monitor header sample ports for pressure
  - ix. Perform well evaluation
  - x. Perform well adjustments (assumes 50% of all wells)
  - xi. Follow-up well monitoring after adjustments
- b. Once each month (where applicable), main header line access ports shall be tested for pressure. The results shall also be stored in a computer database and analyzed for long-term trends (i.e., pressure drops indicate possible condensate blockages and/or pipe breakages, etc.)
- c. LFG control system blowers, flame arresters, flares, control panel, well fields, and condensate pump systems shall be observed for the following:
  - i. Accessibility
  - ii. Vandalism
  - iii. Malfunctions
  - iv. Leaks

#### 1.1.4 Quarterly

- a. Once each quarter, on-site buildings (i.e., scale house) shall be monitored in accordance with Section 20920 through 20933, Title 27 of the California Code of Regulations (CCR). In addition to the parameters below, Consultant shall document testing protocols and instrument calibration, locations of area readings equal to or in excess of 1.25 percent by volume in air shall be recorded (and appropriate County staff notified immediately) along with the following:
  - i. Date, time and monitoring personnel

- ii. Meteorological conditions (i.e., wind velocity, barometric pressure, ambient temperature, weather conditions, etc)
- iii. Methane gas concentration
- iv. Oxygen gas concentration

**1.2 Operation:**

1.2.1 Monthly

LFG extraction wells and BFS total flow shall be adjusted as required to help control LFG migration (methane gas levels below five percent by volume at the property line and surface emissions below 1,000 ppm) and optimize system performance.

**1.3 Maintenance:**

1.3.1 Monthly

- a. Drain/purge water traps, monitors, and pitot tubes.
- b. Inspect monitors/sensors, pitot tubes and strip charts in accordance with manufacturers specifications.
  - i. Rotate active/inactive blowers.
  - ii. Temperature and flow recorder paper shall be replaced as necessary.
  - iii. BFS controller set points shall be checked and adjusted as necessary.
  - iv. Condensate pumping, injection systems shall be checked for proper operation.
  - v. Maintain the air compressor, drain liquids, check operations and add oil as necessary.
  - vi. Test alarm signals (e.g., flame failure, etc.) Simulate for proper operation notification.

1.3.2 Quarterly

- a. The blowers (and electric motors) shall be lubricated in accordance with the manufacturers specifications:
  - i. Inspect Flame arrester
  - ii. Inspect burner heads

1.3.3 Annual

- a. The South flare air compressor systems shall be checked and serviced by Accurate Air Engineering.
- b. Vessel and piping systems shall be observed for corrosion.
- c. At project inception and annually thereafter, prepare and inventory a list of critical spare parts (e.g., chart paper, methane sensors, electrical fuses, etc.).

**1.4 Reporting:**

1.4.1 Monthly

- a. Once each month (due by the end of the following month), Consultant shall prepare a detailed report to the County containing data collected and a summary of all activities performed on the project during the reporting period. Maintenance repairs and/or system modifications shall also be recommended as required.

**Task 1A – LFG Monitoring and Analytical Testing for Halogenated VOC**

Under Task 1A, Consultant shall perform monthly monitoring for total halogenated VOCs in the header piping using a MiniRae photo ionization detector. Additionally, all perimeter migration monitoring probes with methane levels greater than 1% by volume shall be sampled and analytical performed using EPA Method TO-15, up to a total of 12 probes annually. On a quarterly basis up to 30 extraction wells shall be sampled and analytical performed using EPA method TO-15. All analytes of Method TO-15 shall be reported.

**Task 6 – Quarterly CVRWQCB Reporting**

Under Task 6, Consultant shall prepare the quarterly LFG system reporting that are required by the Central Valley RWQCB. These reports are required to address the progress of the LFG system in dealing with the VOC impacts to groundwater. The reports shall be prepared in the same format as previous reports. A draft of the reports shall be provided to the County to review prior to submittal. The final report shall incorporate the County's comments.

**Task 7 - Non-Routine Emergency Service**

Non-routine unscheduled/emergency repair and maintenance services include events that require immediate response to protect life, property, the environment, or to restore system operations. These events may include, but are not limited to the following:

- a. Emergency call-out by alarm systems (LFG and/or groundwater systems) or County personnel.
- b. Odor complaints
- c. Loss of gas flow or flare ignition
- d. Groundwater system liquid or air transmission line leaks
- e. Repair of main header lines (resulting in no gas flow to the BFS)
- f. Replacement of failed groundwater pump controllers
- g. Notification to APCD of system shutdowns

Response to the urgent nature of these items is such that they cannot be scheduled. Consultant shall respond to these conditions, as needed, 24 hours per day, 7 days per week, 365 days per year. Non-routine unscheduled emergency services shall only be performed subsequent to notification to and authorization from the County. Consultant is pre authorized to respond to emergency call-outs as they occur.

**Task 8 - Non-Routine Scheduled Service**

Non-routine scheduled maintenance consists of corrective repair or maintenance work identified during the routine site visits or by County personnel. Non-routine maintenance may include, but is not limited to the following:

- a. Remediating and retesting of leaks in excess of 1,000 ppm of methane at landfills surface or gas transfer path
- b. Raising of wellheads, lateral, or header lines (LFG and/or groundwater systems)
- c. Repairing or replacing of non-functional condensate sump components, lateral, and header lines (LFG and/or groundwater systems)
- d. Replacing non-functional extraction or monitoring wells (LFG and/or groundwater systems)
- e. Assisting with APCD site inspections
- f. Repairing or replacing of non-functional groundwater extraction pumps, system components, lateral and header lines
- g. Carbon absorber back flushing, carbon replacement or sludge disposal

This work is essential for proper system operation; however, it is considered the type of work that can be scheduled to allow for procurement of materials, equipment, scheduling of personnel, etc. A not to exceed or lump sum quote shall be provided to the County by Consultant for non-routine scheduled

maintenance work. Non-routine scheduled maintenance work shall only be performed subsequent to notification to and authorization from the County. This might also include on-call engineering and compliance services. Non-routine scheduled and emergency services shall be performed/billed under this Project Authorization in accordance with Task 7 and Task 8. The "Standard Rates in Exhibit C of the Master Agreement shall apply.

