ITEM NO. 15

STAFF REPORT

CITY OF OCEANSIDE

DATE: July 6, 2011

TO: Honorable Mayor and City Councilmembers

FROM: Water Utilities Department

SUBJECT:

RATIFICATION OF THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH WESTON SOLUTIONS, INC., IN THE AMOUNT OF $49,766 FOR THE HAYMAR SEWAGE SPILL, AND APPROVAL OF AMENDMENT 1 IN THE AMOUNT OF $42,970 TO THE SAME PROFESSIONAL SERVICES AGREEMENT FOR PHASE I AND PHASE II MONITORING AND ANALYSIS SUPPORT AT THE BUENA VISTA CREEK AND LAGOON IN RESPONSE TO THE REGIONAL WATER QUALITY CONTROL BOARD INVESTIGATIVE ORDER NO. R9-2011-0035

SYNOPSIS

Staff and the Utilities Commission recommend that the City Council ratify the execution of the professional services agreement with Weston Solutions, Inc., in the amount of $49,766 for the Haymar sewage spill, and approval of Amendment 1 in the amount of $42,970 to the same professional services agreement adding to the scope of work phase I and phase II monitoring and analysis support at the Buena Vista Creek and Lagoon in response to the Regional Water Quality Control Board Investigative Order No. R9-2011-0035; and authorization for the City Manager to execute the agreements.

BACKGROUND

The City of Oceanside identified a portion of the Haymar sewer for immediate replacement. The existing 15" Vitrified Clay Pipe (VCP) was installed in 1961 and was listed in the City's Integrated Water Utilities Master Plan as a future scheduled replacement project. This project consisted of the relocation of approximately 400 linear feet of 15" VCP gravity sewer pipe.

On Tuesday, December 28, 2010, Water Utilities staff discovered that a portion of this line was broken, necessitating emergency repairs as a result of heavy rainfall and flooding. The City Council adopted a resolution on January 5, 2011, ratifying a Proclamation of Local Emergency by the Director of Emergency Services.

Since the storms and emergency declaration, staff has proceeded with the construction, archaeological and environmental work for the Haymar repair as allowed by the emergency contracting procedures. The majority of the work was completed by the end of February 2011.

On March 10, 2011, the California Regional Water Quality Control Board issued an Investigative Order No. R9-2011-0035 requiring the City to provide the board with a technical report regarding the sewage spill due to the Regional Board on April 11, 2011. One of the items required by the Board was an analysis of the short-term and long-term environmental impacts to the Buena Vista Creek and Lagoon as a result of the sewage spill.

ANALYSIS

A Notice to Proceed was issued to Weston Solutions, Inc., on March 17, 2011 to perform the short-term analysis within the deadline issued by the Regional Board. All work was completed and the Technical Report was provided to the Regional Board by the deadline date. The original professional services agreement was administratively approved and is being ratified because the combined Phase I and Phase II work exceeds staffs' authorized approval limit.

It is necessary to continue with the analysis of the long-term impacts to the Buena Vista Creek and Lagoon in preparation for the request from the Regional Board for this study. Weston Solutions, Inc., will use historical data compiled over years of studies and the results of the short-term impact analysis within the Buena Vista Creek and Lagoon to compile the comprehensive long-term analysis and technical report required by the Boards Investigative Order.

FISCAL IMPACT

A Federal Emergency Management Agency claim is being filed and the costs associated with the Haymar Emergency Sewer Segment are being tracked through the Haymar Sewer fund (750810228). The Miscellaneous Sewer fund (909978000722) has an available balance of $460,526. Therefore there are adequate funds for this project.

INSURANCE REQUIREMENTS

The City's standard insurance requirements will be met.

COMMISSION OR COMMITTEE REPORT

The Utilities Commission will review staff's recommendation at its regularly scheduled meeting on June 27, 2011.

CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney and approved as to form.

RECOMMENDATIONS

Staff and the Utilities Commission recommend that the City Council ratify the execution of the professional services agreement with Weston Solutions, Inc., in the amount of $49,766 for the Haymar sewage spill, and approval of Amendment 1 in the amount of $42,970 to the same professional services agreement adding to the scope of work phase I and phase II monitoring and analysis support at the Buena Vista Creek and Lagoon in response to the Regional Water Quality Control Board Investigative Order No. R9-2011-0035; and authorization for the City Manager to execute the agreements.

