

## CITY COUNCIL

For City Clerk's Use:

☐ **APPROVED** ☐ **DENIED**

Reso No. \_\_\_\_\_ File No. \_\_\_\_\_

Ord No. \_\_\_\_\_

Agenda Item No.: 7

Date: October 27, 2010

**TO:** Honorable Mayor and Members of the City Council

**FROM:** Edward N. Domingue, Director of Engineering Services

**SUBJECT:** First Amendment to Consultant Agreement with SCS Engineers for Remediation of Orange Glen Market Site

### RECOMMENDATION:

It is requested that Council adopt Resolution No. 2010-162 authorizing the Mayor and City Clerk to execute a First Amendment to the Consulting Agreement with SCS Engineers in the amount of \$181,325 for continued engineering and construction support in the remediation of the Orange Glen Market site.

### FISCAL ANALYSIS:

Funds for this work will be reimbursed to the City from the State Cleanup Fund and escrow funds from the right of way acquisition settlement with the previous property owner (Nanci).

### PREVIOUS ACTION:

City Council approved a previous contract with SCS Engineers (previously Environmental Business Solutions, Inc.) per Resolution 2005-118 on June 1, 2005, and Amendment One per Resolution 2008-88 on April 23, 2008. The current contract was approved by City Council per Resolution 2009-117 on August 19, 2009.

### BACKGROUND:

Part of the right-of-way necessary for the Bear/East Valley Parkways Project includes a previous gas station site addressed as 2741 East Valley Parkway (OG Market). The County Department of Environmental Health identified site contamination during removal of the underground storage tanks (USTs) from this site in 1999. The tenant of the OG Market (Tartir) began the clean up process, but was unable due to lack of funds to proceed with the work. The tenant, however, was able to qualify this site for State Cleanup funds.

During the environmental and preliminary engineering phase of the Bear/East Valley Parkway project the City identified the site as potentially contaminated and obtained a preliminary range of cost to

remediate the site. The City received final federal environmental project approvals in 2004 and then proceeded into the project right of way phase.

During the right-of-way phase and prior to final City acquisition of the OG Market, the City entered into an "on behalf of" agreement with the tenant to allow the City to take the lead in site remediation on behalf of the property owner/tenant. This agreement did not relieve the tenant or property owner (Nanci) from responsibility for site cleanup, but expedited cleanup of site contamination that might impact construction of the City's project. While the OG Market structures have been removed and settlement with the tenants completed, the "on behalf of" agreement will continue with the Tartirs until conclusion of site cleanup. This agreement obligates any payments from the State to be paid to the City to reimburse City costs.

The City reached final agreement with the owner of the OG Market outlining acquisition of the site and financial responsibilities for site cleanup in a settlement agreement dated April 4, 2008. The final agreement established an escrow account for \$500,000 of the purchase price of the property to cover any costs of the City not reimbursed by the State Cleanup Fund. The State Cleanup Fund will provide up to \$1.5 million for qualifying cleanup expenses, which when supplemented by the Nanci escrow account are anticipated to adequately fund the process (proposed \$2.0 million budget).

In 2005 SCS Engineers began work under City contracts/amendments to develop and implement work plans to document and remove the point source of contamination from the site. This specialized field of work and the expertise with the State Cleanup Fund was not available from City staff and not necessary to the City on a full time basis. City staff elected with City Council approval to proceed with outside consultants to accomplish this work. Major tasks accomplished to date include:

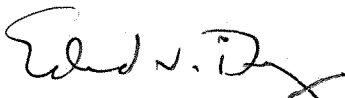
- "On Behalf Agreement" approved by State Water Resources Control Board 11/28/2006.
- Interim Remedial Action Workplan (IRAW) approved 8/01/2007.
- Completion of Interim Remedial Action (IRA) documented in 10/22/08 report.
- Removal and documented disposal of approximately 1,100 tons of petroleum hydrocarbon-bearing soil.
  - Addition of 1,025 pounds of oxygen releasing compound to the saturated subsurface in the vicinity of the former underground storage tanks (UST's).
  - Completed Quarterly groundwater monitoring consistent with IRAW (now changed to semi- annual).

- Response activities to the California Regional Water Quality Control Board Cleanup and Abatement Order R9-2009-0074 dated 5/11/2009.
- Processing of State UST Cleanup Fund claims
- Addendum to the Subsurface Assessment Workplan, dated March 8, 2010.
- Completion of Interim Remedial Action Field Study Workplan Addendum, dated March 16, 2010.
- Completion of a Corrective Action Plan, dated April 30, 2010.
- Processing of Monitoring well permits with City, property owners, and County of San Diego.

The proposed tasks for this first amendment to the latest contract with SCS Engineers will address repairs/upgrades to monitoring wells, project management, continue coordination/processing with Regional Water Quality Control Board (RWQCB) staff, further assessment of site conditions and extent of contamination, installation of additional monitoring wells, continue semi-annual monitoring of test wells, assessment of potential for significant human health risk from vapor phase migration of VOCs, and continue to evaluate the feasibility of additional non-emergency interim remedial actions (e.g.- groundwater pump and treat) to reduce down gradient contamination to acceptable standards.

Upon completion of the successful testing of the non-emergency remediation method, staff will then seek additional future authorization for consultant to pursue that course to final remediation. Consultant estimates a conservative target date to final remediation will not exceed 2 years once the proposed treatment method has been validated and approved by the RWQCB.

Respectfully submitted,



Edward N. Domingue, R.E.  
Director of Engineering Services

7,

RESOLUTION NO. 2010-162

A RESOLUTION OF THE CITY COUNCIL OF  
THE CITY OF ESCONDIDO, CALIFORNIA,  
AUTHORIZING THE MAYOR AND CITY  
CLERK, TO EXECUTE, ON BEHALF OF THE  
CITY, A FIRST AMENDMENT TO THE  
CONSULTANT AGREEMENT WITH SCS  
ENGINEERS, FOR CONTINUED  
ENGINEERING AND CONSTRUCTION  
SUPPORT IN THE REMEDIATION OF THE  
ORANGE GLEN MARKET SITE

WHEREAS, the City Council adopted Resolution 2009-117, dated August 19, 2009, approving a consultant agreement with SCS Engineers for environmental consultant/contractor services for the Bear/East Valley Parkway Project; and

WHEREAS, the Director of Engineering Services recommends the execution of a First Amendment to the Consultant Agreement for continued engineering and construction support in the remediation of the Orange Glen Market site, a more specific location within the Bear/East Valley Parkways Project; and

WHEREAS, this City Council desires at this time and deems it to be in the best public interest to approve said First Amendment to the Consultant Agreement;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Escondido, California, as follows:

1. That the above recitations are true.
2. That the City Council accepts the recommendation of the Director of Engineering Services.

3. That the Mayor and City Clerk are authorized to execute, on behalf of the City, a First Amendment to the Consultant Agreement with SCS Engineers, for continued engineering and construction support in the remediation of the Orange Glen Market site. A copy of the First Amendment to the Consultant Agreement is attached as Exhibit "1" and is incorporated by this reference.



CITY OF ESCONDIDO  
FIRST AMENDMENT TO CONSULTING AGREEMENT

This "Amendment" is made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Between:           CITY OF ESCONDIDO  
                      a municipal corporation  
                      201 N. Broadway  
                      Escondido, California 92025  
                      Attn: Ed Domingue  
                      ("CITY")

And:               SCS Engineers  
                      8799 Balboa Avenue, Suite 290  
                      San Diego, California 92123-4340  
                      Attn: Dan Johnson  
                      ("CONSULTANT")

Witness that whereas:

- A.     CITY and CONSULTANT entered into an agreement on August 19, 2009 ("Agreement"), wherein CITY retained CONSULTANT to provide services for environmental consultant/contractor services for the Bear/East Valley Parkway Project for an amount not to exceed \$100,186; and
- B.     CITY and CONSULTANT desire to amend the Agreement to include additional work, which is defined in "Attachment A" to this Amendment, which is incorporated by reference;

NOW THEREFORE, it is mutually agreed by and between CITY and CONSULTANT as follows:

- 1.     The CONSULTANT will furnish the services described in "Attachment A" to this Amendment.
- 2.     CITY will compensate the CONSULTANT in an additional amount not to exceed \$181,325.00, pursuant to the conditions and compensation terms contained in "Attachment A" to this Agreement.

3. All additional terms under the Agreement between CITY and CONSULTANT still apply to the additional work to be performed by CONSULTANT under this Amendment. If any of the terms of this Amendment conflict with the Agreement, this Amendment must prevail.

IN WITNESS WHEREOF, the parties have executed this Amendment as of the day and year first above written.