**D. Schedule**

Task	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1- Routine Monthly LFG O& M	●	●	●	●	●	●	●	●	●	●	●
1- Monthly LFG Reporting	■	■	■	■	■	■	■	■	■	■	■
1A – Quarterly LFG Monitoring and Analytical Testing for Halogenated VOCs			◆			◆			◆		
6- Quarterly CVRWCB Reporting			◆			◆			◆		

Legend:

- Monthly and Quarterly O & M ●
- Report Submittal ■
- Quarterly only ◆

**E. Project Authorization Period**

Services will commence on or about August 17, 2011, and end June 30, 2012, or until the work is completed.

**F. Compensation**

The Consultant shall be compensated for the services provided under the Agreement and this scope of work as follows:

**1. Project Price**

The below project pricing is devised to allow the County the ability to identify costs associated with the frequency of tasks performed in a given project. The Consultant shall be compensated on a time and material basis, based on the rates set forth below and in the Master Agreement to perform the work associated with each task, not to exceed the amounts listed below. Maximum Total Task Price includes fees and reimbursable expenses that have been agreed to by the both parties in accordance with the Master Agreement Exhibit C – Rate Schedule. The County shall not reimburse for fax, phone, cell phone, postage, or photo copies and other items as identified in Exhibit C – Rate Schedule. The below project prices effective through the term of this Agreement.

TASK NUMBER	DESCRIPTION	TOTAL NOT TO EXCEED AMOUNT PER TASK
1	Routine Operation, Monitoring, Maintenance and Reporting	\$382,291.90
1A	LFG Monitoring and Analytical Testing for Halogenated VOCs	\$24978.30

TASK NUMBER	DESCRIPTION	TOTAL NOT TO EXCEED AMOUNT PER TASK
6	Quarterly CVRWQCB Reporting	\$16,816.00
7	Non-Routine Emergency Services	\$10,000.00
8	Non-Routine Scheduled Services	\$20,000.00
	<b>TOTAL NOT TO EXCEED</b>	<b>\$454,086.20</b>

Project price detailed by classification and event:

Task	Description	Title	Billable Hourly Rate	# of Events During Contract Term	Other Direct Costs	Total Price	Extended Maximum Total Task Price
<b>1- MONITORING</b>							
	Weekly			45	\$100.00		<b>\$13,375.00</b>
		Chief Engineer Tech	\$118.00			\$13,275.00	
	Bi – Monthly			23			<b>\$151,381.40</b>
		Principal	\$246.00			\$2,829.00	
		Manager LFG Field Surveyor	\$174.00			\$18,009.00	
		Chief Engineer Tech	\$118.00			\$130,543.40	
	Monthly			10.5	\$9,200.00		<b>\$38,264.00</b>
		Principal	\$246.00			\$1,291.50	
		Sr. Project Manager	\$185.00			\$9,712.50	
		Project Engineer	\$156.00			\$13,104.00	
		Chief Engineer Tech	\$118.00			\$4,956.00	
	Quarterly			3			<b>\$ 1,263.00</b>
		Sr. Project Manager	\$185.00			\$555.00	
		Chief Engineer Tech	\$118.00			\$708.00	
<b>1A-Monitoring Flare Station, Probes and Gas Extraction Wells for VOCs per WDRs.</b>							
	Quarterly			11, 1, 3	\$18,565.00		<b>\$24,978.30</b>
		Chief Engineer Tech	\$118.00			\$6,413.30	

Task	Description	Title	Billable Hourly Rate	# of Events During Contract Term	Other Direct Costs	Total Price	Extended Maximum Total Task Price
<b>1 – OPERATION AND MAINTENANCE</b>							
	Monthly			10.5			<b>\$19,470.00</b>
		Chief Engineer Tech	\$118.00			\$20,443.50	
	Quarterly			3	\$2,000.00		<b>\$4,124.00</b>
		Chief Engineer Tech	\$118.00			\$2,124.00	
	Annually			1	\$575.00		<b>\$1,752.00</b>
		Manager LFG Field Surveyor	\$174.00			\$174.00	
		Chief Engineer Tech	\$118.00			\$1,003.00	
	Reporting Monthly O & M			10	\$300.00		<b>\$25,080.00</b>
		Principal	\$246.00			\$2,460.00	
		Sr. Project Manager	\$185.00			\$3,700.00	
		Project Engineer	\$156.00			\$12,480.00	
		Manager LFG Field Surveyor	\$174.00			\$1,740.00	
		Chief Engineer Tech	\$118.00			\$1,180.00	
		Sr. Project Coordin.	\$121.00			\$2,420.00	
		Clerk / Courier	\$80.00			\$800.00	
	Project Management, Engineering and Coordination						<b>\$68,067.50</b>
		Principal	\$246.00	45		\$27,675.00	
		Sr. Prjct. Mgr	\$185.00	45		\$16,650.00	
		Mgr. LFG Field Serv	\$174.00	45		\$15,660.00	

