

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

DEPT: Environmental Resources

SJA

BOARD AGENDA # *B-1

Urgent

Routine

AGENDA DATE October 27, 2009

CEO Concurs with Recommendation YES NO

(Information Attached)

4/5 Vote Required YES NO

SUBJECT:

Approval to Amend the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for Environmental Monitoring, Testing, and Reporting Services, at the Fink Road and Geer Road Landfills, and for Operations, Maintenance, and Monitoring Services at the Geer Road Landfill

STAFF RECOMMENDATIONS:

1. Approve an amendment to the Master Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., dba SCS Engineers, to increase the not to exceed total contract amount to \$1,932,793 for additional environmental monitoring, testing, and reporting services at the Fink Road and Geer Road Landfills, and operations, maintenance, and monitoring services at Geer Road Landfill through Fiscal Year 2009-2010.
2. Authorize the Chairman of the Board of Supervisors to amend the Master Agreement number A00625.
3. Authorize the Director of Environmental Resources, or her designee, to sign additional individual Project Authorizations during Fiscal Year 2009-2010 providing that the cumulative total does not exceed the contract amount of \$1,932,793.

FISCAL IMPACT:

There is no fiscal impact to the County General Fund. Approval of this amendment to the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., adds \$181,038 to the previously approved total amount of \$1,751,755. This amendment includes a maximum of 15%, or \$23,614, in contract changes for a total cost of \$1,932,793. Funds for this purpose are available in the Fink Road fund balance and the Geer Road Landfill closure/post-closure fund.

BOARD ACTION AS FOLLOWS:

No. 2009-714

On motion of Supervisor Chiesa, Seconded by Supervisor Grover

and approved by the following vote,

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

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) Approved as recommended

2) Denied

3) Approved as amended

4) Other:

MOTION:

Christine Ferraro

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

Approval to Amend the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for Environmental Monitoring, Testing, and Reporting Services, at the Fink Road and Geer Road Landfills, and for Operations, Maintenance, and Monitoring Services at the Geer Road Landfill

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DISCUSSION:

The Department of Environmental Resources (Department), Landfill Division, operates and maintains the Fink Road and Geer Road Landfills. Currently, only the Fink Road Landfill is in active operation. This facility is located at 4000 Fink Road, Crows Landing, in western Stanislaus County. The Fink Road Landfill provides landfill services for Class III municipal solid waste for all of Stanislaus County. Landfill services are also provided for the combustion ash that results from the incineration of municipal solid waste at the adjacent Waste-to-Energy Plant.

The Geer Road Landfill is no longer an active landfill. Located at 751 Geer Road, Modesto, it has been closed since 1990 in accordance with State requirements and is in a post-closure monitoring and maintenance mode.

Although the day-to-day operation and maintenance of these landfills is performed with in-house staff, specialized services and expertise are needed in the area of environmental monitoring, testing, analyzing, and reporting for both landfills and for closure and post-closure maintenance at the Geer Road Landfill. Following a competitive procurement process in 2007, SCS Engineers (SCS) was awarded a three-year agreement to provide these specialized services for the County which expires on June 30, 2010.

The original contract amount was for \$1,347,448. On November 25, 2008, the Board of Supervisors approved Amendment No. 1 in the amount of \$404,307, of which \$346,424 was available for allowable contract changes (the \$57,883 balance was applied to the Operations and Maintenance Project Authorization, #07-003). Since this date, the Regional Water Quality Control Board (RWQCB) has required that the following items be completed which were not part of the County's contract for routine environmental monitoring, testing, analyzing, and reporting for both landfills:

Project Location	Type of Work	Cost
Fink Road LF	Groundwater Investigation	\$ 115,868
Geer Road LF	Engineering Feasibility Study	\$ 59,520
Geer Road LF	Geo (Data) Tracking	\$ 8,480
Fink Road LF	Geo (Data) Tracing	\$ 8,480
TOTAL		\$192,348 (leaving \$154,076 from the \$346,424 starting balance)

The RWQCB is now requiring the following additional projects at the Geer Road Landfill:

1. Testing of aquifer characteristics for both the shallow and deep groundwater zones beneath the landfill. This work must be done in two phases and Phase 1

will be to establish aquifer parameters. The data gathered from this testing will be used to design extraction wells that would remove groundwater. Testing must be completed by the end of 2009 to allow sufficient time to complete the design work. Phase 2 will be to test the new design for groundwater extraction performance. Phase 2 must be completed by early summer 2010 to allow sufficient time to prepare and submit a Corrective Action Work Plan by October 31, 2010. Proposed cost: Phase 1: \$82,220; Phase 2: estimated at \$40,000. Total: \$122,220.