CITY OF ESCONDIDO

Date: \_\_\_\_\_

\_\_\_\_\_  
Lori Holt Pfeiler  
Mayor

Date: \_\_\_\_\_

\_\_\_\_\_  
Marsha Whalen  
City Clerk

Date: \_\_\_\_\_

SCS Engineers

\_\_\_\_\_  
Daniel E. Johnson  
Vice President

APPROVED AS TO FORM:

OFFICE OF THE CITY ATTORNEY  
JEFFREY R. EPP, CITY ATTORNEY

BY: \_\_\_\_\_

November 6, 2009

## ***SCOPE OF SERVICES CHANGE, NUMBER 6***

<b>To: City of Escondido</b> <b>Attn: Mr. Edward N. Domingue, P.E.</b> <b>Principal Engineer</b> <b>201 North Broadway</b> <b>Escondido, California 92025</b>	<b>Project Number: 01205515.00</b> <b>Project Name: Former Orange Glen Market</b> <b>Project Location: 2741 East Valley Parkway, Escondido, California (Site)</b>
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The objective of the proposed scope of services is to:

- Complete repairs to three monitoring wells (MW1, MW3, and MW5) that were damaged during the completion of the road improvements within the Site.

## **BACKGROUND**

The intent of this Scope of Services Change Number 6 (SSC6) is to provide a cost estimate to complete repairs to the three damaged wells at the Site. Monitoring well MW3 requires complete replacement due to irreparable damage to the PVC riser and surface completion. Monitoring well MW1 requires lengthening of the riser, replacement of the surface completion, and well development. Monitoring well MW5 requires lengthening of the riser to accommodate the new grade as well as replacement of the surface completion to facilitate drainage.

## **SCOPE OF SERVICES**

### **TASK XXXII MONITORING WELL REPAIRS**

#### **Permitting**

The abandonment and replacement of MW3 requires a monitoring well permit from the County of San Diego Department of Environmental Health (DEH) well permitting desk. A monitoring well permit application will be submitted to the DEH with all necessary fees and associated documentation.



**Mr. Edward Domingue**  
**Project Number: 01205515.00**  
**November 6, 2009**

**Scope of Services Change Number 6**  
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**SCS Engineers**

#### **Utility Search and Markout**

Prior to drilling, Underground Service Alert (USA) will be contacted to minimize the likelihood of drilling into an underground utility. SCS will also contract with a private underground utility location company to attempt to locate subsurface utilities and improvements at the Site to minimize the likelihood of drilling into an underground utility.

#### **Monitoring Well Abandonment and Replacement**

The existing components of monitoring well MW3 will be overdrilled with 10-inch diameter hollow-stem augers to a depth of 25 feet below grade. The use of 10-inch diameter augers to overdrill a well constructed in an 8-inch diameter soil boring will provide greater assurance of well debris removal and proper development completion.

Soil cuttings, purged groundwater, and rinsate will be placed in 55-gallon drums, labeled, and stored on Site while disposal options are evaluated.

#### **Permanent Monitoring Well Construction and Surface Completion Repairs**

MW3 will be constructed with 15-foot long screened interval (designed to be approximately 10 feet below and 5 feet above the field-interpreted saturated zone [estimated total depth of approximately 25 feet below grade]).

The 15-foot long screened interval of MW3 will consist of 0.010-inch slotted casing with an appropriately graded filter pack placed in the well annulus to approximately 3 foot above the top of screened interval. The wells will be surged during construction to settle the sand pack prior to installing a 3-foot thick annulus seal. All newly installed wells will be developed in accordance with DEH guidelines to remove fines from the sand pack and well casings. The wells will be constructed in general accordance with DEH guidelines and State of California requirements. Also, in order to comply with the requirements of the monitoring well installation permit, a 60-day report will be prepared and submitted to the DEH.

The flush-mount surface completion of MW1 will be replaced within the existing sidewalk panel. The flush-mount surface completion of MW5 will be replaced within the eastbound side of East Valley Parkway.

#### **Monitoring Well Development**

Monitoring wells MW1 and MW3 will be surged and purged with a development rig subsequent to repair and construction activities. Development will be completed to provide better hydraulic communication with the surrounding saturated unconsolidated

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Project Number: 01205515.00  
November 6, 2009

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SCS Engineers

sediments and remove fines from the well casing by pumping water until the water quality parameters have stabilized within an acceptable range. The estimated budget includes one day of development. Development water will be placed in 55-gallon drums, which will be labeled and left on-Site pending receipt of analytical results and evaluation of disposal options. After completion, the monitoring wells will need to be surveyed by the City of Escondido licensed land surveyor for both vertical and horizontal control. This will allow for an accurate estimate of groundwater elevation and gradient in general accordance with the regulations pursuant to AB2886.

Please note that this budget assumes the disposal of 10 drums of non hazardous groundwater.

## ESTIMATED BUDGET AND SCHEDULE

The SCS team stands ready to begin this project immediately upon receipt of this signed contract.

The following table summarizes the costs for the scope of services contained within SSC6.

Task	The costs for the above-described Scope of Services are estimated to be as follows:
Task XXXII - MONITORING WELL REPAIRS	\$9,600.00
5% Contingency Cost Range*	\$10,080.00

\* Please allow for a minimum 5 percent variance in the total estimated cost due to changed Site conditions or unanticipated circumstances.

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*SCS Engineers*

**NOTE:** This Scope of Services Change is part of and is in general conformance with the previously executed Contract and Agreement for Services No. 01205515.00 between SCS and the Client. Please sign both copies of SSC6 and mail both signed documents to SCS. One fully executed copy of SSC6 will be returned for your records.

**CLIENT AUTHORIZATION:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

**SCS ENGINEERS AUTHORIZATION:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

### SCS PROJECT BUDGET

PROJECT NAME		UST Conformed Schedule		PROJECT NUMBER		01205515.00	
PROJECT DIRECTOR		DJ		Markup		15% EDF	
PROJECT MANAGER		KLE		Communications Fee		CLIENT City of Escondido	
SALES TAX		7.75%		DATE PREPARED		4/20/2009	
PHASE TITLE				SPREADSHEET LOCATION:		File	
ATTACHMENT NO.				REALITY CHECK		OK	

TASK	TASK DESCRIPTION
32	Well Repairs (MW1, MW3, MW5)

### SUMMARY: ESTIMATED COSTS

COST CATEGORY	SUB-TOTALS	TASK 32	TASK	TASK	TASK	TASK	TASK	TASK	TASK
SCS DIRECT LABOR	\$1,007	\$1,007							
SUBCONTRACTOR	\$6,002	\$6,002							
LABORATORY									
OTHER PRIME	\$005	\$005							
TOTAL COST	\$0,576	\$0,576							
PPR COST	\$0,600	\$0,600							

### SUMMARY. SCS DIRECT LABOR COST

SCS STAFF LEVELS	COST SUB- TOTALS	UNIT RATE	TOTAL UNITS	TASK # UNITS	TASK UNITS	TASK UNITS	TASK UNITS	TASK UNITS	TASK UNITS	TASK UNITS
Principal		\$229								
Project Director		\$208								
Senior Project Advisor (STM)		\$181								
Project Manager		\$145								
Senior Project Professional		\$134								
Construction Superintendent		\$126								
Project Professional	\$1,887	\$111	17	17						
Staff Professional		\$97								
Technician		\$76								
Associate Professional		\$86								
Senior Engineering Technician		\$84								
Project Administrator		\$86								
Designer/Drafter		\$81								
Administrative Assistant		\$71								
Technical Editor		\$86								
SUBTOTAL	\$1,887		17	1887						
COMMUNICATIONS FEE										
TOTAL DIRECT LABOR	\$1,887			\$1,887						

PROJECT NAME		UST Conformed Schedule				PROJECT NUMBER		01205515.00			
PROJECT MANAGER		DJ		PHASE TITLE		CLIENT		City of Escondido			
RESPONSIBLE PERSON		KLE		ATTACHMENT NO.		DATE PREPARED		4/20/2009			
SUMMARY SCS PERSONNEL HOURS											
SCS LEVEL	TASKS	COSTS	UNIT RATE	TOTAL UNITS	TASK 32 UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
Principal	REPORT REVIEW		\$229								
	PM/Scheduling		\$229								
	Oversight		\$229								
			\$229								
Project Director			\$208								
			\$208								
			\$208								
			\$208								
Senior Project Advisor (STM)	REPORT REVIEW		\$181								
	PM/Scheduling		\$181								
	Oversight		\$181								
	review logs/notes		\$181								
Project Manager	mob/demob		\$145								
	Permit appl'n		\$145								
	Fieldwork		\$145								
	Oversight		\$145								
	PM/Scheduling		\$145								
	review b/logs		\$145								
	review notes		\$145								
	PEER REVIEW		\$145								
Senior Project Professional			\$134								
	REPORT REVIEW		\$134								
			\$134								
			\$134								
			\$134								
Construction Superintendent			\$126								
			\$126								
			\$126								
Project Professional	PM/Scheduling	\$222	\$111	2	2						
	Fieldwork	\$1,055	\$111	9.5	9.5						
	H&S Plan		\$111								
	mob/demob	\$167	\$111	1.5	1.5						
	Data interp		\$111								
	Reporting		\$111								
	Figures		\$111								
	edits		\$111								
	boring logs	\$111	\$111	1	1						
	Fieldwork		\$111								
	EDF data input		\$111								
	permitting	\$333	\$111	3	3						
Staff Professional	PM/scheduling		\$97								
	USA markout		\$97								
	H&S Plan		\$97								
	mob/demob		\$97								
	Fieldwork		\$97								
	Reporting		\$97								
	Figure preparation		\$97								
	edits		\$97								
	Precon mtng		\$97								
	EDF data input		\$97								
	Prep. 60 day rpt		\$97								
	drum disposal		\$97								
Technician	drum disposal		\$76								
	mob/demob		\$76								
	gw sampling		\$76								
	hand sugar		\$76								
	soil sampling		\$76								
	USA markout		\$76								
			\$76								
Associate Professional	mob/demob		\$86								
	Fieldwork		\$86								
	reporting		\$86								
	figure preparation		\$86								
	edits		\$86								
	H&S Plan		\$86								
	USA markout		\$86								
	PREP FOR FW		\$86								
	boring logs		\$86								
	EDF data input		\$86								
			\$86								
Senior Engineering Technician			\$84								
			\$84								
Project Administrator			\$86								
			\$86								
Designer/Drafter	Site plans		\$81								
	Photoplates		\$81								
	Boring logs		\$81								
	Cross-sections		\$81								
	Edits		\$81								
Administrative Assistant	Project administration		\$71								
	Report production		\$71								
			\$71								
Technical Editor	Report edits		\$86								
			\$86								
SUBTOTAL		\$1,887	TOTAL	17	17						
COMMUNICATIONS FEE			UNITS								
TOTAL DIRECT LABOR		\$1,887									