Task	Description	Title	Billable Hourly Rate	# of Events During Contract Term	Other Direct Costs	Total Price	Extended Maximum Total Task Price
<b>1- OPERATION MAINTENANCE (Continued....)</b>							
		Chief Eng Tech	\$118.00	45		\$5,310.00	
		Sr. Prjct. Eng. Coord	\$121.00	45		\$2,722.50	
					\$50.00	\$50.00	
	<i>Additional Items</i>						<b>\$59,515.00</b>
	Calibrate GEM and OVA (pre and post)	Chief Eng Tech	\$118.00	160		\$9,440.00	
	GEM Use @ \$900.00 per month			10	\$9,000.00	\$9,000.00	
	Instrument rental (OVM, OVA) @ \$125.00 per day			3	\$375.00	\$375.00	
	Supplies and Other Equipment Use @ \$100.00 per month			11	\$1,100.00	\$1,100.00	
	Travel, Hotel etc* @ 1 week			45	\$39,600.00	\$39,600.00	
	<b>TOTAL TASK 1 &amp; 1A</b>						<b>\$407,270.00</b>
<b>6</b>	<b>REPORTING</b>						
	Quarterly			3	\$250.00		<b>\$16,816.00</b>
	CVRWQCB Report	Principal	\$246.00			\$2,214.00	
		Sr. Project Manager	\$185.00			\$2,220.00	
		Project Engineer	\$156.00			\$9,360.00	
		Chief Engineer Tech	\$118.00			\$354.00	
		Sr. Project Coordinator	\$121.00			\$2,178.00	
		Clerk / Courier	\$80.00			\$240.00	
<b>7</b>	<b>NON-ROUTINE EMERGENCY SERVICES</b>		**		**		<b>\$10,000.00</b>

Task	Description	Title	Billable Hourly Rate	# of Events During Contract Term	Other Direct Costs	Total Price	Extended Maximum Total Task Price
8	<b>NON-ROUTINE SCHEDULED SERVICES</b>		**		**		<b>\$20,000.00</b>
	<b>NOT TO EXCEED TOTAL</b>						<b>\$454,086.20</b>

\* Reimbursement shall be made in accordance with Exhibit C – Rate Schedule of the Master Agreement. Consultant must provide original invoice to the County.

\*\*In accordance with Exhibit C of the Master Agreement.

**PROJECT TOTAL: \$454,086.20**

\*Note: Invoices submitted for cost under the following categories shall be in accordance with this Project Authorization and Master Agreement Exhibit C.

1. The Consultant shall be reimbursed only for items and any expenses that are identified in Exhibit C of the Master Agreement and that have been agreed to by the parties that are reasonable, necessary and actually incurred by the Consultant in connection with the services and in accordance with the Master Agreement. No markup is allowed on travel reimbursements and copies of receipts must accompany the invoice.
2. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$454,086.20**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Consultant to perform or to assist in the performance of its work under this Agreement.

**G. Payment and Invoicing**

1. Consultant shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate, actual copies of equipment rental invoices, detailed information on equipment being rented, and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services. All invoices including reimbursable items shall have appropriate back up documents (i.e., copies of receipts) attached to the invoices. Consultant shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
2. The County shall pay the Consultant Net 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:  
 Stanislaus County  
 Department of Environmental Resources Landfill  
 Attention: Jami Aggers  
 3800 Cornucopia Way, Suite C  
 Modesto, California 95358



**H. Representatives**

The County's representatives are Jami Aggers, (209) 525-6768 and Gerry Garcia, (209) 837- 4816. The Consultant's representative is Ghassan Andraos and Bryan A. Stirrat, P.E.

**I. Counterparts**

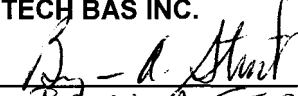
The parties hereby agree that facsimile signatures of the parties to this Agreement shall be as binding and enforceable as original signatures; and that this Agreement may be executed in multiple counterparts with the counterparts together being deemed to constitute the complete agreement of the parties

IN WITNESS WHEREOF, the parties have executed this Project No. 11-001-SMG on August 18, 2011.

**COUNTY OF STANISLAUS**  
Department of Environmental Resources

By:   
Sonya K. Harrigfeld  
Director

**TETRA TECH BAS INC.**

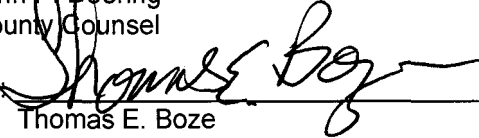
By:   
Name: BRYAN A. STIRRAT  
Title: PRESIDENT

"Consultant"

"County"

APPROVED AS TO FORM:

John P. Doering  
County Counsel

By:   
Thomas E. Boze  
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES  
3800 Cornucopia Way, Suite C, Modesto, CA 95358

Phone: (209) 525-6770

Fax: (209) 525-6773

**Geer Road Landfill Gas System Repairs  
Geer Road Landfill  
Project Number 11-002-SMG**

**A. Terms and Conditions**

Except as hereinafter provided, the services provided by the Consultant under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement for Professional Design Services* number A072711 made and entered into by and between the County of Stanislaus ("County") and Tetra Tech BAS Inc. ("Consultant"), on August 18, 2011.

**B. Background**

The Geer Road Landfill is located approximately 10 miles southeast of the City of Modesto in Stanislaus County, on the northern bluff of Tuolumne River in central Stanislaus County. The 167-acre site is jointly owned by Stanislaus County and the City of Modesto. It is classified as a Class III landfill and is currently closed.

When the landfill was in active operation, it was operated by the Stanislaus County Department of Public Works, and accepted municipal and cannery wastes, from November 1970, until July 1990. The site operated as an area/trench fill sanitary landfill between 1970 and 1990. Approximately 144 acres (footprint) were used for refuse disposal. An estimated 4.5 million tons of municipal solid wastes were disposed of at the site. The maximum depth of refuse is estimated to range between 50-60 feet. The Stanislaus County Department of Environmental Resources currently maintains the landfill as a closed facility.