2. Evaluation of treatment options to determine the best options for pre-treatment and Volatile Organic Compound (VOC) removal at Geer Road Landfill. This work is tied to the Corrective Action Work Plan which must be prepared and submitted by October 31, 2010. Proposed cost: \$39,320.
3. Testing of the proposed water disposal area to determine if it can be used to accept the volume of water predicted, along with determining the best means for water disposal. This work is also tied to the Corrective Action Work Plan for Geer Road Landfill which must be prepared and submitted by October 31, 2010. Proposed cost: \$53,840. Total cost of these three current projects is \$175,380 which leaves a shortfall of \$21,304 when compared to the \$154,076 that is currently available in contract funds. An additional project that was recently required at the Fink Road Landfill due to a change in regulations, was the installation of additional landfill gas monitoring probes. This work had to be overseen by SCS and was estimated to cost \$14,540 which increases the shortfall to \$35,844 when compared to the currently available contract funds.
4. Over this past year, the RWQCB has imposed a variety of requirements which have caused the County to expend funds within the Geer Road Landfill environmental monitoring, testing, and reporting Project Authorization more rapidly than anticipated. These include the following: preparing VOC time-series graphs, preparing tabulated organic data, preparing isoconcentration maps for individual VOCs, preparing information on the detection of specific compounds, recreating historical data from a prior consultant into a database, and assistance with the revised Waste Discharge Requirements for the site. The consultant estimates that an additional \$81,580 will be necessary to complete the standard environmental monitoring, testing, and reporting services between now and June 30, 2010.

With only \$154,076 in remaining allowable contract charges from the previous contract amendment, the Department is unable to complete these projects without an additional contract amendment. The cost of the work being added under this amendment is \$157,424. An additional 15% in allowable contract changes, or \$23,614, has also been included which brings the total amount to increase the Agreement by to \$181,038 and the total not to exceed amount of the agreement to \$1,932,793 through June 30, 2010.

The current Master Agreement expires on June 30, 2010, and allows for two, 1-year extensions prior to a need to put the work back out to a competitive bidding process.

Approval to Amend the Agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for Environmental Monitoring, Testing, and Reporting Services, at the Fink Road and Geer Road Landfills, and for Operations, Maintenance, and Monitoring Services at the Geer Road Landfill

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Department staff may return to the Board with a recommendation to extend the contract following negotiations on the pricing for services rendered. If the pricing for a contract extension cannot be successfully negotiated, Department staff would negotiate the best rates possible for the completion of the current projects which are underway whose completion dates extend beyond June 30, 2010, and the contract would be put back out to a competitive bid. The proposed amendment to the agreement is included as Attachment "A."

POLICY ISSUE:

The Board of Supervisors should determine if amending the agreement with Stearns, Conrad, and Schmidt, Consulting Engineers, Inc., for environmental monitoring, testing, and reporting services at the Fink Road and Geer Road Landfills is consistent with the Board's priorities of the efficient delivery of public services, a safe community, a healthy community, and a well-planned infrastructure system.

STAFFING IMPACTS:

There are no staffing impacts associated with this item.

CONTACT PERSON:

Sonya K. Harrigfeld, Director. Telephone: 209-525-6770



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Perform Aquifer Test Study – Part 1
Geer Road Landfill

AMENDMENT 1
Project Number 09-001-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in Master Agreement For Independent Contractor Services number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on August 28, 2007.

Whereas, the County and Contractor entered into Project Authorization Number 09-001-SMG dated August 19, 2009 against Master Agreement for Independent Contractor Services dated August 28, 2007 ("the Agreement"), and

Whereas, Project Authorization Number 09-001-SMG, Section D – Project Authorization Period, stipulates that the Contractor shall complete work by February 26, 2010 based on timely authorization to proceed and that the Project Authorization period shall end on March 31, 2010; and

Whereas the County has a need to extend the term of Project Authorization period because the work for drilling was delayed due to adverse weather conditions; and

Whereas this amendment is for the mutual benefit of County and Contractor;

Now, therefore, the County and Contractor agree as follows:

Project Authorization Number 09-001-SMG, Section D – Project Authorization Period, the end date is amended as follows:

"... and end June 30, 2010."

IN WITNESS WHEREOF, the parties have executed this Project Authorization No. 09-001-SMG Amendment 1 on February 17, 2010.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: [Signature]
Sonya K. Harrigfeld
Director

"County"

SCS ENGINEERS

By: [Signature]
Name: Ambrose McCreedy
(Printed)
Title: vice president

"Contractor"

APPROVED AS TO FORM:
John P. Doering
County Counsel

By: [Signature]
Alice Mimms
Deputy County Counsel



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AMENDMENT NO. 2

TO

INDEPENDENT CONTRACTOR MASTER AGREEMENT

STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

This Amendment No. 2 to the Master Agreement for Independent Contractor Services ("Amendment No. 2") by and between the COUNTY OF STANISLAUS ("County") and STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC. d/b/a SCS ENGINEERS ("Contractor") is made and entered into on OCT 27 2009.

Whereas, the County and Contractor entered into a Master Agreement for Independent Contractor Services dated August 28, 2007 ("the Agreement"); and

Whereas, Paragraph 17 of the Master Agreement provides for the Agreement to be amended, modified, changed, added or subtracted from by mutual consent of both parties; and

Whereas, Amendment 1 dated December 5, 2008, increased the initial not to exceed Limit of Expenditure amount of \$1,347,448.00 by \$404,307.00 to a new not to exceed Limit of Expenditure amount of \$1,751,755.00; and

Whereas, the County desires to increase this Master Agreement not to exceed Limit of Expenditure amount by \$181,038.00 due to unforeseen expenses associated with regulatory requirements; and

Whereas, the Scope of Work provides for Contractor to perform some engineering services; and

Whereas, Section 2782.8. (a) and (C) of the Public Contracting code defines engineering services under design services; and