PROJECT NAME	UST Confirmed Schedule	PROJECT NUMBER	01205515.00
PROJECT MANAGER	DJ	CLIENT	City of Escondido
RESPONSIBLE PERSON	KLE	DATE PREPARED	4/29/2009

**SUMMARY: SCS SUBCONTRACTOR COST**

SUBCONTRACTOR ITEMS:	UNIT RATE	TOTAL UNITS	TOTAL COSTS	TASK 32 UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
Drum Disposal	\$110	10	\$1,100	10						
Drill bid (Baja)	\$2,300	1	\$2,300	1						
Well Development bid (Test America)	\$2,280	1	\$2,280	1						
ULS	\$400	1	\$400	1						

SUBCONTRACTOR COST		\$6,080	\$6,080						
SCS SUB/CTRCT. FEE	15%	\$912	\$912						
TOTAL SUBCONTRACTOR COST		\$6,992	\$6,992						

PROJECT NAME	UST Conformed Schedule	PROJECT NUMBER	01205515 00
PROJECT MANAGER	DJ	CLIENT	City of Escondido
RESPONSIBLE PERSON	KLE	DATE PREPARED	4/20/2009

**SUMMARY: LABORATORY ANALYSIS COST**

[illegible]

SUMMARY: OTHER PRIME COSTS

PROJECT NAME		UST Confirmed Schedule			PROJECT NUMBER		01205515.00						
PROJECT MANAGER		DJ		PHASE TITLE		CLIENT		City of Escondido					
RESPONSIBLE PERSON		KLE		ATTACHMENT NO.		DATE PREPARED		4/20/2009					

SCS EQUIPMENT AND SUPPLIES

WORK ITEMS	UNIT RATE	TOTAL UNITS	TOTAL COSTS	TASK 32 UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	
<b>BARBERS:</b>												
Teflon/Stainless Steel per day	\$25											
Disposable (each)	\$15											
PVC per day	\$20											
Slug per day	\$25											
	SUBTOTAL											
<b>CAMERAS:</b>												
Digital	\$15	1	\$15	1								
Still	\$10											
Film & Developing	\$20											
Video	\$50											
	SUBTOTAL		\$15	\$15								
<b>RYE/MISC. SUPPLIES:</b>												
Haz Waste Field Kit	\$60											
Exp. Field Supplies	\$35											
Sample Tubes and caps	\$5											
Haz Waste Field Kit												
	SUBTOTAL											
<b>METER/ANALYZER/PRADA:</b>												
Multiple Parameter Water Quality Meter (low-flow cell)	\$225											
Dissolved Oxygen Meter	\$75											
Oil/Water Interface Probe	\$75	1	\$75	1								
Electronic Distance Meter	\$25											
Speedy moisture meter	\$75											
Organic Vapor Meter	\$85	1	\$85	1								
pH/Temp/Conductivity	\$60											
	SUBTOTAL		\$160	\$160								
<b>PROBES:</b>												
Flame Ionization Detector	\$75											
Probe Removal Jack	\$10											
	SUBTOTAL											
<b>PUMPS:</b>												
Dreager Tubes	\$15											
Dreager Pump	\$25											
Generator	\$60											
Hand Auger	\$60											
Power Auger	\$100											
Bladder Pump	\$150											
Tubing & Hardware (Job specific quote)												
DC Pump	\$60											
Grundfos or Peristaltic Pump	\$125											
	SUBTOTAL											
<b>OTHER SCS STUFF</b>												
Vehicle half day	\$40	1	\$40	1								
Vehicle full day	\$80	1	\$80	1								
	SUBTOTAL		\$120	\$120								
SCS EQUIPMENT & SUPPLIES		TOTAL COSTS		\$295	\$295							

SUMMARY OTHER PRIME COSTS (CONTINUED)

<b>PROJECT NAME</b>		UST Conformed Schedule			<b>PROJECT NUMBER</b>		01205515 00	
<b>PROJECT MANAGER</b>		DJ			<b>CLIENT</b>		City of Escondido	
<b>RESPONSIBLE PERSON</b>		KLE			<b>DATE PREPARED</b>		4/20/2009	
<b>PHASE TITLE</b>					<b>ATTACHMENT NO.</b>			

WORK ITEMS	UNIT RATE	TOTAL UNITS	TOTAL COSTS	TASK 32 UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS	UNITS
<b>RENTALS:</b>											
<b>SUBTOTAL</b>											
<b>SUPPLIES:</b>											
PVC blank 4"x 5 ft	\$1										
PVC blank 4"x 10'	\$1										
PVC slot 4"x8'	\$1										
PVC slot 4"x10'	\$1										
Cement (sack)	\$1										
Volcay Grout	\$1										
Bentonite pellets (bckt)	\$1										
Bentonite granular (sack)	\$1										
Sand No. 3	\$1										
End caps	\$1										
Slip Caps	\$1										
Well covers	\$1										
Locking well caps	\$20										
Pad Locks	\$15										
DOT 55g. drum	\$65										
Tubes and caps	\$5										
Wood plugs	\$1										
Valve/Sample Ports/Plumb.	\$1										
Vapor Phase Carbon Can.	\$1										
10 ml visqueen 20"x100'	\$100										
	\$1										
<b>SUBTOTAL</b>											
<b>SUBTOTAL WITH 7.75% SALES TAX</b>											
1.0775											
<b>PERMITS:</b>											
First Soil Boring/Well Permit/Well Destruct	\$193	1	\$193	1							
Subsequent Soil Boring/Hydropunch/Geoprobe Permits	\$50										
Subsequent Groundwater/Vapor Well Permits	\$160										
Subsequent Well Destruction Permits	\$120										
First Well Maintenance Fee	\$100	1	\$100	1							
Subsequent Well Maintenance Fee	\$30										
Cash bond per well	\$2,000										
Traffic control plan review/permit	\$75										
Traffic control plan review/sheet	\$25										
Encroachment prmt processing fee	\$100										
<b>SUBTOTAL</b>											
\$293											
<b>BINDING/REPRODUCTION:</b>											
Copies(50+), 12c/ea	\$0.10	25	\$3	25							
COLOR COPIES 8.5x11	\$1.20										
COLOR COPIES 11x17	\$2.40	6	\$14	6							
<b>SUBTOTAL</b>											
\$17											
<b>TRAVEL COSTS:</b>											
Mileage(+100), 50c/mi	\$0.50										
Per Diem/per day	\$30										
Hotel/per day	\$95										
<b>SUBTOTAL</b>											
<b>GRAND SUBTOTAL</b>											
\$605											
<b>HANDLING FEE (RENTALS, SUPPLIES, PERMITS)</b>											
15%											
\$91											
<b>TOTAL OTHER PRIME COSTS</b>											
\$696											



March 2, 2010

## ***SCOPE OF SERVICES CHANGE, NUMBER 7***

<b>To: City of Escondido Attn: Mr. Edward N. Domingue, P.E. Principal Engineer 201 North Broadway Escondido, California 92025</b>	<b>Project Number: 01205515.00 Project Name: Former Orange Glen Market Project Location: 2741 East Valley Parkway, Escondido, California (Site)</b>
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The objectives of the proposed scope of services are to:

- Provide additional operating budget for project management, liaising with RWQCB, and facilitation of UST Cleanup FUND requirements.
- Further assess the hydraulic gradient direction and magnitude of groundwater beneath the Site.
- Further assess the presence and concentrations of dissolved phase petroleum hydrocarbons and volatile organic compounds (VOCs) in the subsurface of Site.
- Prepare a Subsurface Assessment Workplan Addendum (Addendum) for the Site.
- Implementation of the Addendum which includes the installation of up to eight additional monitoring wells.
- Replace monitoring well MW1 due to the inability to locate and repair the existing well.
- Prepare a Corrective Action Plan (CAP) for the Site.