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the existing LFG collection and control system at the County's Geer Road Landfill to help control LFG migration. Consultant shall exercise generally accepted repair practices with respect to the operational goals established by the system design engineer, San Joaquin Valley Unified Air Pollution Control District (APCD) and with the rules and regulations of applicable state and local agencies, and other regulatory agencies for control of subsurface LFG migration, surface emissions, as well as, environmental and regulatory reporting requirements.

The work the Consultant shall perform under this Project Authorization is identified below:

1. Replace an approximate 2300 foot section of existing 6 inch above grade HDPE pipe with 8 inch HDPE sdr-17 pipe.
2. Replace pump and controls for sump # 1 and make sump operational. The pump type is a QED AP-4 pneumatic pump. The pump shall have an air regulator and pump cycle counter. The controls shall be mounted in their own fiberglass box at the sump location. The pump shall operate from air supplied by existing onsite system.
3. Install larger HDPE Dual contained sump at sump 2 location to insure that there are no condensate blockages at this interconnect point between both sides of landfill. The below grade sump is manufactured from HDPE. The sump is dual contained and its volume is approximately 500 gallons.
4. Re-route piping and relocate well heads on wells that allow condensate to drain back into the gas well. The wells are RW-16, 17, 18, 19, 7s, EW17, 26, 28, 29, 30, and 34.
5. Install I.D. tags on twelve (12) landfill gas wells which have new well heads installed. Wells include EW 30, 28, 34, 3d, 3s, 5d, 5s, 44, 3, RW16, 17, and 19.
6. Install unistrut pipe racks to regrade low points on main above grade gas headers.
7. Make minor repairs to field portion of system as needed. Minor is defined as broken wellheads, cracked or dry rotted hoses, broken HDPE or PVC fittings, a 10 foot section of HDPE or PVC on grade line with a low point holding condensate; etc. Major is defined as a sump with a bad pump, a 12 inch gas line full of condensate blocking vacuum to a large portion of the gas system, installing a new sump and pump to replace one that is worn out, or replacing 2400 ft of gas line with a larger size; etc.
8. Provide surveying to regrade portions of piping.
9. Project including travel shall be completed within a maximum of 16 working days.

#### **D. Compensation**

The Consultant shall be compensated in accordance with the Master Agreement terms and conditions for the services provided under this Project Authorization as follows:

1. Consultant shall be compensated on a time and material not to exceed basis for the work set forth in this Project Authorization and at the prices indicated in this section. In addition to the aforementioned fees, Consultant shall be reimbursed for the following expenses, plus any expenses agreed to by the parties as set forth in the Master Agreement and this Project Authorization, that are reasonable, necessary and actually incurred by the Consultant in connection with the services:

- (a) Any filing fees, permit fees, or other fees paid or advanced by the Consultant.
- (b) Expenses, fees or charges for printing, reproduction or binding of documents at actual costs.
- (c) Travel expenses shall be reimbursed in accordance with the County's travel policy, which is incorporated herein by reference.

Fees plus reimbursable expenses shall not exceed the amounts set forth in below and a copy of the original invoice for the items listed in a, b or c above shall be attached to the invoice submitted to the County for reimbursement. Payments shall be based upon work and documents completed and submitted by the Consultant to the County and accepted by the County, as being satisfactory to County's needs, not work in process. The County shall not pay a mark up on any of the above items listed in a, b or c or any item identified in Exhibit C of the Master Agreement. Items such a cell phone, telephone, fax, copies, postage, fuel, or freight, etc., are already included in the billable hourly rate.

Total Project Price includes work at prevailing wage.

## 2. Hourly Detail

Below is a detailed breakdown of estimated hours for the above work:

Title	Straight time Hourly Billable Rate	Quantity of Hours	Not to Exceed Total	Over Time Billable Rate
Principal - Maintenance	\$145.00	30	\$4,350.00	\$145.00
Maintenance Manager	\$130.00	128	\$16,640.00	\$172.90
Technician (Piping)	\$95.64	128	\$12,229.12	\$127.20
Technician (Piping)	\$95.64	128	\$12,229.12	\$127.20
Technician (Weed Eating, Misc. Gas System Repairs)	\$75.00	128	\$9,600.00	\$99.75
Equipment Operator	\$105.53	128	\$13,507.84	\$140.35
Administrative Assistant	\$53.14	8	\$425.12	\$53.14
Surveyor to set grades on portions of piping	\$135.00	40	\$5,400.00	\$179.55
<b>TOTAL</b>			<b>\$74,381.20</b>	

## 3. Reimbursable Detail

Below is a detailed breakdown of Reimbursable Expenses for the above work. These reimbursable expenses are included in the below Project Total.

Description	Not to Exceed Total
Hotel, Travel, etc. *	\$14,750.00
<b>Total</b>	<b>\$14,750.00</b>

Note: The above Reimbursable items are included in the Project Total listed below.

\* Reimbursement shall be made in accordance with Exhibit C – Rate Schedule of the Master Agreement. Consultant must provide subcontractor's original invoice to the County. Consultant shall not mark up the reimbursable items. All travel expenses shall be in accordance with the County's travel policy.