PREPARED BY:

Greg Blakely
Administration Manager

SUBMITTED BY:

Peter A. Weiss
City Manager

REVIEWED BY:

Michelle Skaggs-Lawrence, Deputy City Manager

Cari Dale, Water Utilities Director

Teri Ferro, Financial Services Director

Exhibit A – Professional Services Agreement
Exhibit B – Amendment 1

CITY OF OCEANSIDE
AMENDMENT 1 TO
PROFESSIONAL SERVICES AGREEMENT

PROJECT: BUENA VISTA CREEK AND LAGOON MONITORING AND ANALYSIS SUPPORT – 750810228.5320

THIS AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT (hereinafter "Amendment") is made and entered this _____ day of _____2011, by and between the City of Oceanside, Water Utilities Department, a municipal corporation, hereinafter designated as "DEPARTMENT", and WESTON SOLUTIONS, INC., hereinafter designated as "CONSULTANT".

RECITALS

WHEREAS, DEPARTMENT and CONSULTANT are the parties to that certain Professional Services Agreement dated May 18, 2011, hereinafter referred to as the "Agreement", wherein CONSULTANT agreed to provide certain services to the DEPARTMENT set forth therein;

WHEREAS, the parties desire to amend the Agreement to provide for changes and/or modifications to Section 1, Scope of Work, Section 2, Timing Requirements and Section 13, Compensation.

AMENDMENT

NOW, THEREFORE, as set forth herein, the parties hereto do mutually agree that the Agreement shall be amended as follows:

1. Section 1, Scope of Work, shall be amended to reflect and include the required phase II monitoring and analysis support as described and outlined in the Scope of Work and Cost Estimate dated May 25, 2011, (Exhibit A).

2. Section 2, Timing Requirements, shall be amended to reflect a revised completion date of November 1, 2011.

3. Section 13, Compensation, shall be amended to reflect that all work performed in accordance with the original agreement and this Amendment 1 shall not exceed $92,736.

4. Except as expressly set forth in the Amendment, the Agreement shall remain in full force and effect and is hereby ratified and reaffirmed.

SIGNATURES. The individuals executing this Amendment represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of the respective legal entities of the CONSULTANT and the DEPARTMENT.

IN WITNESS WHEREOF, the parties hereto being duly authorized on behalf of their respective entities to execute this Amendment, do hereby agree to the covenants contained in the Agreement, including this Amendment and have caused this Amendment to be executed by setting hereunto their signatures this _____ day of _____, 2011.

WESTON SOLUTIONS, INC.

By: Michael Drennan
Vice-President

By: [illegible]
ASSISTANT SECRETARY

23-1501990
Employer ID No.

CITY OF OCEANSIDE

By: _____
Peter A. Weiss, City Manager

APPROVED AS TO FORM:

[illegible], ASST.
City Attorney

NOTARY ACKNOWLEDGEMENTS OF CONSULTANT MUST BE ATTACHED.

PLEASE SEE ATTACHED
CALIFORNIA CERTIFICATE
DAVID CARMONA
NOTARY PUBLIC
06/06/11

Exhibit A

WESTON SOLUTIONS, INC.
2433 Impala Drive
Carlsbad, CA 92010
(760) 795-6900 / (760) 931-1580 FAX
www.westonsolutions.com

May 25, 2011

Mr. Jason Dafforn
Water Utilities Department
300 North Coast Highway
Oceanside, CA 92054

Subject: Scope of Work and Cost Estimates for Phase II Monitoring and Analysis Support in Response to San Diego Regional Water Quality Control Board Investigative Order No. R9-2011-0035 (Buena Vista Creek and Lagoon)

Dear Mr. Dafforn:

Weston Solutions, Inc. (Weston) is pleased to provide this Scope of Work (Scope) and Cost Proposal to provide additional monitoring and analysis support in response to San Diego Regional Water Quality Control Board (Regional Board) Investigative Order No. R9-2011-0035 (Order). Phase I monitoring was conducted to address items #17 and #18 of the Order in response to the sewer line break which occurred just upstream of North Haymar Drive on Buena Vista Creek in the City of Oceanside (City). The Phase I report was submitted to the City on April 4, 2011. Immediate short term impacts of the discharge on public health were addressed by the City of Oceanside by notifying the public with postings at the Lagoon and the beach. The short and long-term impacts of the discharge to public health, animal and plant communities, and on the overall ecosystem downstream of the discharge were assessed through sampling, analysis, and comparison of recently collected data in Phase I to historical data.