## **BACKGROUND**

The Site is currently under Cleanup and Abatement Order Number R9-2009-0074 (Order) dated May 11, 2009 and Addendum Number 1 to the Order (Addendum) dated July 30, 2009. In accordance with the Order a Corrective Action Plan (CAP) must be submitted to the RWQCB for review and comment by April 30, 2010. Also, the results of the subsurface

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assessment completed at the Site in October 2009 suggest that dissolved-phase contamination (especially methyl tertiary butyl ether [MTBE] dissolved in groundwater) has not been completed and additional downgradient assessment must be completed. Prior to completing the additional assessment work, an Addendum (Addendum) to the most recently approved Subsurface Assessment Workplan (Workplan) (dated January 29, 2009) must be submitted to the RWQCB for review and comment. There is currently no existing contract amendment that contains the budget to produce the required CAP and Workplan Addendum.

The petroleum hydrocarbon- and volatile organic compound (VOC)-bearing groundwater beneath the Site and Site vicinity is currently being monitored and sampled on a semiannual basis. In October 2009, five additional monitoring wells were installed in accordance with the Workplan. Subsequent to the implementation of the Workplan, up to eight more monitoring wells could also be installed at the Site. This scope change provides the additional costs associated with including the five newly installed wells and eight proposed monitoring wells in the existing semiannual groundwater sampling program for the remainder of events in the corresponding Tasks 21 through 24 (three semiannual sampling events). The next sampling event is tentatively scheduled to be completed in May 2010 on up to 20 wells.

Repairs to wells damaged during the completion of the road widening activities (MW3 and MW5) were completed this month. Monitoring well MW1 however was not found subsequent to excavation of surface pavement and soils in the reported location. Therefore, monitoring well MW1 will require replacement approximately 20 feet to the southwest to continue the collection of dissolved-phase analytical data representative of upgradient conditions.

## **SCOPE OF SERVICES**

### **TASK XVIII PROJECT AND USTCF MANAGEMENT AND CAO COMPLIANCE**

The estimated budget includes limited time for project management activities such as project scoping, client communication and liaison, regulatory agency communication and liaison, compliance tracking and management, project status updates, and budget and invoice review by the project manager. Also, to further facilitate the recovery of project costs from the Underground Storage Tank Cleanup Fund (USTCF) additional staff time has been allotted to the existing corresponding task.

**The estimated time and materials cost to complete the scope of services in Task XVIII is \$7,000.00**

### **TASK XXI GWM PROJECT MANAGEMENT**

This task includes time to coordinate and manage subcontractors, secure any necessary specialized equipment, and prepare for field mobilization. The estimated budget also includes limited time for project management activities such as scheduling fieldwork, procuring

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necessary equipment, and Client and subcontractor invoice review and approval by the project manager.

**The estimated time and materials cost to complete the additional scope of services in Task XXI is \$585. 00 per event with three remaining sampling events totaling an additional \$1,755.00.**

## **TASK XXII      GROUNDWATER MONITORING AND SAMPLING**

In an effort to obtain groundwater samples more representative of aquifer conditions low-flow purging and sampling (ASTM designation D6771-02) methodology will be performed on the thirteen additional wells (five newly installed and up to eight proposed wells) in conjunction with the existing semiannual sampling program for the three events remaining in the existing task budget. Water will be removed from each well with the use of a peristaltic pump in conjunction with dedicated, non-reactive polyethylene and silicone tubing. The tubing intake will be positioned within the upper third of the length of the wetted screen. Water will be pumped through a flow cell with a known operating volume, containing a calibrated water-quality meter capable of measuring pH, dissolved oxygen, conductivity, salinity, total dissolved solids, temperature, turbidity, and oxidation reduction potential. The water-quality meter sondes and associated low-flow cell will be decontaminated before purging groundwater from each well.

Water-quality measurements will be obtained from the water-quality meter each time that an approximate new low flow-cell volume of purged groundwater is purged from the well. This length of time will be deduced in the field by dividing the approximate operating flow cell volume by the current flow rate of the pump. After three stabilized consecutive water quality measurements, a groundwater sample will be collected from each well by bypassing the flow cell and pumping the sample directly into appropriate, laboratory-supplied containers. The samples will be labeled and placed in an ice-packed cooler for transport under chain of custody to the selected laboratory. Purge water will be stored on Site in a labeled drum for later disposal under manifest.

### **Groundwater Sample Analysis**

The groundwater samples will be analyzed for the following:

- TPHg and TPHd in general accordance with EPA Method 8015B Modified
- BTEX, and fuel oxygenates MTBE, DIPE, TAME, ETBE, and TBA in general accordance with EPA Method 8260B

**The estimated time and materials cost to complete the additional scope of services in Task XXII is \$6,400.00 per event with three remaining sampling events totaling an additional \$19,200.00.**

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**TASK XXIII      DISPOSAL OF DRUMMED SOIL CUTTINGS,  
PURGE WATER, AND DECON WATER**

As stated earlier, decon water and purge water will be placed in 55-gallon drums, which will be labeled and left on Site (vicinity of well MW6) pending receipt of analytical results and evaluation of disposal options. SCS shall perform all necessary testing and submit all necessary documentation to licensed disposal facilities for the disposal of drummed decontamination water and purged groundwater. For budgetary purposes we have assumed the disposal of one additional 55-gallon drum of purged groundwater and decontamination water as non-hazardous waste.

**The estimated time and materials cost to complete the additional scope of services in Task XXIII is \$620.00 per event with three additional events totaling \$1,860.00**

**TASK XXXIII   PREPARATION OF A SUBSURFACE  
ASSESSMENT WORKPLAN ADDENDUM  
(ADDENDUM)**

In accordance with the Subsurface Assessment Workplan (Workplan) dated January 29, 2009, seven temporary groundwater monitoring wells were installed crossgradient and downgradient from the Site on October 22 and 23, 2009. Because the downgradient and crossgradient extent of CoCs dissolved in groundwater was not established subsequent to executing the Workplan additional subsurface assessment is required to complete the delineation. A Workplan addendum (Addendum) will be prepared to document the proposed methods and rationale to complete the delineation of CoC-bearing groundwater at the Site.

**The estimated time and materials cost to complete the scope of services in Task XXXIII is \$1,850.00**

**TASK XXXIV   IMPLEMENTATION OF THE ADDENDUM**

**Preparation for Field Work**

**Preparation and Submittal of Soil Boring and Groundwater  
Monitoring Well Permit Applications**

Prior to conducting fieldwork, a soil boring and monitoring well permit application will be completed and submitted to the DEH for approval along with the required fee. The permit application will reflect soil boring advancement methodology and monitoring well construction details. The permit application will be signed by a state-certified professional geologist and submitted to the DEH for approval.

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### **Site Health and Safety Plan**

A Site health and safety plan (Plan) is required for the work conducted at the Site by workers within the exclusion zone pursuant to the regulations in 29 Code of Federal Regulations (CFR) Part 1910.120 and Title 8 California Code of Regulations (CCR) Section 5192. A previously prepared Plan which outlined the potential chemical and physical hazards that may be encountered during the drilling and sampling activities, will be updated as needed. The appropriate personal protective equipment and emergency response procedures for the Site-specific chemical and physical hazards will be detailed in this Plan. All field personnel involved with the field work will be required to read and sign the document in order to encourage proper health and safety practices.

### **Utility Search and Markout**

Prior to drilling, Underground Service Alert (USA) will be contacted to minimize the likelihood of drilling into an underground utility. SCS will also contract with a private underground utility location company to attempt to locate subsurface utilities and improvements at the Site to minimize the likelihood of drilling into an underground utility.

### **Project Management, Subcontractor Management, and Scheduling**

Prior to mobilizing for field work, SCS will notify and schedule the subcontractors including, but not limited to, the laboratory, the drilling company, and the utility location contractor. In addition, SCS will coordinate with the Client and affected property owners to ensure appropriate scheduling of field work.

### **Field Activities - Drilling of Soil Borings, Temporary and Permanent Well Installation, Groundwater Sample Collection and Analysis**

#### **Temporary/Permanent Well Installation and Grab Groundwater Sample Collection and Analysis**

In an attempt to complete the delineation of dissolved-phase constituents of concern (CoCs) in the Site vicinity, it is proposed that additional assessment of the plume be conducted by installing and sampling up to eight additional temporary groundwater monitoring wells (including two contingency wells) crossgradient and downgradient from the Site (Figure 2). Drilling will be performed using a CME 75 or similar drill rig equipped with 8-inch hollow stem augers. SCS staff, under the supervision of a state-certified professional geologist, will be on the Site to observe the drilling activity and describe collected soil samples in general accordance with the Unified Soil Classification System.

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Based on the reported concentrations of MTBE in groundwater samples collected from monitoring wells MW8 through MW12, the dissolved-phase plume has not been delineated. Up to eight soil borings (MW13 through MW20) will be advanced on APN 231-040-33 in an attempt to complete the delineation.

The soil borings will be advanced to approximately 20 to 25 feet below grade with the temporary wells constructed with 15-feet of screened interval such that the screen will span the top of shallow groundwater (estimated to range from approximately 12 to 14 feet below grade). The temporary wells (MW13 through MW20) will be constructed in 8-inch diameter borings using 2-inch PVC casing. Should the reported concentration of TPH and VOCs dissolved in the groundwater samples collected from temporary wells exceed the detection limit, then the construction of the temporary wells will be completed as permanent flush-mount wells.