## 4. Material Detail

Below is a detailed breakdown of typical materials and equipment expenses for the above work. These expenses are included in the below Project Total.\*\*

Description	Unit of Measure	Quantity	Unit Price	Extended Not To Exceed Total
<b>8" Above Grade Line Materials</b>				
8" SDR -17 Pipe	LF	2400	\$8.50	\$20,400.00
8" HDPE Tee	EA	1	\$168.75	\$168.75
8" x 3" HDPE Saddle Tee	EA	6	\$156.25	\$937.50
8" x 4" HDPE Saddle Tee	EA	6	\$156.25	\$937.50
8" x 6" HDPE Tee	EA	1	\$237.50	\$237.50
10" x 8" PVC SCD 80 Reducer Coupling	EA	1	\$518.75	\$518.75
8" SCHD 80 PVC Pipe	FT	20	\$15.00	\$300.00
8" SHCD 80 PVC Female Adapter Coupling	EA	1	\$68.75	\$68.75
8" Stainless Steel HDPE Transition Fitting	EA	1	\$406.25	\$406.25
8" SDR-17 Fitting (45'S, 90'S)	EA	6	\$118.75	\$712.50
8" ASHI Butterfly Valve	EA	2	\$812.50	\$1,625.00

Description	Unit of Measure	Quantity	Unit Price	Extended Not To Exceed Total
<b>8" Above Grade Line Materials (continued)</b>				
8" HDPE Flange and Ring	EA	4	\$68.75	\$275.00
8" HDPE Valve Spacer Ring	EA	4	\$75.00	\$300.00
8" Valve Bolt Kit (HDPE Flg x Valve x HDPE Flg)	EA	2	\$112.50	\$225.00
8" Electrofusion Coupling	EA	4	\$175.00	\$700.00
1" HDPE Pipe	LF	125	\$.95	\$118.75
Plastic Rebar Cap (OSHA Approved)	EA	100	\$2.45	\$245.00
#6 Rebar 40" Long	EA	100	\$4.25	\$425.00
<b>TOTAL</b>				<b>\$28,601.25</b>
<b>Sump Replacement and Pump Replacement Materials</b>				
HDPE Dual Contained Sump (Replace Sump 2A)	EA	1	\$8,750.00	\$8,750.00
Clean Environment AP-4 Pump with Regulator, Counter, Hoses, & Panel Box	EA	2	\$3,962.00	\$7,924.00
<b>TOTAL</b>				<b>\$16,674.00</b>
<b>Wellhead Replacement Materials</b>				
Soiltec Vertical Wellhead	EA	12	\$376.00	\$4,512.00
2" Kanaflex Type Hose	FT	100	\$4.49	\$449.00
2" Powerlock Clamp	EA	26	\$17.96	\$466.96
4" X 2" Fernco Coupling	EA	24	\$9.25	\$222.00
6" X 2" Fernco Coupling	EA	4	\$28.00	\$112.00
Brass Well I.D. Tags w/Stainless Steel Cable	EA	12	\$14.45	\$173.40
1 5/8 Unistrut	FT	120	\$2.10	\$252.00
2" Unistrut Clamp	EA	12	\$2.50	\$30.00
Plastic Unistrut Cap	EA	12	\$1.89	\$22.68
<b>TOTAL</b>				<b>\$6,240.04</b>
<b>Gas Header and Lateral Piping marker Materials</b>				
5" Reflective PVC Marker Posts 5 Ft Long	EA	180	\$16.10	\$2,898.00
<b>TOTAL</b>				<b>\$2,898.00</b>
<b>General Gas System Repair Materials</b>				
6" Electrofusion Coupling	EA	4	\$131.25	\$525.00
4" Electrofusion Coupling	EA	4	\$56.25	\$225.00
3" Electrofusion Coupling	EA	4	\$43.75	\$175.00
2" Electrofusion Coupling	EA	4	\$25.00	\$100.00
4" SDR-17 Fitting (45's, 90's)	EA	36	\$52.69	\$1,896.84
1 5/8" Unistrut	FT	380	\$2.10	\$798.00
Unistrut Brackets and Bolts	EA	60	\$5.95	\$357.00
Unistrut Base Plate	EA	60	\$18.75	\$1,125.00
10" - 12" Unistrut Clamp	EA	16	\$18.75	\$300.00
8" Unistrut Clamp	EA	24	\$10.00	\$240.00
6" Unistrut Clamp	EA	24	\$7.50	\$180.00
4" Unistrut Clamp	EA	24	\$3.75	\$90.00
2" Unistrut Clamp	EA	12	\$2.50	\$30.00
4" SDR - 17 Pipe	FT	500	\$2.40	\$1,200.00
4" S.S. Transition Fitting	EA	10	\$78.00	\$780.00

Description	Unit of Measure	Quantity	Unit Price	Extended Not To Exceed Total
<b>General Gas System Repair Materials</b>				
4" X 2" PVC SCHD 80 Reducer Coupling	EA	12	\$40.00	\$480.00
¼" ASHI Labcock Valve	EA	60	\$17.96	\$1,077.60
Plastic Unistrut Cap	EA	88	\$1.89	\$166.32
1" HDPE Pipe	LF	125	\$.95	\$118.75
Brass Gas Well I.D. Tags w/Stainless Steel Cable	EA	88	\$14.45	\$1,271.60
Misc Materials (estimated)	EA	1	\$1,000.00	\$1,000.00

Misc Consumable Supplies (estimated)	EA	1	\$750.00	\$750.00
Delivery of Materials (estimated)	EA	1	\$2,000.00	\$2,000.00
<b>TOTAL</b>				<b>\$14,886.11</b>
<b>Equipment</b>				
Excavator	Day	5	\$921.00	\$4,605.00
Backhoe	Day	9	\$421.00	\$3,789.00
Generator 9.7KW	Day	13	\$98.50	\$1,280.50
Service Truck #1	Day	13	\$105.00	\$1,365.00
Service Truck #2	Day	13	\$105.00	\$1,365.00
Service Truck #3	Day	8	\$105.00	\$840.00
Electrofusion Processor	Day	6	\$275.00	\$1,650.00
Asphalt Saw Cutting Machine and Water Tank (at sump 2A location)	Day	1	\$575.00	\$575.00
Asphalt Paving (Trench Repair)	LS	1	\$2,650.00	\$2,650.00
2" – 4" HDPE Welder	Day	6	\$98.50	\$591.00
6" – 12" HDPE Welder	Day	6	\$350.00	\$2,100.00
Mob/Demob Equipment (estimated)	LS	1	\$1,800.00	\$1,800.00
<b>TOTAL</b>				<b>\$22,610.50</b>
<b>OVERTIME (Upon County approval)*</b>				<b>\$1,020.00</b>
<b>PROJECT NOT TO EXCEED TOTAL</b>				<b>\$182,061.10</b>

\*All overtime work shall be pre-approved by the County representative prior to Consultant performing overtime work.