Whereas, Section 7.1- Defense and Indemnification of the Agreement provides for indemnification related to the performance of Independent Contractor Services; and

Whereas, the County has a need to add to Section 7.1 Defense and Indemnification language pertaining to design services to comply with the Public Contract code; and

Whereas this amendment is for the mutual benefit of County and Contractor;

Now, therefore, the County and Contractor agree as follows:

1. Exhibit A, Section H is amended as follows:

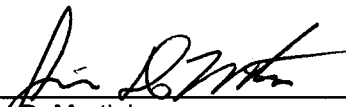
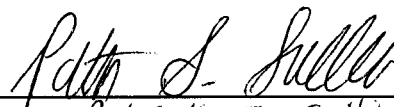
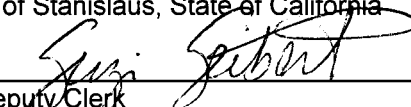

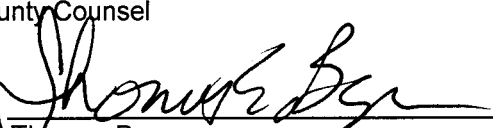
"LIMIT OF EXPENDITURE: The maximum amount to be paid by the County for services provided under this Master Agreement shall not exceed \$1,932,793.00 including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

2. Section 7.1 – Defense and Indemnification, is amended to add the following language to cover the performance of engineering services under this Agreement:

" 7.1 (b) Engineering and Design Services: To the fullest extent allowed by law, Contractor shall defend, indemnify, and hold harmless the County and its officers, agents, employees and representatives from and against any and all claims, actions, losses, injuries, damages or expenses of every name, kind and description, including litigation costs and reasonable attorney's fees incurred, brought for or on account of, injury to or death of any person, including but not limited to workers, County employees and the public, or damage to property, which arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the negligence, recklessness, or willful misconduct of Contractor, 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.

3. Except as stated herein, all other terms and conditions of the Agreement remain unchanged.

In witness whereof, the parties have executed this Amendment on the date written above.

<p>COUNTY OF STANISLAUS</p> <p>By: <u></u> Jim DeMartini Chair of The Board of Supervisors</p> <p>Date: <u>OCT 27 2009</u></p> <p>"County"</p>	<p>SCS ENGINEERS</p> <p>By: <u></u> Name Patrick S. Sullivan Title Senior Vice President</p> <p>Date: <u>10-27-09</u></p> <p>"Contractor"</p>
<p>ATTEST: Christine Ferraro Tallman Clerk of the Board of Supervisors of the County of Stanislaus, State of California</p> <p>By: <u></u> Deputy Clerk</p> <p>Date: <u>OCT 27 2009</u></p>	
<p>APPROVED AS TO CONTENT: Department of Environmental Resources</p> <p>By: <u></u> Sonya K. Harrigfeld Director</p> <p>Date: _____</p>	
<p>APPROVED AS TO FORM: John P. Doering County Counsel</p> <p>By: <u></u> Thomas Boze Deputy County Counsel</p> <p>Date: _____</p>	



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Environmental Monitoring Testing, Analyzing and Reporting
At
Geer Road Landfill

Amendment 2 To Project No. 07-002-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on August 28, 2007.

Whereas, the County and Contractor entered into Project Authorization Number 07-002-SMG dated August 30, 2007 against Master Agreement for Independent Contractor Services dated August 28, 2007 ("the Agreement"), and

Whereas, Project Authorization Number 07-002-SMG, Amendment Number 1 dated August 11, 2009, amended Section D – Compensation not to exceed amount to \$424,592.25 and

Whereas, the County desires to increase the "not to exceed" amount of this Project Authorization by \$69,438.16 due to unforeseen expenses related to regulatory requirements, and

Whereas this amendment is for the mutual benefit of County and Contractor;

Now, therefore, the County and Contractor agree as follows:

- 1. Project Authorization Number 07-002-SMG, Section D – Compensation, item 2 is amended as follows:

"The parties hereto acknowledge the maximum amount to be paid by the County for services provided shall **not exceed \$494,030.41**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement."

IN WITNESS WHEREOF, the parties have executed this Project Authorization No. 07-002-SMG Amendment 2 on March 10, 2010.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: Sonya K. Harrigfeld
Sonya K. Harrigfeld
Director

"County"

SCS ENGINEERS

By: Ambrose McCready
Name: Ambrose McCready
Title: Vice President
(Printed)

"Contractor"

APPROVED AS TO FORM:

John R. Doering
County Counsel

By: Thomas E. Boze
Thomas Boze
Deputy County Counsel



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Perform Groundwater Treatability Study Geer Road Landfill

Project Number 10-001-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on August 28, 2007.

B. Background

The Geer Road Landfill (GRLF) is owned by the County. The landfill was operated from 1970 to 1990 serving the City of Modesto and parts of the County. The permitted, closed landfill is located in Section 34, Township 3 South, Range 10 East, and Section 3, Township 4 South, Range 10 East, Mount Diablo Baseline and Meridian (MDB&M). The center of the site is located at approximately latitude 37° 34.32' and longitude 120° 1.05'. The physical address is 750 Geer Road, Modesto, California.

The landfill ceased operation in July 1990. The footprint of the site encompasses 144 acres. An estimated two hundred and fifty thousand (250,000) tons of wastes are in place. GRLF is referenced as site No. 50-AA-002 in the California Department of Resources Recycling and Recovery's (CalRecycle) Solid Waste Information System (SWIS) database.