Phase I monitoring was conducted from March 18, 2011 through April 1, 2011 in Buena Vista Creek (Creek) upstream and downstream of the sewer line break, in the eastern portion of Buena Vista Lagoon (Lagoon) and in the sewer influent upstream of the sewer line break. Phase I monitoring and analysis was intended to satisfy the immediate short and long-term requirements based on best professional opinion of the efforts needed to satisfy the Regional Board's requests within the time frame provided. Based on the results from the Phase I effort, additional sampling and comparison to both recently collected data and historical data will further assess the long-term ecological impacts of the discharge.

Phase II will provide additional monitoring and analysis support to address the long-term ecological impacts listed in item #18 of the Order. Data collected from Phase I monitoring will be compared to recently collected bioassessment and water quality data collected during May 2011 at the Buena Vista TWAS-1 location as part of the Regional Copermittee Monitoring Program (with prior approval from the County of San Diego

Copermittee Workgroup Chair). Sediment and benthic infaunal samples will be collected, analyzed and compared to historical data from the Ambient Bay and Lagoon Program during 2003-2005.

The following tasks that correspond to Phase II are proposed:

Task 1	**Sediment Sampling and Analysis**
Task 2	**Benthic Infaunal Lagoon Sampling, Analysis and Comparison**
Task 3	**Phase I Data Comparison to Copermittee Data**
Task 4	**Draft and Final Monitoring and Assessment Report**
Task 5	**Project Management and As-Needed Technical Support**

The scope, approach, deliverables and estimated effort for each of the listed tasks are presented as follows. An overall cost summary and schedule are presented following the task specific descriptions.

Phase II Options to Satisfy Item #18: "*An assessment of the potential short and long term impacts of the discharge on public health, animal and plant communities (including sensitive and/or endangered species), and on the overall ecosystem downstream of the discharge. The assessment must include:*

a. A summary of all threatened and endangered species located downstream of the spill site within or adjacent to Buena Vista Creek, Buena Vista Lagoon, and the Pacific Ocean.

b. A description of all observations and sampling activities, conducted by or on behalf of the City, associated with potential short-term and long-term impacts to human health, vegetation, and wildlife from the spill and an evaluation of these impacts.

Task 1: Sediment Sampling and Analyses

- Weston will collect creek bed surface sediment samples (top 2 cm) upstream of the point source of the discharge, downstream of the discharge, and in the eastern portion of the lagoon (Phase I sites). Data will be collected with a Ponar grab sampler in the Lagoon and other relevant sampling devices in the Creek as applicable. Samples in the creek will be collected from three transects of five equidistant samples perpendicular to the creek bank and then composited into one representative sample per location. A total of 3 sediment samples, including one duplicate, and one field blank will be analyzed for sediment chemistry and sediment toxicity for the analytes listed in Attachment #2 to assess long-term ecological impacts listed in item #18 of the Order.
- Sediment samples collected under Phase I that were archived will be analyzed for chemical constituents.

- Data will be compared between the recently collected samples, the archived samples, and historical data from the Ambient Bay and Lagoon Program during 2003-2005 (Lagoon segment sample only).

Estimated Cost: $27,170

Task 2. Benthic Infaunal Lagoon Sampling, Analysis and Comparison Bioassessment Survey

- Weston will collect benthic infaunal samples with a Ponar grab sampler from the eastern portion of the Lagoon. Benthic infaunal samples were collected and preserved from the Lagoon during Phase I. Benthic macroinvertebrate sorting and taxonomic identification will be conducted for both Phase I and Phase II samples and compared to assess long-term ecological impacts listed in item #18 of the Order.
- Data will also be compared to historical data from the Ambient Bay and Lagoon Program during 2003-2005.