Temporary wells MW13 through MW18 will be advanced and sampled initially due to the higher probability of the presence of dissolved phase CoCs. Temporary wells MW19 and MW20 will be installed and sampled subsequent to receiving the analytical results for the grab groundwater samples collected from MW13 through MW18 from an on-Site mobile laboratory.

As required by San Diego County guidelines, the augers will be either precleaned or pressure cleaned on-Site to minimize the likelihood of cross-contamination and to minimize the potential for a false positive in the soil and groundwater samples analyzed. During the drilling of the soil borings, soil samples will be collected based on the following protocol:

- At a minimum of 5-foot intervals
- At interpreted capillary fringe or significant changes in unconsolidated sediments
- In areas of discoloration or staining
- When odors or elevated readings from field screening instruments are noted
- At other depths as deemed appropriate by the on-Site SCS staff

Soil samples will be collected with a split-spoon type or similar sampler and driven into stainless steel sample tubes. The two ends of the soil sample tubes will be covered with Teflon sheeting, tightly closed with plastic end caps, labeled, and submitted to an off-Site, state-accredited laboratory for analysis. Chain-of-custody procedures will be implemented for sample tracking. Lithological descriptions will be performed by a California-registered professional geologist, or a qualified professional under the direct supervision of a professional geologist in accordance with the Unified Soil Classification System (USCS).

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At least three borehole volumes of water will be purged from the temporary wells with a decontaminated bailer and centrifugal pump. Subsequent to achieving a recharge of approximately 80 percent in the well casing a groundwater sample will be collected using a peristaltic pump and dedicated polyethylene and silicone tubing. Groundwater quality measurements (pH, temperature, conductivity, turbidity, and dissolved oxygen) will be collected prior to sample analysis for benzene, toluene, ethylbenzene, and xylenes (BTEX) and oxygenates (MTBE, di-isopropyl ether [DIPE], ethyl tert-butyl ether [ETBE], tert-amyl methyl ether [TAME], and tert-butyl alcohol [TBA]), in general accordance with EPA Method 8260B at a state-accredited on-Site mobile laboratory. These data will be used to assess the extent of any BTEX or oxygenate plume in the vicinity of the reported release. Please note that some of the boring locations may be adjusted based on results from the initially completed temporary monitoring wells.

Soil cuttings, purged groundwater, and rinsate will be placed in 55-gallon drums, labeled, and stored on Site until proper disposal has been scheduled. Each temporary well that is not selected for permanent completion will be destroyed within 24 hours of construction by removing the screen and casing, removal of any filter pack by overdrilling, backfilling with bentonite grout, and capping with hydrated bentonite chips and dyed concrete. It is assumed that it will take 3 to 4 days to complete the soil boring and well construction activity.

#### **Permanent Monitoring Well Construction**

The wells will be constructed with 15-foot long screened intervals (designed to be approximately 10 feet below and 5 feet above the field-interpreted saturated zone [estimated total depth of approximately 22 to 25 feet below grade]).

The 15-foot long screened interval of each well casing will consist of 0.010-inch slotted casing with an appropriately graded filter pack placed in the well annulus to approximately 1 foot above the top of screened interval. The wells will be surged during construction to settle the sand pack prior to installing a 3-feet thick annulus seal. All newly installed wells will be developed to remove fines from the sand pack and well casings and provide better hydraulic communication between the monitoring well construction and the surrounding saturated subsurface. The wells will be constructed and developed in accordance with DEH guidelines and State of California requirements.

Purged groundwater will be placed in drums which will be labeled and left on Site until proper disposal has been scheduled.

#### **Soil Sample Analysis**

Up to three soil samples collected from the interpreted capillary fringe (approximately 10 to 15 feet below grade) of each soil boring will be submitted to a state-accredited laboratory for analysis. The samples will be analyzed for TPHg and TPHd in

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accordance with the California Department of Health Services Leaking Underground Fuel Tank method (CA DHS LUFT) and for BTEX, and fuel oxygenates including MTBE, DIPE, TAME, ETBE, and TBA in accordance with EPA Method 8260B.

**Disposal of Drummed Soil Cuttings, Purge Water, and Decon Water**

As stated earlier, soil cuttings, decon water, and purge water will be placed in appropriate 55-gallon drums, which will be labeled and left on Site pending receipt of analytical results and evaluation of disposal options. SCS shall perform all necessary testing and submit all necessary documentation to licensed disposal facilities for the disposal of drummed soil cuttings, decon water, and purge water.

**Civil Survey**

Pursuant to the requirements of AB 2886, the wells will be surveyed for latitude, longitude, and elevation. The latitude and longitude will be measured to sub-meter accuracy using an approved datum with GPS equipment. The well elevation will be measured to a hundredth of a foot using an AB 2886-compliant datum.

**Preparation of Report of Findings**

At the completion of Assessment a letter report (Report) will be prepared. The Report will include the following:

- Laboratory reports and chain-of-custody documents
- Permits
- Figures depicting the soil boring and monitoring well locations as well as soil and groundwater sample analytical data
- Computer-prepared lithologic logs of the soil borings
- Figures depicting the extent of petroleum hydrocarbon-bearing soil and groundwater at the Site
- Tabulated analytical results and appropriate support documentation

The Report will include a detailed description of the work performed, discussion of the results, and SCS's conclusions and recommendations, as deemed appropriate. The Report will be peer-reviewed and signed by a state-certified Professional Geologist. In addition to the above-described Report, in order to comply with the requirements of the soil boring permit, a 60-day report will be prepared and submitted to the DEH.



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### **Electronic Delivery Format (EDF) Reporting**

All required data collected during the Assessment will be uploaded to the RWQCB GeoTracker database in electronic delivery format (EDF) prior to or no later than the written report delivery date.

**The estimated time and materials cost to complete the scope of services in Task XXXIV is \$30,900.00**

### **TASK XXXV REPLACEMENT OF MONITORING WELL MW1**

Because MW1 could not be found during the recent attempt to repair the surface completion a replacement well will be installed approximately 20 feet to the southeast of the existing monitoring well location.

#### **Permitting**

The installation of MW1R requires a monitoring well permit from the County of San Diego Department of Environmental Health (DEH) well permitting desk. A monitoring well permit application will be submitted to the DEH with all necessary fees and associated documentation.

#### **Utility Search and Markout**

Prior to drilling, Underground Service Alert (USA) will be contacted to minimize the likelihood of drilling into an underground utility. SCS will also contract with a private underground utility location company to attempt to locate subsurface utilities and improvements at the Site to minimize the likelihood of drilling into an underground utility.

#### **Monitoring Well Construction**

MW1 will be constructed with 15-foot long screened interval (designed to be approximately 10 feet below and 5 feet above the field-interpreted saturated zone [estimated total depth of approximately 25 feet below grade]).

The 15-foot long screened interval of MW1 will consist of 0.010-inch slotted casing with an appropriately graded filter pack placed in the well annulus to approximately 3 foot above the top of screened interval. The wells will be surged during construction to settle the sand pack prior to installing a 3-foot thick annulus seal.

Monitoring well MW1R will be purged with a decontaminated centrifugal pump subsequent to repair and construction activities. Development will be completed to provide better hydraulic communication with the surrounding saturated unconsolidated sediments and remove fines from the well casing by pumping water until the water quality parameters have stabilized within an acceptable range. This well will be constructed and developed in general accordance with DEH guidelines and State of California requirements. Also, in order to comply with the

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requirements of the monitoring well installation permit, a 60-day report will be prepared and submitted to the DEH.

Development water will be placed in 55-gallon drums, which will be labeled and left on-Site pending receipt of analytical results and evaluation of disposal options. After completion, the monitoring wells will need to be surveyed by the City of Escondido licensed land surveyor for both vertical and horizontal control. This will allow for an accurate estimate of groundwater elevation and gradient in general accordance with the regulations pursuant to AB2886.

Please note that this budget assumes the disposal of 2 drums of non hazardous soil and groundwater.

**The estimated time and materials cost to complete the scope of services in Task XXXV is \$4,600.00**

## **TASK XXXVI PREPARATION OF A CORRECTIVE ACTION PLAN (CAP)**

The Corrective Action Plan (CAP) will be written in general accordance with the guidelines presented in Section 7 of the current SAM Manual for a Corrective Action Plan. These requirements are based on the California Code of Regulations, Title 23, Division 3, Chapter 16, Article 11. Based on the findings, the CAP will also present a rationale for closure that incorporates the existing body of environmental data available for the Site. The CAP will have four separate sections as described below.

### **Section I: Assessment of Impacts**

The first part of the CAP will include a section describing the hydrologic and geologic characteristics of the Site. The current and potential beneficial uses of groundwater and nearby surface waters, as well as tabulated groundwater data for the wells at the Site and their construction details will be presented. A narrative description of the topographic characteristics in the vicinity of the Site will be discussed and presented on a figure. A narrative description, as well as a cross-section representation of the lithologies present at the Site will be included. Hydraulic contour maps that illustrate groundwater flow direction and gradient will also be included. A discussion of the groundwater data in a regional context, and in consideration of regional climatic cycles including any trends or fluctuations observed, will also be part of this section.