The site has been regulated by Regional Water Quality Control Board (RWQCB) since April 2000 under Waste Discharge Requirements (WDRs) Order No. 5-00-087 for post-closure maintenance of an unlined Class III landfill, and for corrective action of volatile organic compounds (VOCs) in groundwater including the associated landfill gas (LFG). As part of the corrective actions already taken at the site, the County has installed a cap, a groundwater extraction and treatment system (GWETS), and a landfill gas (LFG) extraction and treatment system.

Several evaluations of the existing GWETS, including a study conducted by Contractor in 2008, concluded that the system was effective in removing VOC from groundwater, but the pumping systems were insufficient to create an effective barrier to VOCs moving in groundwater from under the landfill to the southwest. The pumping systems currently pump approximately 50-70 GPM from 12 extraction wells. These wells are only screened in the shallow groundwater zone.

Following the 2008 GWETS study, the RWQCB required the County to complete an Engineering Feasibility Study (EFS) to evaluate alternatives for improving corrective actions for VOCs in groundwater. The EFS concluded that two options should be pursued; (1) installation of ten new vadose zone landfill gas (LFG) extraction wells, and (2) implementation of a more rigorous groundwater extraction and pumping system. The conceptual model for the groundwater extraction treatment system was to install 20 dual-zone extraction wells capable of pumping 20 gallons per minute (GPM) each, treatment of the water to include metals and VOC removal, and disposal of the water on the County-owned property northwest of the landfill. This equates to water extraction and treatment at 400 GPM, or about 576,000 gallons per day.

In April 2009, new Water Discharge Requirements WDRs/MRP for the site were issued as Order No. R5-2009-0051. In the new order, several key compliance dates were established specifically regarding the recommended groundwater corrective action in the southern part of the landfill. These include:

- Submit a Corrective Action Work Plan October 31, 2010
- Submit an Operations & Maintenance Plan July 29, 2011
- Submit a Construction and Start-up Report October 31, 2011

In order to proceed with the groundwater extraction corrective action plans and eventual installation of the system in early 2011, several tasks must first be completed to test various aspects of the extraction, treatment and disposal systems. This information is critical to support proper system design and construction.

The following three aspects of the system need to be researched and tested:

1. Testing of aquifer characteristics for both the shallow and deep zones to establish aquifer parameters, and testing of the new extraction well design for extraction performance;
2. Evaluation of treatment options to determine the best options for pre-treatment and VOC removal at the predicted flow rates; and
3. Testing of the water disposal area to determine if the property can accept the volume of water predicted, and the best means for water disposal.

Because of the magnitude of these studies, differing time constraints, and different scopes of work, these three evaluations are divided into separate Project Authorizations. This Project Authorization is for the groundwater treatability study.

C. Scope of Work

Contractor shall provide all the labor, material, and equipment to perform a groundwater treatability study as described in the following tasks:

Task 1 – Groundwater Data Compilation

Contractor shall review and compile historical analytical groundwater data from previous investigations and current monitoring programs to estimate concentrations of specific inorganic constituents, and VOCs, that may be expected during future groundwater extraction. Contractor shall use this data as a basis for the evaluation of treatment alternatives for non-target constituents (Task 2), which may, in part, dictate the evaluation of treatment alternatives for target compounds (Task 3).

Task 2 – Treatability Study of Non-Target Constituents (Metals)

Using the concentrations of non-target constituents such as iron, manganese, and arsenic, and the estimated extraction flow rate, Contractor shall determine to what extent treatment for non-target constituents is required. If the evaluation shows that treatment for non-target constituents is necessary, as suspected, Contractor shall evaluate the best available technologies (BAT) for such treatment. At a minimum this shall include evaluation of two main options; (1) keeping the metals in dissolved form through pH adjustment, or (2) removing the metals through oxidation/reductions, filtering, reverse osmosis or other methods.

Contractor shall evaluate the technologies in terms of effective removal of metals at the estimated concentrations and flow rates, cost of acquisition and installation, cost of operation including energy supply and cost and ease of maintenance. In some cases, additional information may be required to properly evaluate certain technologies. For instance, samples may need to be collected and analyzed to determine the ratio of dissolved versus total metal concentrations, or to determine the valance states of certain metals (e.g. ferrous versus ferric iron). For this reason, costs associated with this task include a line item for specialized analytical testing. If specialized testing is not required, this analysis shall not be completed and the cost included in this task for specialized testing shall be deducted from the total cost of this task.

Once the Contractor selects a particular technology as the most promising, a determination shall be made as to the necessity for system testing. Although it is possible that the selected BAT may not require any testing, it is likely that a bench-scale or pilot-scale study may be necessary. In some cases, bench-scale or pilot-scale test costs may be covered, in whole or in part, by the manufacturer of equipment. If such BAT testing is required, the testing shall be recommended in the Groundwater Treatability Study Report (Task 4) and shall be completed under a separate work authorization from the County.

Task 3 – Treatability Study of Target Constituents (VOCs)

Using the concentrations of target constituents (VOCs) and the estimated extraction flow rate, Contractor shall evaluate the best available technologies (BAT) for VOC removal. At a minimum this shall include evaluation of various air stripping technologies and granular activated carbon (GAC). The technologies shall be evaluated in terms of effective removal of VOCs to below method detection limits, cost of acquisition and installation, cost of operation including energy supply, and cost and ease of maintenance.