Estimated Task Cost: $ 3,355

Task 3. Phase I Data Comparison to Copermittee Data

During Phase I monitoring, water quality samples were collected upstream of the point source of the discharge downstream of the discharge in the Creek, and in the eastern portion of the Lagoon. Results suggest that in March 2011 there was no apparent difference between the water quality upstream of the spill site compared to the site downstream of the spill site and in the lagoon. Benthic macroinvertebrates and algae were also sampled upstream of discharge and downstream of discharge in the Creek. Based on an analysis of historical data, the pre-spill biotic conditions in the stream were quite similar to the conditions encountered in March 2011. To further assess the long-term ecological impacts of the discharge, Phase I data collected in March 2011 will be compared to water quality data and stream bioassessment data collected during May 2011 at the Buena Vista TWAS-1 location (downstream of the discharge) as part of the Regional Copermittee Monitoring Program.

- Water quality data from Phase I will be compared to water quality data collected during May 2011 (with prior approval from the Copermittee Monitoring Workgroup) at the Buena Vista TWAS-1 location as part of the Regional Copermittee Monitoring Program to assess long-term ecological impacts listed in item #18 of the Order.
- Stream bioassessment was conducted at two sites during Phase I using the Surface Water Ambient Monitoring Protocol (SWAMP) (Ode, 2007). One site was located upstream of the point source of the discharge and one site was located

downstream of the discharge. Stream bioassessment was also conducted during May 2011 at the Buena Vista TWAS-1 location as part of the Regional Copermittee Monitoring Program. The stream bioassessment results from both surveys will be compared to assess long-term ecological impacts listed in item #18 of the Order (with prior approval from the Copermittee Monitoring Workgroup).

Estimated Task Cost: $ 2,315

Task 4. Draft and Final Monitoring and Assessment Report

Weston will prepare a draft monitoring and assessment report. The report will consist of methods, results, data tables, figures, and summary data interpretations. A final report will be provided after receiving review comments from the City. Weston will also provide a power point presentation to summarize the project and results.

Estimated Task Cost: $7,030

Task 5. Project Management and As-Needed Technical Support

This task involves oversight for planning and implementing the project, as well as coordinating with The City of Oceanside and subcontractors to ensure that project goals, budgets, and schedules are met. Weston's management team will perform the following tasks:

- Administration and daily management of the contract for this project
- Coordination and communication with the City of Oceanside
- Attendance at Relevant Meetings
- Coordination and communication with subcontracting laboratories
- Kick-off Meeting with Weston staff

Estimated Task Cost: $3,100

Project Budget Summary (Labor rates and costs provided in Attachment #1)

TASK	TASK DESCRIPTION	ESTIMATED COST
Task 1	Sediment Sampling and Analysis	$27,170
Task 2	Benthic Infaunal Lagoon Sampling, Analysis and Comparison	$3,355
Task 3	Phase I Data Comparison to Copermittee Data	$2,315
Task 4	Draft and Final Monitoring and Assessment Report	$7,030
Task 5	Project Management and As-Needed Technical Support	$3,100
Total Project Base Cost Estimate – Time and Materials (Not To Exceed)		**$42,970**

Should you require any further information, please do not hesitate to call me at 760-795-6903 or via email at dave.renfrew@westonsolutions.com.

Sincerely,

David S. Renfrew, REA-I, CPSWQ
Project Manager
Weston Solutions, Inc.

Cc: Project File
Attachments
#1 – Labor Rates, Hours, and Costs
#2 – Sediment Quality Chemistry List