The second part of the Assessment of Impacts portion of the CAP will discuss the contaminant characteristics and their impacts. This includes identifying the contaminants of concern at the Site. The existing soil and groundwater data will be tabulated and included in this section. Analysis of the trends in contaminant concentrations and dissolved-phase contaminant plume geometry will also be presented in this section. A narrative discussion of the chemical and physical characteristics, including toxicity, persistence, and potential for contamination migration through soil, water, and air will also be provided.

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A discussion of the impacts of the contamination to soil, groundwater, surface water, air, subsurface utilities, and storm drains will be provided. A map and cross-sections depicting the contaminant plumes will be included. In addition, the potential impacts of contamination to the above-mentioned media will be included in this section along with figures and cross-sections depicting the potentially impacted areas.

To complete this section SCS will need to conduct a receptor survey to identify potentially sensitive receptors (human and ecological) and their distance from the Site. If a utility search is deemed necessary during the course of the CAP preparation, research into the location and type of subsurface utility will be completed prior to document completion. The subsurface utility research will include a site visit and review of plans, if available, to identify underground utilities which might act as conduits for contaminants. Costs to complete subsurface utility research have not been included in this scope change. Should the research require completion an estimate of additional costs will be provided to the Client for approval prior to execution.

## **Section II: Determination of Applicable Cleanup Levels**

The second section of the CAP will detail the proposed cleanup levels for groundwater, surface water, and soil at the Site. These levels will be established in consultation with the RWQCB. As defined in the RWQCB's amendments and most recent Basin Plan (May 1998), the Escondido Hydrologic Subarea (904.62) has been classified as having existing beneficial uses for groundwater, including municipal, agricultural, and industrial. Proposed target cleanup levels are typically based on water quality objectives from the Basin Plan, and risks to public health and safety. Potential vapor migration of contaminants will also be accounted for when determining target cleanup parameters for groundwater at the Site.

## **Section III: Feasibility Study and Corrective Action Workplan**

The CAP will include a feasibility study to evaluate appropriate remediation strategies based on anticipated costs and effectiveness. At least three remediation strategies will be evaluated in the CAP. Each recommended strategy must be capable of achieving the target cleanup goals established or proposed/approved for the Site. The elements of a feasibility study include, at a minimum, a brief description of each proposed corrective action strategy, and a brief justification for the selection of each corrective action strategy as an appropriate method to mitigate impacts at the Site and protect public health. It must also contain an estimate of the time required to attain the proposed cleanup goals for each corrective action strategy and a comparative analysis of the total costs of each corrective action strategy. Costs will be presented in terms of capital and long term operating costs. The selected remediation strategy to mitigate impacts at the Site will also be presented and justified in this section.

Depending on the results of the CAP, a detailed corrective action implementation workplan (design) (CAP Workplan) may be determined to be necessary. If so, it will describe the specific tasks to be performed while implementing the selected remediation alternative. The CAP Workplan will address all relevant items in parts (3), (4), and (5) of the SAM Manual "Site Remediation Check List." If such a workplan is required, a detailed plan for community

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health and safety (CHSP) will also most likely be required according to the guidelines presented in Section 4.IV of the SAM Manual, and submitted to the DEH with the CAP Workplan. Because these two documents may not be required, the associated costs have not been included in this proposed budget. Should the CAP Workplan or remediation design as well as the CHSP be required, an estimate of additional costs will be provided to the Client for approval prior to completion. In addition, depending on the results of the CAP, a pilot or feasibility study may be required to evaluate the feasibility, efficacy, and design criteria for the full scale remediation project.

#### **Section IV: Plan to Monitor and Report the Effectiveness of the Corrective Action Plan**

The fourth, and final, part of the CAP will discuss the strategy for monitoring and evaluating the effectiveness of the selected corrective action strategy. This will include a description of the key indicators and the monitoring methods that will be used in evaluating the effectiveness of the work. In addition, it will describe the criteria to be used in determining when Site cleanup is complete, or when the corrective action has become ineffective. Verification monitoring and sampling must occur to demonstrate the effectiveness of the Site remediation strategy both during and post remediation. This section will also propose a schedule for reporting to the RWQCB (in writing) the monitoring data and an evaluation of the results of such monitoring.

The final version of the CAP will require regulatory agency concurrence. The RWQCB will issue a "Conditional CAP Concurrence" letter if it is concluded that implementation of the CAP will adequately protect public health, safety, and the environment, and will effectively mitigate residual contaminant impacts at the Site to acceptable levels.

Another provision of the CAP process includes public participation. Public notice will be provided to property owners, occupants of adjacent properties, those in the vicinity of potential impacts from the Site activities, and other interested parties.

This contingency must provide a minimum 30-day period for public review of the CAP at the local public library and at the offices of the DEH. Estimated costs to implement the public notification process have been included in this SSC.

#### **Estimated Schedule and Costs**

We anticipate being able to start work on the CAP subsequent to the completion of Task XXIX (Interim Remedial Action Feasibility Study), Task XXX (Feasibility Report Preparation), and Task XXXIV (Implementation of the Workplan Addendum). We also anticipate requesting an extension of the current due date for the CAP submission to allow for the implementation of certain essential pre-cursor work (assessment of plume and feasibility study).

**The estimated time and materials cost to complete the scope of services in Task XXXVI is \$11,425.00**

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## ESTIMATED SCHEDULE AND COSTS

The following table summarizes the costs associated with the scope of work contained within this scope change.

Task	The costs for the above-described Scope of Services are estimated to be as follows:
Task XVIII – Project Management/USTCF Management	\$7,000.00
Task XXI – GWM Project Management (3 events)	\$1,755.00
Task XXII – Groundwater Monitoring (3 events)	\$19,200.00
Task XXIII – GWM IDW Disposal (3 events)	\$1,860.00
Task XXXIII – Workplan Addendum Preparation	\$1,850.00
Task XXXIV – Implementing Addendum	\$30,900.00
Task XXXV – Monitoring Well Replacement	\$4,600.00
Task XXIII - Corrective Action Plan Preparation	\$11,425.00
Total Estimated Cost	\$78,590.00
Total Estimated Cost with Contingency*	\$82,520.00

\* Please allow for a minimum 5 percent variance in the total estimated cost due to changed Site conditions or unanticipated circumstances.

**NOTE:** This Scope of Services Change Number 7 (SSC7) is part of and is in general conformance with the previously executed Contract and Agreement for Services No. 01205515.00 between SCS and the Client. Please sign both copies of SSC7 and mail both signed documents to SCS. One fully executed copy of SSC7 will be returned for your records.

### CLIENT AUTHORIZATION:

\_\_\_\_\_  
 Signature Printed Name Date

### SCS ENGINEERS AUTHORIZATION:

\_\_\_\_\_  
 Signature Printed Name Date

## SCS ENGINEERS

### SCS ENGINEERS UST PROJECT FEE SCHEDULE JULY 1, 2009 TO JUNE 30, 2010

Principal .....	\$229.00
Project Director .....	\$208.00
Senior Project Advisor .....	\$181.00
Project Manager .....	\$160.00
Senior Project Professional .....	\$134.00
Construction Superintendent .....	\$126.00
Project Professional .....	\$111.00
Staff Professional .....	\$ 97.00
Associate Professional .....	\$ 86.00
Senior Engineering Technician .....	\$ 84.00
Technician .....	\$ 76.00
Project Administrator .....	\$ 86.00
Technical Editor .....	\$ 86.00
Designer/Drafter .....	\$ 81.00
Administrative/Secretarial .....	\$ 71.00

#### Additional Terms and Conditions

- Scheduled labor rates include overhead, administration, and profit.
- Rates for principals of the firm may be negotiated on a project-specific basis.
- Scheduled rates are effective through June 30, 2010. Work performed thereafter is subject to a new Fee Schedule.
- Expert witness testimony (depositions and trial) will be charged at \$300.00 per hour. Preparation for testimony and general litigation support will be charged at normal hourly rates.
- Direct project expenses (such as field equipment, subcontracted services including drilling, laboratory analyses, etc., permits, supplies, etc.) will be charged at cost plus 15 percent. Company trucks are charged at \$50 for up to a half day (4 hours) of use, and \$100 for up to a full day (company cars at \$40/\$80). These charges incorporate an allowance of 100 miles per job per day; a \$0.50 per mile surcharge is applied for additional miles. Vehicle charges for long-term and/or high-mileage projects may be negotiated on a case-by-case basis. Personal vehicles will be charged at the Federal rate then in effect. All other field equipment will be charged in accordance with the Fee Schedule in effect at the time the work is performed.
- Per diem will be charged on all projects requiring overnight stays from our office. The per diem rate is \$175.00 per day per person or the federal per diem rate for the area, whichever is greater.
- Overtime will be charged at 125 percent of standard rates for weekday work in excess of 8 hours. Work performed on holidays and weekends will be charged at 150 percent of standard rates.
- Invoices will be prepared monthly or more frequently for work in progress, unless otherwise agreed. Invoices are due and payable upon receipt. Invoices not paid within 30 days are subject to a service charge of 1.5 percent per month on the unpaid balance.
- Payment of SCS invoices for services performed will not be contingent upon the client's receipt of payment from other parties, unless otherwise agreed in writing. Client agrees to pay legal costs, including attorney's fees, incurred by SCS in collecting any amounts past due and owing on client's accounts.