Because of the wide application of VOC technologies, it is not anticipated that a bench-scale or pilot scale test shall be required for VOC removal systems. Manufacturers of various systems should be able to provide preliminary designs for systems capable of handling VOC's removal at the anticipated flow rates and concentrations. Therefore Contractor shall obtain preliminary design(s) from manufacturers and incorporate these designs into the system preliminary design in Task 4.

Task 4 – Groundwater Treatability Study Results and Preliminary Remediation System Design

Following the selection of possible BAT alternatives in Tasks 2 and 3, Contractor shall complete a preliminary design of the treatment system(s) in order to determine the system size, expected operation and maintenance costs, as well as power and space requirements. Contractor shall prepare a draft Groundwater Treatability Study Report summarizing the results of Tasks 1 through 3. The Groundwater Treatability Study draft shall include the results obtained for evaluation of groundwater quality, recommendation approaches for non-target and target treatment BAT and, if necessary, recommendations for bench-scale or pilot-scale testing. The preliminary design shall also be included in the Groundwater Treatability Study report.

Contractor shall send the draft Groundwater Treatability Study to the County for review and comment. Following receipt of County comments, Contractor shall prepare a Final version of the Groundwater Treatability Study Report and deliver the report to the County and RWQCB.

D. Schedule

The groundwater treatability study shall be completed according to the following schedule in elapsed time from the approval date of the Work Authorization to proceed. Note that some of the tasks may be completed concurrently.

	<u>Weeks</u>
• Task 1 – Groundwater Data Evaluation	1-2
• Task 2 – Treatability Study of Non-Target Constituents Specialized Water Quality Analyses (if necessary)	2-6
• Task 3 – Treatability Study of Target Constituents	6-10
• Task 4 – Groundwater Treatability Study Result and Preliminary Remediation System Design	10-14
 TOTAL ELAPSED TIME (Weeks)	 14

E. Project Authorization Period

Services will commence on or about February 23, 2010, and end June 30, 2010 or upon completing the agreed upon services.

F. Compensation

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

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 Contractor 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. The County shall not reimburse for fax, phone, postage, copies or 15% mark up on any items except laboratory testing related to this Project Authorization.

A Summary breakdown of the fees is as follows:

	<u>Not to Exceed Limits</u>
Task 1 – Groundwater Data Compliation	\$ 4,160.00
Task 2 – Treatability Study of Non-Target Constituents	\$15,500.00
Task 3 – Treatability Study of Target Constituents	\$ 7,980.00
Task 4 – Groundwater Treatability Study Results	\$11,600.00
 TOTAL	 \$39,240.00

Below is a detailed breakdown of the fees:

Title	Task 1	Task 2	Task 3	Task 4	Total	Rate/hr	Not To Exceed Total
Sr. Technical Manger	8	16	16	24	64	\$170.00	\$10,880.00
Project Professional	16	48	40	40	144	\$110.00	\$15,840.00

Title	Task 1	Task 2	Task 3	Task 4	Total	Rate/hr	Not To Exceed Total
Certified Industrial Hygienist	0	4	4	4	12	\$150.00	\$ 1,800.00
Staff professional	0	16	0	0	16	\$ 90.00	\$ 1,440.00
Drafter, AutoCAD	0	0	0	24	24	\$ 75.00	\$ 1,800.00
Clerical	16	4	4	8	32	\$ 65.00	\$ 2,080.00
Subtotal (\$)	\$4,160.00	\$10,300.00	\$7,980.00	\$11,400.00			\$33,840.00
Other Direct Costs *							
Travel Expense (vehicle)	0	\$200.00	0	\$200.00			\$ 400.00
Hotel/Meals	0	0	0	0			\$0.00
Laboratory Testing	0	\$5,000.00	0	0			\$ 5,000.00
Subtotal (\$)	\$0.00	\$5,200.00	\$0.00	\$200.00			\$ 5,400.00
TOTAL	\$4,160.00	\$15,500.00	\$7,980.00	\$11,600.00			\$39,240.00

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

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor 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 \$39,240.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

G. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor 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 Contractor'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 Contractor 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. Contractor 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.
3. The County shall pay the Contractor 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 representative is Gerry Garcia, (209) 837- 4816. The Contractor's representative is, Wayne Pearce, Project Manager, (916) 361-1297.

I. Duty to Cooperate

Each party shall notify the other party immediately 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, Contractor 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.

J. Responsibility for Errors

Contractor shall be responsible for its work and results under this Agreement. Contractor, 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 Contractor occurs, then Contractor shall, at no cost to County, provide all necessary design drawings, estimates and other Contractor 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.