Labor Rates and Hours

Category	Personnel	Bill Rate Per Hour ($)	Task #1 Sediment Sampling and Analysis (hours)	Task #2 Benthic Infaunal Sampling, Sorting and Taxonomy (hours)	Task #3 Phase I Data Comparison to Copermittee Data (hours)	Task #4 Draft and Final Report (hours)	Task #5 Project Management (hours)	Total Hours	Total Cost
Project Principal	David Moore, Ph.D	200					2	2	$ 400
Project Manager, Senior		165						0	$ -
Project Manager	David Renfrew, CPSWQ, REA-I	155	1		1	12	12	26	$ 4,030
Engineer, Senior		200						0	$ -
Engineer		150						0	$ -
Engineer, Associate		115						0	$ -
Engineer, Junior		90						0	$ -
Scientist, Senior	Garth Engelhorn, Damon Owen	140			12	20	6	38	$ 5,320
Geologist, Senior		135						0	$ -
Geologist		130						0	$ -
Scientist 3	Satomi Yonemasu, Laurence Campagna	120	6	2	4	16		28	$ 3,360
Scientist 2		100						0	$ -
Scientist 1		92						0	$ -
GIS Specialist		140						0	$ -
GIS Analyst		75						0	$ -
Environmental Analyst	Melissa Mathis	84	6	2				8	$ 672
Technician, Senior		75						0	$ -
Technician, Field / Laboratory		65						0	$ -
Assistant Laboratory Technician		52						0	$ -
Project Controls		75						0	$ -
W/P & Graphics	Michelle Patzius	75				6		6	$ 450
Administration		65						0	$ -
									$ 14,232 Labor Subtotal

Subcontract Laboratory Services

			Task #1	Task #2	Task #3	Task #4	Task #5		
Physis Labs - Pyrethroids	$400/sample	NA	$ 4,000						$ 4,000
Benthic infauna	$600/sample	NA		$ 2,400					$ 2,400
Weck Sediment	$1228.50/sample	NA	$ 12,285						$ 12,285
ay Lab-Hyalella 10-day Sediment	$1,150/sample	NA	$ 4,600						$ 4,600
									$ 23,285 Subcontract Services Subtotal

External Costs, G&A, Fees on Subs, and ODCs

			Task #1	Task #2	Task #3	Task #4	Task #5		
External Costs, sampling containers, mileage, and shipping	NA	NA	$ 210	$ 10					$ 220
Sampling equipment (Ponar Grab, Boat, camera, PH,EC,Temp Meter, Benthic Seive)	NA	NA	$ 220	$ 25					$ 245
G&A, Fees, and ODCs	NA	NA	$ 4,476	$ 511					$ 4,988
									$ 5,453 External Costs, G&A, and Fees Subtotal
									$ 42,970

Attachment #2 - Analytical List

Parameter	Method	Procedure	Method Detection Limit (dry weight)	Reporting Limit (dry weight)
Physical / Conventional Tests				
Ammonia	SM 4500-NH3F	ICP/MS	0.03 mg/wet kg	0.03 mg/wet kg
Dissolved Sulfides	Plumb (1981)	Titrametric	0.2 mg/kg	0.4 mg/kg
Grain Size	Plumb (1981)	Sieve/Pipette	1.00%	1.00%
Percent Solids	USEPA 160.3	Gravimetric	0.10%	0.10%
Total Organic Carbon	USEPA 9060A	Combustion IR	0.01%	0.02%
Total Nitrogen	SM 4500-N	Colorimetric	2 mg/kg	4 mg/kg
Total Phosphorus	SM 4500-P E	Colorimetric	0.016 mg/kg	0.05 mg/kg
Total Sulfides	Plumb (1981)	Titrametric	0.2 mg/kg	0.4 mg/kg
Metals				
Aluminum (Al)	USEPA 6020m	ICP/MS	1 µg/g	5 µg/g
Antimony (Sb)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Arsenic (As)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Barium (Ba)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Beryllium (Be)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Cadmium (Cd)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Chromium (Cr)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Copper (Cu)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Iron (Fe)	USEPA 6020m	ICP/MS	1 µg/g	5 µg/g
Lead (Pb)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Mercury (Hg)	USEPA 245.7m	CVAFS	0.01 µg/g	0.02 µg/g
Nickel (Ni)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Selenium	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Silver	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Zinc (Zn)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Synthetic Pyrethroids				
Allethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Bifenthrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Cyfluthrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Cypermethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Danitol (Fenpropathrin)	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Deltamethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Esfenvalerate	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Fenvalerate	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
L-Cyhalothrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Permethrin	USEPA 8270CmNCI	GC/MS-NCI	5 ng/g	25 ng/g
Prallethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Organochlorine Pesticides				
2,4′-DDD	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2,4′-DDE	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2,4′-DDT	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
4,4′-DDD	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
4,4′-DDE	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
4,4′-DDT	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g