\*\* Consultant may use alternate types and sizes of material or equipment (depending on site conditions) to perform the work under this Project Authorization as long as the Consultant obtains prior approval from the County and the total costs remain within the Project Total

## 5. Project Total

- a. **The Project Total is \$182,061.10**
- b. The Consultant shall be reimbursed only for items and any expenses that are identified in Exhibit C of the Master Agreement and that have been agreed to by the parties that are reasonable, necessary and actually incurred by the Consultant in connection with the services and in accordance with the Master Agreement. No markup is allowed on travel reimbursements and copies of receipts must accompany the invoice.
- c. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$182,061.10**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Consultant to perform or to

assist in the performance of its work under this Agreement.

- d. Any required changes in the Scope of Work for this project shall be in accordance with Section 2.3 the Master Agreement.

**E. Payment and Invoicing**

1. Consultant shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate, actual copies of equipment rental invoices, detailed information on equipment being rented, and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services. All invoices including reimbursable items shall have appropriate back up documents (i.e., copies of receipts) attached to the invoices. Consultant shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
2. The County shall pay the Consultant Net 30 days after approval of the invoice.

Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:  
Stanislaus County  
Department of Environmental Resources Landfill  
Attention: Jami Aggers  
3800 Cornucopia Way, Suite C  
Modesto, California 95358

**F. Representatives**

The County's representatives are Jami Aggers, (209) 525-6768 and Gerry Garcia, (209) 837- 4816. The Consultant's representative is Ghassan Andraos and Kelly McGregor, P.E.

**G. Project Authorization Period**

Services will commence on or about August 22, and end September 16, 2011, or upon completing the agreed upon services.

**H. Schedule**

Consultant shall complete the work under this Project Authorization within a maximum of sixteen (16) working days of receiving authorization to proceed.

**I. Counterparts**

The parties hereby agree that facsimile signatures of the parties to this Agreement shall be as binding and enforceable as original signatures; and that this Agreement may be executed in multiple counterparts with the counterparts together being deemed to constitute the complete agreement of the parties.

*(Signatures on the next page)*

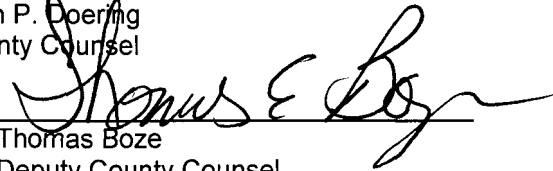
IN WITNESS WHEREOF, the parties have executed this Project No. 11-002-SMG on August 18, 2011.

**COUNTY OF STANISLAUS**  
Department of Environmental Resources

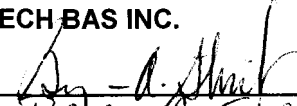
By:   
Sonya K. Harrigfeld  
Director

"County"

APPROVED AS TO FORM:  
John P. Doering  
County Counsel

By:   
Thomas Boze  
Deputy County Counsel

**TETRA TECH BAS INC.**

By:   
Name: Bryan A. Street  
Title: PRESIDENT

"Consultant"





DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Cornucopia Way, Suite C, Modesto, CA 95358

Phone: (209) 525-6770

Fax: (209) 525-6773

**Geer Road Landfill Gas System Additional Repairs (No. 2)  
Geer Road Landfill  
Project Number 11-003-SMG**

**A. Terms and Conditions**

Except as hereinafter provided, the services provided by the Consultant under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement for Professional Design Services* number A072711 made and entered into by and between the County of Stanislaus ("County") and Tetra Tech BAS Inc. ("Consultant"), on October 20, 2011.

**B. Background**

The Geer Road Landfill is located approximately 10 miles southeast of the City of Modesto in Stanislaus County, on the northern bluff of Tuolumne River in central Stanislaus County. The 167-acre site is jointly owned by Stanislaus County and the City of Modesto. It is classified as a Class III landfill and is currently closed.

When the landfill was in active operation, it was operated by the Stanislaus County Department of Public Works, and accepted municipal and cannery wastes, from November 1970, until July 1990. The site operated as an area/trench fill sanitary landfill between 1970 and 1990. Approximately 144 acres (footprint) were used for refuse disposal. An estimated 4.5 million tons of municipal solid wastes were disposed of at the site. The maximum depth of refuse is estimated to range between 50-60 feet. The Stanislaus County Department of Environmental Resources currently maintains the landfill as a closed facility.

The site is within a meander bend of the Tuolumne River. The landfill was capped in 1995 with a final cover system, a geomembrane on the top deck and clay on the side slopes. The final cover is a modified California Title 23, Chapter 15 design. The top deck cover (approximately 51 acres) consists of a 1-foot foundation layer overlain by a 60-mil High Density Polyethylene (HDPE) geo-membrane that is protected by a 1-foot thick vegetative cover layer. The side-slope has a 1-foot clay barrier in place of the HDPE. The cap was installed to divert rainfall from the landfill waste and to reduce the generation of leachate. A landfill gas (LFG) extraction system was installed in two phases, with two well fields covering the site, in 1992 and 1995.

On April 24, 2009, the Regional Water Quality Control Board (RWQCB) issued new Waste Discharge Requirements (WDR) and associated Monitoring and Reporting Program (MRP) Order No. R5-2009-0051 for the Geer Road Landfill. The County was in the process of complying with the requirements of the new WDRs when on April 8, 2011, the RWQCB issued a Cease and Desist Order R5-2011-0021 to the County, which required that the County optimize the existing LFG collection and control system and submit a LFG Extraction System Optimization Report by September 30, 2011. On April 8, 2011, the RWQCB also issued a revised MRP Order No. R5-2011-0022.