K. 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.


IN WITNESS WHEREOF, the parties have executed this Project No. 10-001-SMG on March 4, 2010, 2010.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: 
Sonya K. Harrigfeld
Director


"County"

STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: 
Name: Patrick S. Sullivan
(Printed)
Title: Senior Vice President

"Contractor"

APPROVED AS TO FORM:
John P. Doering
County Counsel

By: 
Alice E. Mimms
Deputy County Counsel



DEPARTMENT OF ENVIRONMENTAL RESOURCES
 3800 Cornucopia Way, Suite C, Modesto, CA 95358
 Phone: (209) 525-6770
 Fax: (209) 525-6773

Provide Title V Reporting Services for Fink Road Landfill

Project Number 10-002-SMG

A. Terms and Conditions

Except as hereinafter provided, the services provided by the Contractor under this Project Authorization and Attachment A, shall be subject to the terms and conditions set forth in *Master Agreement For Independent Contractor Services* number A00625 made and entered into by and between the County of Stanislaus ("County") and Stearns, Conrad and Schmidt Consulting Engineers, Inc. d/b/a SCS Engineers ("Contractor"), on August 28, 2007.

B. Background

The Non-Methane Organic Compounds (NMOC) Emission Report indicated the landfill exceeded the 50 Mg/yr threshold, thus triggering additional New Source Performance Standards (NSPS) requirements related to design and installation of an NSPS-compliant Gas Collection and Control System (GCCS). Subsequent submittal of a Tier 2 NMOC Emission Report indicated emissions of less than 50 Mg/yr would postpone the requirement for installation of an NSPS-compliant GCCS. However, because it had been more than 5 years since the last Tier 2 testing was done in 2003, a Tier 2 NMOC Emission report could not be submitted unless late Tier 2 sampling was approved by the NSPS Administrator. The U. S. Environmental Protection Agency (EPA) has delegated to the San Joaquin Valley Air Pollution Control District (SJVAPCD) authority for administering the NSPS for landfills; therefore, the SJVAPCD is authorized to approve late Tier 2 testing.

Contractor communicated with the District to obtain approval for late Tier 2 testing. Contractor provided documentation of precedents for EPA approval of such late testing and obtained approval from the SJVAPCD for late Tier 2 Testing. The SJVAPCD has approved late Tier 2 testing, per December 24, 2009, email from Steve Brodie of the SJVAPCD to the Contractor.

C. Scope of Work

Title V Reporting Services

The Title V permit for the site requires Reports of Required Monitoring (RRM) to be submitted semi-annually and a Compliance Certification to be submitted annually.

Note: Completion of Title V reporting does not include Contractor's completion of the actual compliance activities necessary for the site. These compliance activities remain the County's responsibility, with exception of those compliance activities that the Contractor is responsible for as part of the operations and maintenance (O&M) under Project Authorization 07-003-SMG to the Master Agreement. Contractor shall review the County's compliance status, based on information provided by the County, and reports that status to the agency in accordance with the permit.

Contractor shall provide all the labor, material, and equipment to provide Title V Services as described in the following tasks:

Task 1- Semi-Annual Reports of Required Monitoring

Semi-Annual Reports of Required Monitoring are due to the San Joaquin Valley Air Pollution Control District (SJVAPCD) no later than June 30 and December 31 of each year for reporting periods December through May and June through November, respectively.

Contractor shall prepare and complete the June 2010 report and submit to the County for review and comment prior to submitting the report to the SJVAPCD. This task includes but is not limited to the following:

- Contractor shall confirm the landfill's compliance with all monitoring requirements contained in the permit. Confirmation shall consist of a review of monitoring data provided by the County and/or completion of a compliance questionnaire by County personnel.

- Contractor shall perform a full compliance audit of the relevant requirements in the permit for each reporting event, which shall entail a site inspection, interviews with facility staff, review of all compliance records made available to Contractor, and independent verification, to the extent practical, of compliance for the specific permit items related to Monitoring.
- The report shall consist of a completed San Joaquin Valley Air Pollution Control District (SJVAPCD) TVFORM-007 that shall be completed by the Contractor and certified by the County's designated Responsible Official, as specified by District rules. Contractor shall prepare and complete the report on behalf of the County for Contractor's submittal to the SJVAPCD.
- Contractor shall provide the County a draft of the report to review prior to the Contractor's submittal of the report to the SJVAPCD. Contractor shall incorporate the County comments into the final report and submit the final version of the report to the SJVAPCD.

Task 2- Annual Compliance Certification

The Annual Compliance Certification Report is required to be submitted no later than June 30 of each year for reporting period June through May. Contractor shall prepare and complete the Annual Compliance Certification Report and submit to the County for review and comment prior to Contractor's submittal to the SJVAPCD. This task includes but is not limited to the following:

- Contractor shall confirm the landfill's compliance with each condition of the site's Title V permit. Confirmation shall consist of a review of monitoring data provided by the County and/or completion of a compliance questionnaire by County personnel. The questionnaire is more extensive than that required for completion of the RRM as those reports cover only monitoring requirements; whereas the Annual Certification Report encompasses all permit conditions, including reporting, recordkeeping, as well as monitoring requirements.
- Contractor shall perform a full compliance audit of all of the requirements in the permit for each reporting event, which shall entail a site inspection, interviews with facility staff, review of all compliance records made available to Contractor, and independent verification of compliance to the extent practical based on the information Contractor is provided.
- The report shall consist of a completed SJVAPCD TVFORM-006 that shall be certified by the County's designated Responsible Official, as specified by District rules. Contractor shall prepare and complete the report on behalf of the County for submittal to the SJVAPCD.
- Contractor shall provide a draft of the report to the County to review prior to submittal to SJVAPCD. Contractor shall incorporate the County's comments into the final report and submit the final version to SJVAPCD.