Attachment #2 - Analytical List

Parameter	Method	Procedure	Method Detection Limit (dry weight)	Reporting Limit (dry weight)
Aldrin	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-alpha	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-beta	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-delta	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-gamma	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Chlordane-alpha	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Chlordane-gamma	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
cis-Nonachlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
DCPA (Dacthal)	USEPA 8270Cm	GC/MS SIM	5 ng/g	10 ng/g
Dicofol	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Dieldrin	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endosulfan I	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endosulfan II	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endosulfan Sulfate	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endrin	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endrin Aldehyde	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endrin Ketone	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Heptachlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Heptachlor Epoxide	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Methoxychlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Mirex	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Oxychlordane	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Perthane	USEPA 8270Cm	GC/MS SIM	5 ng/g	10 ng/g
Toxaphene	USEPA 8270Cm	GC/MS SIM	10 ng/g	50 ng/g
trans-Nonachlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
PCBs				
PCB Congeners	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
PAHs				
1-Methylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
1-Methylphenanthrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
1,6,7-Trimethylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2,6-Dimethylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2-Methylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Acenaphthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Acenaphthylene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Anthracene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(a)anthracene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(a)pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(b)fluoranthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(e)pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(g,h,i)perylene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(k)fluoranthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Biphenyl	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Chrysene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g

Attachment #2 - Analytical List

Parameter	Method	Procedure	Method Detection Limit (dry weight)	Reporting Limit (dry weight)
Dibenzo(a,h)anthracene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Fluoranthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Fluorene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Indeno(1,2,3-cd)pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Naphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Perylene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Phenanthrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Toxicity				
10-day acute survival test with the amphipod *H. azteca*.				

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

State of California
County of SAN DIEGO

On 06/06/11 (Date) before me, DAVID CARMONA, NOTARY PUBLIC (Here Insert Name and Title of the Officer),

personally appeared MICHAEL DRENNAN (Name(s) of Signer(s)),

who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) is/a~~re~~ subscribed to the within instrument and acknowledged to me that he/sh~~e~~/th~~ey~~ executed the same in his/h~~er~~/th~~eir~~ authorized capacity(ie~~s~~), and that by his/h~~er~~/th~~eir~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

DAVID CARMONA
COMM. #1931331
NOTARY PUBLIC • CALIFORNIA
SAN DIEGO COUNTY
Commission Expires Apr 2, 2015
TUP2

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Signature of Notary Public)

Place Notary Seal Above

OPTIONAL

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Description of Attached Document

Title or Type of Document: CITY OF OCEANSIDE AMENDMENT 1 TO PROFESSIONAL SERVICES AGREEMENT

Document Date: 06/06/11 Number of Pages: TWO

Signer(s) Other Than Named Above: NONE

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____	Signer's Name: _____
☐ Corporate Officer — Title(s): _____	☐ Corporate Officer — Title(s): _____
☐ Individual	☐ Individual
☐ Partner — ☐ Limited ☐ General	☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact	☐ Attorney in Fact
☐ Trustee	☐ Trustee
☐ Guardian or Conservator	☐ Guardian or Conservator
☐ Other: _____	☐ Other: _____
Signer Is Representing: _____	Signer Is Representing: _____
RIGHT THUMBPRINT OF SIGNER: Top of thumb here	RIGHT THUMBPRINT OF SIGNER: Top of thumb here

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Item #5907

CITY OF OCEANSIDE

PROFESSIONAL SERVICES AGREEMENT

PROJECT: BUENA VISTA CREEK AND LAGOON MONITORING AND ANALYSIS SUPPORT [750810228.5320]

THIS AGREEMENT, dated May 18, 2011 for identification purposes, is made and entered into by and between the CITY OF OCEANSIDE, a municipal corporation, hereinafter designated as "CITY", and WESTON SOLUTIONS, INC., hereinafter designated as "CONSULTANT".

RECITALS

A. CITY desires to obtain professional engineering services from an independent contractor for the above named project.

B. CONSULTANT has submitted a proposal to provide engineering services for the CITY in accordance with the terms set forth in this Agreement.