The rationale and methodology for determining our Schedule of Rates is based on Manual 45c of the American Society of Civil Engineers.

**SCS ENGINEERS UST FEE SCHEDULE  
 JULY 1, 2009 TO JUNE 30, 2010**

**FIELD EQUIPMENT RENTAL AND REIMBURSABLE FEE SCHEDULE**

<b>EQUIPMENT</b>	<b>RATE (\$)</b>
55-Gallon Drum	65
Full Day Geoprobe 540 MT (8 hours onsite, 2 technicians, expendables)	2,300
Full Day Geoprobe 540 MT (8 hours onsite, 1 technician, expendables)	1,700
Half Day Geoprobe 540 MT (4 hours onsite, 1 technician, expendables)	900
Overtime Geoprobe 540 MT (>8 hours/day)	200/Hour
1 Liter or less Summa Canister	35/Use
6 Liter Summa Canister + Flow w/Controller	75/Use
Bentonite Chips	11/Bag
Cement/Asphalt	8/Sack
Chlorine Test Kist	25/Kit
Drager CMS Analyzer	25/Day
Drager CMS Analyzer Chips	200/Chip
Drager Pump	25/Day
Drager Tubes	15/Tube
Generator	60/Day
Hand Auger	60/Day
Tube, Caps and Teflon Sheets	5/Tube
Tedlar Bags	20/Bag
Organic Vapor Meter	85/Day
Chlorine Meter	25/Day
Bailers - Reusable	25/Day
Bailers - Disposable (small)	15/Each
Bailers - Disposable (large)	20/Each
Bailers - PVC	20/Day
10 ml Visqueen 20' x 100'	100/Roll
Expendable Field Supplies (caution tape, decontamination equipment, ice, sampling jars, etc.)	35/Day
Hazardous Waste Field Kit	60/Day
(for any field sampling; personal protective equipment including Level C; protective clothing, respirators, gloves, etc.)	
Hazardous Waste Field Kit (for Level A or B)	Quoted/Job Specific
Still Camera Film and Processing	10/Day + 20/Roll
Digital Camera (includes contact sheet & color printing)	15/Day
Digital Video Camera	30/Day
Electronic Distance Meter	25/Day
Oil/Water Interface Probe	75/Day
Multiple Parameter Water Quality Meter	225/Day
pH/Temp/Conductivity Meter	60/Day
Moisture Meter	75/Day
Dissolved Oxygen Meter	75/Day
Bladder Pump	150/Day
Peristaltic Pump	125/Day
Pump Bladders, Tubing & Hardware	Quoted/Job Specific
Water Depth Meter	50/Day
Water Sampling Pump (Grundfos with controller or peristaltic)	125/Day
Water Sampling Pump (DC)	60/Day
Locking Well Cap	20/Each
Padlocks	15/Each
Copies	.14/Page
Color Copies/Prints (8 1/2 x 11)	1.25/Page
Color Copies/Prints (11 x 17)	2.50/Page
CDs	25/Each

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***S*COPE OF SERVICES CHANGE, NUMBER 8**

<b>To: City of Escondido</b> <b>Attn: Mr. Edward N. Domingue, P.E.</b> <b>Director of Engineering Services</b> <b>201 North Broadway</b> <b>Escondido, California 92025</b>	<b>Project Number: 01205515.00</b> <b>Project Name: Former Orange Glen Market</b> <b>Project Location: 2741 East Valley Parkway, Escondido, California (Site)</b>
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The objectives of the proposed scope of services are to:

- Provide additional operating budget for facilitation of UST Cleanup FUND requirements.
- Provide additional operating budget for project management and Cleanup and Abatement Order (CAO) compliance management, and liaising with the RWQCB.
- Assess the possible presence and concentrations of volatile organic compounds (VOCs) and petroleum fuel oxygenates including methyl tertiary butyl ether (MTBE) in the soil vapor at selected locations in the Site vicinity in connection with known releases from on-Site sources.
- Assess the likelihood that significant human health risk exists in association with current land uses as a result of vapor phase migration of VOCs.
- Purchase and install a dedicated bladder pump network in the groundwater monitoring wells.
- Complete an additional feasibility study on the implementation of additional non-emergency interim remedial actions (e.g., groundwater pump and treat to establish hydraulic control) to attempt to address the downgradient migration of extremely elevated concentrations of MTBE and TBA.



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## BACKGROUND

Additional operating budgets are required for ongoing facilitation of project cost refunds from the Underground Storage Tank Cleanup Fund (USTCF) (Task 18 of both SSC1 and SSC7) and project management costs associated with compliance with the Cleanup and Abatement Order R9-2009-0074 (Order) (Task 37 of this SSC8).

This SSC8 also includes estimated costs to implement the *Soil Vapor and Limited Human Health Risk Assessment Workplan* dated June 30, 2010 and the *Revised Soil Vapor and Limited Human Health Risk Assessment Workplan* dated August 16, 2010 (Task 38 of this SSC8).

This SSC8 also contains costs to install a dedicated bladder pump network in existing and proposed monitoring wells at the Site (Task 39 of this SSC8) in accordance with recent interpretations made by RWQCB staff of existing low flow sampling guidance with respect to use of suction lift pumps (including the peristaltic pump historically used to purge water from the shallow monitoring wells) for purposes of sampling for volatile organic compounds (VOC) in groundwater. Although the installation of the bladder pumps does require a substantial equipment expenditure coupled with a day of staff time to properly install the pumps in the well casings, sampling events will require less time in the future to complete due to the efficiencies produced by the operation of a dedicated sampling network.

Lastly, this SSC8 includes costs to install a specialized monitoring well to be used for the completion of additional shallow aquifer characterization. Costs to complete the aquifer characterization (pump and slug tests) as well as interpret the collected data and produce an addendum to the Feasibility Report documenting the findings have been included in this SSC8 as well (Task 40 of this SSC8).

## SCOPE OF SERVICES

### TASK XVIII USTCF MANAGEMENT

The estimated budget includes limited time to further facilitate the recovery of project costs from the USTCF. A recently completed budget review suggests this task is approximately \$6,100 over the existing \$12,000 budget. In addition to the \$6,100 for previously provided services approximately \$5,000 of additional staff time has been allotted to the existing corresponding task to manage future reimbursement requests and correspondence with the USTCF.

**The estimated time and materials cost to complete the scope of services in Task XVIII is \$11,025.00**

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## TASK XXXVII PROJECT MANAGEMENT

The estimated budget includes time (approximately 40 hours at senior project professional and 15 at project director) for project management activities such as project design and scoping, client communication and liaison, regulatory agency communication and liaison, attendance of meetings, compliance tracking and management, project status updates, and budget and invoice review by the project manager.

**The estimated time and materials cost to complete the scope of services in Task XXXVII is \$8,900.00**

## TASK XXXVIII SOIL VAPOR ASSESSMENT AND HUMAN HEALTH RISK ASSESSMENT

### Soil Vapor Assessment

SCS proposes to conduct a soil vapor survey and human health risk assessment at the Site in general accordance with the Department of Toxic Substances Control (DTSC) vapor intrusion guidance (DTSC, 2005) (*DTSC Guidance*). As such, semi-permanent soil vapor sampling probes or "implants" will be designed and emplaced in multiple locations at the Site.

In conformance with the *DTSC Guidance*, multi-depth probes will be installed to assess possible vapor concentration gradients and will be sampled for two events to assess temporal variations, if any, as well as concentration trends. In addition, quality assurance samples will be collected (2 per event) to assess data quality.

It was reported to SCS from the onsite mobile home park manager that the mobile homes are situated over unpaved soil and supported by concrete piers. Crawl space beneath the mobile homes is generally surrounded by a skirt of either siding or trellis and is between two and three feet high.

Based on our review of the *DTSC Guidance*, we propose to collect soil vapor data at nine locations located above the known extent of dissolved-phase VOCs within the mobile home park. A number of the sampling locations will be placed immediately adjacent to existing mobile homes to provide analytical data representative of conditions beneath them.

SCS proposes to complete a soil vapor survey of the shallow soil to assess the potential for soil vapor to contain VOCs. Soil vapor samples will be collected from nine locations. To assess soil vapor concentration gradients, each location will consist of a multiple depth sampling probe (i.e., a sample probe at 5 and between 8 and 10 feet below grade). Therefore, each sampling event will consist of the collection of 18 soil vapor samples (plus two duplicates for analysis by EPA Method TO-15). We are proposing two

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sampling events to provide temporal data and provide a robust data set, which is consistent with current regulatory guidelines.