TIER 2 SAMPLING AND REPORTING

Contractor shall conduct an additional Tier 2 sampling so that it can be re-established that the landfill's Non-Methane Organic Compounds (NMOC) emissions remain below 50 Mg/yr. The 5-yr Tier 2 NMOC Emission Report submitted in 2003 indicated emissions would remain below 50 Mg/yr well beyond 2010. If this status can be documented, the New Source Performance Standards (NSPS) requirement to install a fully compliant Gas Collection and Control System (GCCS) would be further postponed.

Task 3 - Tier 2 Study and NMOC Emission Report

Contractor shall perform Tier 2 field sampling in accordance with the NSPS requirements. Under Tier 2, NSPS requires a minimum of 2 samples be collected per hectare of existing landfill area, not to exceed a total of 50 samples. Alternatively, if a gas collection system is in place, NSPS allows for sampling from the collection system header. The Contractor shall conduct the sampling similarly to the Tier 2 sampling performed in 2003, which consisted of sampling from LFG headers in those areas of the landfill where a gas collection system is in place, and sampling from the leachate collection system in areas not covered by a gas collection system. The Contractor shall collect LFG samples from each sampling location and ship to a certified laboratory for chemical analysis.

Contractor shall perform the following specific subtasks:

- Review available site plans and identify the most feasible sampling locations.
- Collect a maximum of 3 samples from the main header of the LFG system supplying flare (includes LF-1 and areas of LF-2 with leachate wells connected to gas system).
- Collect a maximum of 3 samples from leachate wells in any portions of the LF-2 not currently connected to the

main header of the LF-2 LFG system.

- Obtain LFG samples from each sampling location in accordance with EPA Method 25C. Prior to taking the sample, Contractor shall use field instrumentation to measure LFG pressures and concentrations (CH₄, O₂, CO₂, and balance gas) to ensure a good quality sample is collected.
- Analyze a maximum of 6 samples per EPA Method 25C and 3C using an EPA-approved analytical laboratory. The Contractor shall analyze the samples at least in duplicate, as required by the EPA.
- Re-calculate the NMOC emission rate using the average NMOC concentration at the site. Prepare and submit a revised NMOC Emission Rate Report to the County for review. The submittal shall include:
 - A summary of the emission estimates.
 - A summary of the field sampling procedures.
 - A map showing field sampling locations.
 - A completed sample data form.
 - A summary table of NMOC laboratory results expressed as hexane.
 - Appended laboratory analytical and quality control data.
 - Emissions modeling output data.
- Incorporate the County's review comments into the final document. Submit revised NMOC Emissions Rate Report to EPA and SJVAPCD on behalf of the County.

Task 4 - Preparation And Submittal Of GCCS Design Plan

Background

NSPS specifies that upon submittal of a NMOC Emission Report indicating emissions over 50 Mg/yr, the County landfill operator must submit a GCCS Design Plan within 12 months of the date of submittal of the NMOC report showing exceedence of the threshold. The NSPS also allows for subsequent submittal of a Tier 2 Emission Report which could demonstrate the site is still under the NMOC threshold. In that case, the requirement to submit a GCCS Design Plan would no longer be in effect until such a time as another NMOC Emission Report indicating exceedence of the threshold is submitted.

Contractor's interpretation of the applicable NSPS requirements is that the GCCS Design Plan submittal deadline of 12 months would be counted from the date the 2008 NMOC report was due. This date is April 6, 2008. In that case, the Design Plan should have been submitted by April 6, 2009. If the District interprets the regulations in this way, then a Design Plan will need to be submitted as soon as possible.

The Air Pollution Control District may view the late submittal of this Plan as an additional deviation, or alternatively, may view it simply as related to the original deviation of the late NMOC Emission Report submittal, and may deem it does not warrant any additional enforcement action.

Alternatively, the District may interpret the NSPS such that the Design Plan is due no more than 12 months after the NMOC Report showing emission in excess of 50 Mg/yr is actually submitted. Since the Tier 1 NMOC Emissions Report was submitted on November 25, 2009, a GCCS Design Plan would not be due until November 25, 2010. Based on the Contractor's understanding of the regulations and previous EPA determinations, Contractor believes the GCCS report will have to be submitted pursuant to the April 6, 2008, NMOC Report submittal due date. Therefore, Task 5 could be viewed as optional for this effort.

If the upcoming Tier 2 is not successful in showing emissions below 50 Mg, NSPS would require a Design Plan to be submitted within 12-months, regardless of the District's determination on the matter. Regardless of the District's determination on this matter and/or the Tier 2 sampling results, Contractor recommends that the Design Plan be prepared, as the Contractor's understanding of the regulations indicates it is required. Further, the Plan could be used to demonstrate compliance with the new California Air Resources Board greenhouse gas requirements (AB 32 requirements).

Task 4 - GCCS Design Plan

Contractor shall prepare the GCCS Design Plan for the site in accordance with NSPS requirements. Contractor shall review information available for the site to prepare the Design Plan, which shall detail how the existing GCCS currently complies with the NSPS and how it will be upgraded in the future to provide continual compliance. Contractor shall prepare the Design Plan submittal in a format prescribed by the NSPS and approved by the U.S. Environmental Protection (EPA) for other sites. In the Design Plan, Contractor shall propose alternatives to full compliance with the NSPS, as appropriate, to ensure long-term and flexible compliance with the regulations.