C. CITY desires to contract with CONSULTANT as an independent contractor and CONSULTANT desires to provide services to CITY as an independent contractor.

D. CONSULTANT has demonstrated its competence and professional qualifications necessary for the satisfactory performance of the services designated herein by virtue of its experience, training, education and expertise.

NOW, THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1.0 **SCOPE OF WORK.** The project is more particularly described as follows: Monitoring and Analysis Support for the Buena Vista Creek and Lagoon in response to the San Diego Regional Water Quality Control Board Investigative Order No. R9-2011-0035; more particularly as described in the attached Scope of Work and Cost Estimate.

1.1 **PROFESSIONAL SERVICES PROVIDED BY CONSULTANT.** The professional services to be performed by CONSULTANT shall consist of but not be limited to the following:

1.1.1 Work closely with the Water Utilities Director in performing work in accordance with this Agreement in order to receive clarification as to the result which the CITY expects to be accomplished by CONSULTANT. The Water Utilities Director, under the authority of the City Manager, shall be the CITY'S authorized

representative in the interpretation and enforcement of all work performed in connection with this Agreement. The Water Utilities Director may delegate authority in connection with this Agreement to the Water Utilities Director's designees. For the purposes of directing the CONSULTANT'S performance in accordance with this Agreement, the Water Utilities Director delegates authority to Jason Dafforn.

1.1.2 In compliance with Government Code section 7550, the CONSULTANT shall include a separate section in the proposal prepared pursuant to this Agreement, which contains a list of all the subcontractors and dollar amounts of all contracts and subcontracts required for the preparation of work described in this Agreement.

1.1.3 Visit and carefully examine the location of the project as often as necessary to become acquainted with all conditions which are visible or could reasonably be discovered, and which might have an impact upon the construction of the project.

1.1.4 Monitor, sample, and submit to the Water Utilities Director, an assessment of the impacts as described in the Scope of Work, and in the time and manner set forth in this Agreement.

1.2 **SERVICES PROVIDED BY CITY.** The CITY shall perform the following services:

1.2.1 Provide access to all public improvement plans and records and furnish one copy of drawings and reports requested.

1.2.2 Obtain all necessary permits from other regulatory agencies and other Departments. CONSULTANT shall participate in the completion of such forms but CITY will submit these and pay for any applicable fees.

1.2.3 Upon request, verify the location of existing CITY owned utilities.

1.2.4 Provide all legal advertising mailings and postings required.

1.2.5 Provide overall project management.

2.0 TIMING REQUIREMENTS

2.1 Time is of the essence in the performance of work under this Agreement and the following timing requirements shall be strictly adhered to unless otherwise modified in writing as set forth in Section 2.3. Failure by CONSULTANT to

strictly adhere to these timing requirements may result in termination of this Agreement by the CITY and the assessment of damages against the CONSULTANT for delays.

2.2 Phase I. CONSULTANT shall prepare and deliver a draft impact assessment as outlined in the Scope of Work dated March 17, 2011 by April 5, 2011.

2.3 CONSULTANT shall submit all requests for extensions of time for performance in writing to the Water Utilities Director no later than ten (10) calendar days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due. The Water Utilities Director shall review all such requests and may grant reasonable time extensions for unforeseeable delays which are beyond CONSULTANT'S control.

2.4 For all time periods not specifically set forth herein, the CONSULTANT shall respond in the most expedient and appropriate manner under the circumstances, by either telephone, fax hand delivery or mail.

3.0 **DESIGN CRITERIA AND STANDARDS.** All work shall be performed in accordance with applicable CITY, state and federal codes and criteria. In the performance of its professional services, CONSULTANT shall use the degree of care and skill ordinarily exercised by consultants under similar conditions.

All plans shall be ink drawn on standard mylar sheets available from the CITY at no cost to CONSULTANT. Contract specifications shall conform to the CITY'S specification procedures and the format of the CITY'S standard form Contract Documents for Public Works Construction.