Prior to collecting a soil vapor sample, an approximately 1-inch diameter hole will be drilled into the ground. The soil vapor sampling probe, which consists of a 1-inch diameter, hollow metal rod will then be manually driven to the desired sampling depth with a hammer. Once reaching the desired depth, a soil vapor well will be constructed using a vapor probe implant, sand pack, and bentonite seal. The soil vapor implant will be connected to the surface and a sampling port using dedicated Nylaflo tubing. Soil vapor samples will be collected from sample points placed at depths of approximately 5 and 15 feet below grade under the direct supervision of an SCS environmental professional. After sampling the locations two times, the probe holes will be backfilled with appropriate backfill materials after removing the tubing from the subsurface.

Please note that while we will make our best effort to achieve the target depths and collect soil vapor samples, we may not be able to do so because of the hardness or resistance of the soil encountered during advancement of the probes.

Chain-of-custody procedures will be implemented for sample tracking. The soil vapor samples will be analyzed on-Site by a State-accredited mobile laboratory. All soil vapor samples will be analyzed for the presence and concentrations of the complete list of volatile organic compounds (VOCs) in accordance with EPA Method TO-15 (which includes previously detected compounds 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene).

The list of detectable analytes will also be amended to include naphthalene<sup>1</sup>, as well as fuel oxygenates. Samples will also be analyzed for fixed gases in accordance with DTSC guidance. All detection limits will be below corresponding residential use California Human Health Screening Levels for soil gas. Two duplicate samples per sampling event will be analyzed by EPA Method TO-15. Because SCS is proposing to analyze the soil vapor samples on-Site in a mobile laboratory no trip blanks will be necessary. Laboratory method blanks will be collected and analyzed by the on-Site mobile laboratory which can also be reported as ambient air blanks. No other sample blanks will be collected during the investigation. A written analytical report will be provided by the laboratory upon the completion of the sample testing.

#### **Limited Human Health Risk Assessment (HRA)**

If detectable concentrations of VOCs are encountered, a vapor intrusion human health risk assessment will be conducted and overseen by a Professional Geologist and a Board Certified Toxicologist. This assessment will include a review of the information developed from the soil vapor survey to assess the extent and concentration of VOCs in soil vapor, if any, beneath the Site. We will utilize existing geotechnical data for

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<sup>1</sup> Please note that Teflon tubing will be used in the construction of the soil vapor monitoring probes.

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unsaturated soils at the Site as well as incorporate the specific parameters of the existing improvements, that may contain, control, dilute, or inhibit the movement of contaminants through the subsurface. Based on this information, SCS will develop a reasonable and defensible vapor phase transport model utilizing the following scenarios:

- For the mobile homes use of the most recent County of San Diego Department of Environmental Health (DEH) Vapor Risk 2000 Model to estimate a soil vapor concentration at the "flux point" (base of slab), to obtain an input dose in conjunction with an assumed air exchange rate and continued residential exposure.
- For the slab-on-grade recreation center use of the DTSC standard vapor risk analytical model and assuming continued commercial land use for the recreation center building based on the Johnson and Ettinger Model (J&E).

**The estimated time and materials cost to complete the soil vapor assessment portion of Task XXXVIII is \$24,875.00. The estimated time and materials cost to complete the human health risk assessment portion of Task XXXVIII is \$6,800.00. The total estimated time and materials cost to complete the scope of services in Task XXXVIII is \$31,675.00**

#### **TASK XXXIX BLADDER PUMP INSTALLATION**

A dedicated PVC-body, bladder pump equipped with a Teflon™ bladder and all necessary polyethylene tubing, connections, and shallow casing hardware will be installed in each of the twenty monitoring wells currently existing and proposed to be installed at the Site. Installation will follow manufacturers recommended installation protocols and will reflect associated sampling guidelines provided by local regulatory agencies such as the County of San Diego Department of Environmental Health.

Installation of the bladder pump network will be completed subsequent to installation of monitoring wells MW13 through MW20, and MW1R; but before the next groundwater sampling event tentatively scheduled to be completed in November of 2010.

**The estimated time and materials cost to purchase and install a dedicated bladder pump system in all twenty existing and proposed monitoring wells at the Site (Task XXXIX is \$20,775.00**

#### **TASK XXXX AQUIFER CHARACTERIZATION**

##### **Fieldwork**

In order to assess whether remedial technologies such as groundwater pump-and-treat (GWPT) can be viably utilized at the Site to control and mitigate the downgradient dissolved-phase contamination, critical aquifer parameters such as hydraulic conductivity

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and groundwater flow velocity are needed to aid proper design of any proposed remedial system.

Because none of the existing or proposed groundwater monitoring wells have constructions that can facilitate the completion of commonly used aquifer testing methods SCS will permit and manage the installation of a monitoring well (Aquifer Test Well) specifically designed for the completion of small scale (pneumatic falling or rising head slug testing) and large scale (pumping test) aquifer characteristic testing. The proposed construction of the Aquifer Test Well will include 4-inch diameter well casing and screen in order to provide sufficient casing volume to accept the installation of appropriate groundwater purge pump and transducer equipment. The Aquifer Test Well will also be constructed with a twenty-five feet long screen submerged at least 5-feet below the water table to provide sufficient casing volume to accept the installation of appropriate groundwater purge pump and transducer equipment, minimize potential for purging the well casing dry during the pumping test, and preclude the loss of applied pressure (rising head slug test) or vacuum (falling head slug test) into the unsaturated vadose zone during the completion of the slug test.

Subsequent to installation and development of the Aquifer Test Well an 8 hour long pumping test will be conducted using the Aquifer Test Well as the extraction well with the two nearest monitoring wells (MW2 and MW6) as two observation wells. Pressure transducers will be placed in the casings of MW2 and MW6 prior to pump test initiation to collect baseline data. Groundwater elevation in the observation wells will be monitored and logged prior, during, and subsequent to the test. Water extracted during the test will be discharged to an on-Site storage tank for later transport and disposal.

Groundwater elevation drawdown in the temporary piezometer during the pilot test as well as the recovery of groundwater elevation within the extraction well subsequent to the completion of the pump test will be used in conjunction with the software program Aqtesolv™ Professional developed by HydroSOLVE, Inc. to obtain initial estimates of transmissivity (T), storativity (S), and ultimately hydraulic conductivity (K).

Pneumatic slug testing will be performed on the Aquifer Test Well to obtain estimates of the hydraulic conductivity of the shallow water-bearing unit beneath the Site. A slug of air will be inserted and/or removed from the Test Well and groundwater elevation changes within the Test Well will be electronically recorded with time using a pressure transducer and data logger. Each test will be run until water levels reach a minimum of 90 percent of their pre-test values. Resulting water level data will be analyzed using an appropriate method for unconfined aquifers. Resulting hydraulic conductivity estimates will be used in conjunction with other hydrogeologic data to estimate groundwater velocities beneath the Site.

Based on the observations made during the initial pump test completed on monitoring well MW3R, it has been assumed that an 8 hour long test performed from a pumping well located approximately 20 to 25 feet away from one to two observations wells can be

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completed with a maximum purged groundwater volume of less than 4,900 gallons. Should the successful completion of the pumping test require a greater volume of groundwater to be pumped and disposed of additional charges would be approximately \$860 for an additional storage tank delivery, rental, and retrieval plus a per gallon charge of \$0.35 per gallon for purged groundwater disposal.

#### **Preparation of Feasibility Report Addendum**

At the completion of the Assessment an Addendum to the Feasibility Report (Addendum) will be prepared. The Addendum will include the following:

- Laboratory reports and chain-of-custody documents
- Tabulated analytical results and appropriate support documentation
- Slug and pump test data and supporting aquifer parameter model outputs
- Recommendations relating to potential remedial technologies that could be successfully implemented at the Site

#### **Electronic Delivery Format (EDF) Reporting**

The Addendum will be uploaded to the RWQCB GeoTracker database in electronic delivery format.

**The estimated cost to conduct the scope of services in Task XXXX is \$16,350.00**

#### **ESTIMATED SCHEDULE AND COSTS**

The following table summarizes the costs for the scope of services described in this SSC.

<b>Task</b>	<b>The costs for the above-described Scope of Services are estimated to be as follows:</b>
TASK XVIII - USTCF Management	<b>\$11,025.00</b>
TASK XXXVII – Project Management	<b>\$8,900.00</b>
TASK XXXVIII – Soil Vapor Assessment	<b>\$24,875.00</b>
TASK XXXVIII – Human Health Risk Assessment	<b>\$6,800.00</b>
TASK XXXIX – Bladder Pump Installation	<b>\$20,775.00</b>
TASK XXXX – Aquifer Parameter Testing	<b>\$16,350.00</b>
<b>Total Estimated Cost</b>	<b>\$88,725.00</b>

\* Please allow for a minimum 5 percent variance in the total estimated cost due to changed Site conditions or unanticipated circumstances.

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**NOTE: This Scope of Services Change is part of and is in general conformance with the previously executed Contract and Agreement for Services No. 01205515.00 between SCS and the Client. Please sign both copies of SSC8 and mail both signed documents to SCS. One fully executed copy of SSC8 will be returned for your records.**

**CLIENT AUTHORIZATION:**

\_\_\_\_\_  
Signature Printed Name Date

**SCS ENGINEERS AUTHORIZATION:**

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Signature Printed Name Date