The preparation of the Design Plan shall fulfill the requirements set forth under 40 CFR 60.752(b)(2). The Design Plan shall outline the methodology employed to design a LFG management system that shall comply with the NSPS

as well as the facility's proposed methods for complying with the monitoring record keeping and reporting requirements of the NSPS.

Contractor shall prepare the Design Plan to meet the new California Air Resources Board greenhouse gas requirements (AB 32 requirements) and be used for that purpose as well.

The NSPS requires the following items to be addressed in the Design Plan and Contractor shall include the following items in the Design Plan:

- Control of surface emissions.
- Depths of refuse.
- LFG generation rates and flow characteristics.
- Landfill cover properties.
- LFG system expandability
- Leachate and condensate management.
- Accessibility
- Compatibility with filling operations.
- Integration with closure end use.
- Air intrusion control
- Corrosion resistance
- Fill settlement.
- Resistance to decomposition heat.
- Minimization of off-site migration.
- Surface emissions monitoring plan.

Contractor shall submit to the County for review and comment prior to finalization, a draft of the submittal. Contractor shall include in their scope or work of the Design Plan one (1) meeting with the County to discuss the draft report and any proposed alternatives. Contractor shall finalize the report for submittal to the SJVAPCD and EPA.

D. Schedule

Tasks 1 and 2

Contractor shall complete during the month of June, Tasks 1 and 2 as described in the task summary for submittal by the end of June. Contractor shall submit drafts to County for review at least one week prior to the submittal date.

Task 3

(Sampling) – Contractor shall be complete this task within 3 weeks of receiving notice from County of approval of this task. Contractor shall complete the Tier 2 Report within 2 weeks after receipt of laboratory results.

Task 4

Contractor shall complete within 4 to 6 weeks from the notice to proceed.

E. Project Authorization Period

Services will commence on or about March 18, 2010, and end June 30, 2010 or upon completing the agreed upon services.

F. Compensation

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

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 Contractor 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. The County shall not reimburse for fax, phone, postage, copies or 15% mark up on any items except laboratory testing related to this Project Authorization.

A Summary breakdown of the fees is as follows:

Task	Description	Not to Exceed Limits
1	Report of Required Monitoring	\$4,000.00
2	Annual Compliance Certification	\$4,999.50
3	Tier 2 Sampling and Analysis, NMOC Report	\$5,999.50 (Discount of \$750 for free sample collection by Contractor)
4	GCCS Design Plan Preparation	\$4,390.00
	Total	\$19,389.00

Below is a detailed breakdown of the Hourly fees:

Title	Task 1 – opt. (Full audit)	Task 2 – opt (Full audit)	Task 3	Task 4	Total with full audit	Hourly Rate	Not To Exceed Total with full audit
Principal	2	3	1.5	2.5	9	\$190	\$ 1,710.00
Project Manager			2		2	\$150	\$ 300.00
Senior Project Professional	4	5	3	5.5	17	\$130	\$ 2,275.00
Project Professional	26	32	17	27	102	\$110	\$11,220.00
Clerical	1	1.5	1.5	2	6	\$ 65	\$ 390.00
Total Personnel Hours	33	41.5	25	37	172.5		
Total Cost per Task	\$3,825.00	\$4,837.50	\$2,942.50	\$4,290.00			
Sub Total							\$15,895.00

Below is a detailed breakdown of Reimbursable Expenses

Title	Task 1 – opt. (Full audit)	Task 2 – opt (Full audit)	Task 3	Task 4	Not To Exceed Total with full audit
Transportation Expenses in accordance with the Master Agreement Reimbursable	\$100.00	\$100.00			\$ 200.00
Laboratory Fees			\$3,000.00		\$3,000.00
Overnight Mailing Expenses	\$ 75.00	\$ 62.00	\$ 57.00	\$ 100.00	\$ 294.00
Total Cost per Task	\$175.00	\$162.00	\$3,066.50	\$ 100.00	
Sub Total					\$3,494.00

PROJECT TOTAL: \$19,389.00

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

1. The Contractor shall be reimbursed only for items and any expenses that are identified in the Exhibit C of the Master Agreement and that have been agreed by the parties that are reasonable, necessary and actually incurred by the Contractor 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 \$19,389.00**, including, without limitation, the cost of any subcontractors, consultants, experts or investigators retained by the Contractor to perform or to assist in the performance of its work under this Agreement.

G. Payment and Invoicing

1. The terms of payment are Net 30 days after approval of the invoice.
2. Contractor 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 Contractor'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 Contractor 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. Contractor 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.
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K. 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.

(signatures on the next page)

IN WITNESS WHEREOF, the parties have executed this Project No. 10-002-SMG on March 16, 2010.

COUNTY OF STANISLAUS
Department of Environmental Resources

By: [Signature]
Sonya K. Harrigfeld
Director

"County"

STEARNS, CONRAD & SCHMIDT CONSULTING ENGINEERS, INC.

By: [Signature]
Name: Patrick S. Sullivan
(Printed)
Title: Senior VP

"Contractor"

APPROVED AS TO FORM:
John P. Doering
County Counsel

By: [Signature]
Thomas Boze
Deputy County Counsel