On December 9, 2010, the County contracted with Meyers Nave Riback Silver & Wilson, to provide legal advice related to the Geer Road Landfill Cease and Desist Order. Meyers Nave Riback Silver & Wilson, retained Bryan A. Stirrat and Associates on behalf of the County to review existing site data and conduct certain environmental investigations, and develop remedial recommendations for the site. On May 18, 2011, Bryan A. Stirrat and Associates recommended certain remedial action be taken by the County.

**C. Scope of Work**

The Consultant shall provide all the labor, material, supplies, parts, tools, equipment and any other items necessary to repair the existing LFG collection and control system at the County's Geer Road Landfill to

help control LFG migration. Consultant shall exercise generally accepted repair practices with respect to the operational goals established by the system design engineer, San Joaquin Valley Unified Air Pollution Control District (APCD) and with the rules and regulations of applicable state and local agencies, and other regulatory agencies for control of subsurface LFG migration, surface emissions, as well as, environmental and regulatory reporting requirements.

The work the Consultant shall perform under this Project Authorization is identified below:

1. Repair south flare station fire eye (UV flame sensor);
  - a. Consultant shall replace the electrical wiring conduit as existing conduit allows the intrusion of atmospheric precipitation into the conduit, potentially causing short-circuiting of the wiring and damage to the equipment. Consultant shall replace conduit with manufacturer recommended materials including new waterproof conduit piping.
2. Perform investigation and repairs of up to six (6) LFG perimeter probes;
  - a. Consultant shall investigate and repair perimeter probes:
    - i. Probe GP-4: Consultant shall remove probe vault to excavate the existing, disconnected probe piping and reinstall riser of probe. Consultant shall perform a sounding (depth determination) of the probe after reinstallation. Consultant shall replace probe vault to original condition. Excavation shall be no more than 2 feet.
    - ii. Probe GP-5: Consultant shall remove probe vault to excavate the existing, disconnected probe piping and reinstall riser of probe. Consultant shall perform a sounding (depth determination) of the probe after reinstallation. Consultant shall replace probe vault to original condition. Excavation shall be no more than 2 feet.
    - iii. Probe GP-14: Consultant shall repair existing probe sample ports and valves and perform sounding of the total depth of the probe. This includes Consultant removing and properly disposing of the existing damaged sample ports and valves and replacing them with new sample ports and valves.
    - iv. Probes GP-38 and GP-41: Excavate the area under the monument to locate the probe casing. Consultant shall reinstall the probe riser to the casing and perform a sounding of each probe. Consultant shall repair damaged sample ports and valves. Consultant shall replace probe vault if removal is required for excavation. Excavation shall be no more than 2 feet.
    - v. Probe GP-1: Consultant shall repair the existing damaged (dented and askew) probe monument, by replacing the damaged probe monument with a new one. Consultant shall remove the existing damage probe monument and properly dispose of it. Replacement of this damage probe monument shall allow for efficient monitoring of the casing.
3. Repair south flare condensate level switch and condensate injection system;
  - a. The repairs shall include the Consultant purchasing and installing a new level switch (float), in accordance with manufacturer original design, on the condensate tank at the South Flare. There is not one currently installed on this tank. The current system requires the operation of the condensate pumping system in manual mode only. Consultant's repairs to the condensate injection system shall include the removal of the existing 1/4" diameter stainless steel tubing and the installation of a new 1/2 " diameter stainless steel tubing to allow increased flow and reduce potential for

obstructions during condensate injection system operations. Consultant shall properly dispose the removed tubing.

4. Purchase and install (sample ports) flow monitoring points and caps on wellheads;
  - a. Consultant shall furnish and install (sample ports) monitoring points on all vertical extraction wellheads to provide additional information on the optimization process of the landfill gas extraction system. Consultant shall furnish and install new sample ports and valves on all perimeter methane monitoring probes to allow the measurement of accumulated pressure within the casings of the perimeter probes.
5. Price includes work at prevailing wage.

**D. Compensation**

The Consultant shall be compensated in accordance with the Master Agreement terms and conditions for the services provided under this Project Authorization as follows:

1. Consultant shall be compensated on a time and material not to exceed basis for the work set forth in this Project Authorization and at the prices indicated in this section. In addition to the aforementioned fees, Consultant shall be reimbursed for the following expenses, plus any expenses agreed to by the parties as set forth in the Master Agreement and this Project Authorization, that are reasonable, necessary and actually incurred by the Consultant in connection with the services:

- (a) Any filing fees, permit fees, or other fees paid or advanced by the Consultant.
- (b) Expenses, fees or charges for printing, reproduction or binding of documents at actual costs.
- (c) Travel expenses shall be reimbursed in accordance with the County's travel policy, which is incorporated herein by reference.

Fees plus reimbursable expenses shall not exceed the amounts set forth in below and a copy of the original invoice for the items listed in a, b or c above shall be attached to the invoice submitted to the County for reimbursement. Payments shall be based upon work and documents completed and submitted by the Consultant to the County and accepted by the County, as being satisfactory to County's needs, not work in process. The County shall not pay a mark up on any of the above items listed in a, b or c or any item identified in Exhibit C of the Master Agreement. Items such a cell phone, telephone, fax, copies, postage, fuel, or freight, etc., are already included in the billable hourly rate.

Total Project Price includes work at prevailing wage.

**2. Hourly Detail**

Below is a detailed breakdown of estimated hours per Task as described above:

Task	Title	Straight time Hourly Billable Rate	Quantity of Hours	Not to Exceed Total
<b>1</b>	<b><i>Repair South Flare Station Fire Eye (UV Flame Sensor);</i></b>			
	Engineering Technician V (ET-V)	\$104.00	5	\$520.00
	Project Manager (PM)	\$174.00	1	\$174.00
	Project Engineer (PE)	\$156.00	4	\$624.00
	<b>Task 1 Labor Total</b>			<b>\$1,318.00</b>
<b>2</b>	<b><i>Perform Investigation and Repairs of LFG Perimeter Probes</i></b>			
	Engineering Technician V (ET-V)	\$104.00	40	\$4,160.00
	Project Manager (PM)	\$174.00	3	\$522.00
	Project Engineer (PE)	\$156.00	4	\$624.00
	<b>Task 2 Labor Total</b>			<b>\$5,306.00</b>

Task	Title	Straight time Hourly Billable Rate	Quantity of Hours	Not to Exceed Total
<b>3</b>	<b><i>Repair South Flare Condensate Level Switch and Condensate Injection System</i></b>			
	Engineering Technician B (ET-V)	\$104.00	14	\$1,456.00
	Project Manager (PM)	\$174.00	2	\$348.00
	Project Engineer (PE)	\$156.00	4	\$624.00
	<b>Task 3 Labor Total</b>			<b>\$2,428.00</b>
	<b>TOTAL LABOR</b>			<b>\$9,052.00</b>

**3. Material Detail**

Below is a detailed breakdown of typical materials and equipment expenses for the above work. These expenses are included in the below Project Total.\*\*

Description	Unit of Measure	Quantity	Unit Price	Extended Not To Exceed Total
Task 1:				
Conduit (Grainger Part #6D267):	Each	1	\$20.00	\$20.00
Misc. Parts:	Each	1	\$50.00	\$50.00
Task 2:				
Lab Cocks:	Each	100	\$120.00	\$1,200.00
Concrete and water:	Each	1	\$50.00	\$50.00
Monument / Vault:	Each	2	\$300.00	\$600.00
Misc. Parts:	Each	1	\$200.00	\$200.00
Task 3:				
Float Switch	Each	1	\$248.75	\$248.75
Condensate Injection System Stainless Steel Tubing and SS fittings	Each	1	\$1,574.28	\$1,574.28
Task 4:				
Sample Ports (Sold in packs of 100):	Each	1	\$150.46	\$150.46
Caps (Sold in packs of 100)	Each	1	\$18.51	\$18.51
Misc. Parts:	Each	1	\$100.00	\$100.00
<b>TOTAL</b>				<b>\$4,212.00</b>

\*\* Consultant may use alternate types and sizes of material or equipment (depending on site conditions) to perform the work under this Project Authorization as long as the Consultant obtains prior approval from the County and the total costs remain within the Project Total

**4. Project Total**

- a. **The Project Total is \$13,264.00**
- b. The Consultant shall be reimbursed only for items and any expenses that are identified in Exhibit C of the Master Agreement and that have been agreed to by the parties that are reasonable, necessary and actually incurred by the Consultant in connection with the services and in accordance with the Master Agreement. No markup is allowed on travel reimbursements and copies of receipts must accompany the invoice.
- c. The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$13,264.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Consultant to perform or to assist in the performance of its work under this Agreement.
- d. Any required changes in the Scope of Work for this project shall be in accordance

with Section 2.3 the Master Agreement.

**E. Payment and Invoicing**

1. Consultant shall submit a detailed invoice for work actually completed. The invoice is to include but not be limited to the following information: hours worked by Consultant's Staff, the title of the Staff, billable rate, actual copies of equipment rental invoices, detailed information on equipment being rented, and reimbursable items that are reasonable, necessary and actually incurred by the Consultant in connection with the services. All invoices including reimbursable items shall have appropriate back up documents (i.e., copies of receipts) attached to the invoices. Consultant shall be compensated for services rendered and accepted under this Agreement and shall be paid monthly, in arrears, on a time and material basis not to exceed the per task totals for work performed and services provided.
2. The County shall pay the Consultant Net 30 days after approval of the invoice. Invoices shall be mailed or delivered to the Department indicated below. The remit to address is:

Stanislaus County  
Department of Environmental Resources Landfill  
Attention: Jami Aggers  
3800 Cornucopia Way, Suite C  
Modesto, California 95358

**F. Representatives**

The County's representatives are Jami Aggers, (209) 525-6768 and Gerry Garcia, (209) 837- 4816. The Consultant's representative is Michael Leonard and Bryan A. Stirrat, P.E.

**G. Project Authorization Period**

Services will commence on or about October 17, and end November 18, 2011, or upon completing the agreed upon services.

**H. Schedule**

Consultant shall complete the work under this Project Authorization (including travel) within an estimated thirty (30) working days of receiving authorization to proceed.

**I. Counterparts**


The parties hereby agree that facsimile signatures of the parties to this Agreement shall be as binding and enforceable as original signatures; and that this Agreement may be executed in multiple counterparts with the counterparts together being deemed to constitute the complete agreement of the parties.


*(signatures on the next page)*

IN WITNESS WHEREOF, the parties have executed this Project No. 11-003-SMG on October 20, 2011.

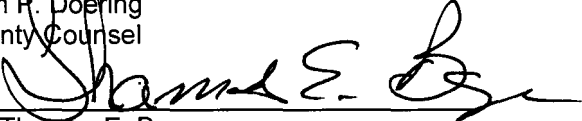
**COUNTY OF STANISLAUS**  
Department of Environmental Resources

**TETRA TECH BAS INC.**

By:   
Sonya K. Harrigfeld  
Director  
"County"

By:   
Name: Michael D. Moore  
Title: CFO  
"Consultant"

APPROVED AS TO FORM:  
John P. Doering  
County Counsel

By:   
Thomas E. Boze  
Deputy County Counsel