4.0 **INDEPENDENT CONTRACTOR.** CONSULTANT'S relationship to the CITY shall be that of an independent contractor. CONSULTANT shall have no authority, express or implied, to act on behalf of the CITY as an agent, or to bind the CITY to any obligation whatsoever, unless specifically authorized in writing by the Water Utilities Director. The CONSULTANT shall not be authorized to communicate directly with, nor in any way direct the actions of, any bidder or the construction contractor for this project without the prior written authorization by the Water Utilities Director. CONSULTANT shall be sole responsible for the performance of any of its employees, agents or subcontractors under this agreement.

CONSULTANT shall report to the CITY any and all employees, agents and consultants performing work in connection with this project, and all shall be subject to the approval of the CITY.

5.0 **CITY BUSINESS LICENSE.** Prior to the commencement of any work under this agreement, the CONSULTANT shall obtain and present a copy of an Oceanside City Business License to the Water Utilities Director.

6.0 **WORKERS' COMPENSATION.** Pursuant to Labor Code section 1861, the CONSULTANT hereby certifies that the CONSULTANT is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and the CONSULTANT will comply with such provisions and provide certification of such compliance as a part of these Award Documents. The certification shall be in accordance with Subsections 7.3 through 7.8 of this Agreement.

7.0 **LIABILITY INSURANCE.**

7.1 CONSULTANT shall, throughout the duration of this Agreement, maintain comprehensive general liability and property damage insurance, or commercial general liability insurance, covering all operations of CONSULTANT, its agents and employees, performed in connection with this Agreement including, but not limited to, premises and automobile.

7.2.1 CONSULTANT shall maintain liability insurance in the following minimum limits:

Comprehensive General Liability Insurance
(bodily injury and property damage)

Combined Single Limit Per Occurrence	$ 1,000,000
General Aggregate	$ 2,000,000*

Commercial General Liability Insurance
(bodily injury and property damage)

General limit per occurrence	$ 1,000,000
General limit project specific	$ 2,000,000

Automobile Liability Insurance	$ 1,000,000

*General aggregate per year, or part thereof, with respect to losses or other acts or omissions of CONSULTANT under this Agreement.

7.2.2 If coverage is provided through a Commercial General Liability Insurance policy, a minimum of 50% of each of the aggregate limits shall remain available at all times. If over 50% of any aggregate limit has been paid or reserved, the CITY may require additional coverage to be purchases by the CONSULTANT to restore the required limits. The CONSULTANT shall also notify the CITY'S Project Manager promptly of all losses or claims over $25,000 resulting from work performed under this contract, or any loss or claim against the CONSULTANT resulting from any of the CONSULTANT'S work.

7.3 All insurance companies affording coverage to the CONSULTANT for the purposes of this Section shall add the City of Oceanside as "additional insured" under the designated insurance policy for all work performed under this Agreement. Insurance coverage provided to the CITY as an additional insured shall be primary insurance and other insurance maintained by the CITY, its officers, agents and employees shall be excess only and not contributing with insurance provided pursuant to this Section.

7.4 All insurance companies affording coverage to the CONSULTANT pursuant to this Agreement shall be insurance organizations authorized by the Insurance Commissioner of the State of California to transact business of insurance in the state or be rated as A-X or higher by A.M. Best.

7.5 All insurance companies affording coverage shall provide thirty (30) days written notice to the CITY should the policy be cancelled before the expiration date. For the purposes of this notice requirement, any material change in the policy prior to the expiration shall be considered a cancellation.

7.6 CONSULTANT shall provide evidence of compliance with the insurance requirements listed above by providing a Certificate of Insurance and applicable endorsements, in a form satisfactory to the City Attorney, concurrently with the submittal of this Agreement.

7.7 CONSULTANT shall provide a substitute Certificate of Insurance no later than thirty (30) days prior to the policy expiration date. Failure by the CONSULTANT to provide such a substitution and extend the policy expiration date shall be considered a default by CONSULTANT and may subject the CONSULTANT to a suspension or termination of work under the Agreement.

7.8 Maintenance of insurance by the CONSULTANT as specified in this Agreement shall in no way be interpreted as relieving the CONSULTANT of any responsibility whatsoever and the CONSULTANT may carry, at its own expense, such additional insurance as it deems necessary.

8.0 **PROFESSIONAL ERRORS AND OMISSIONS INSURANCE.** Throughout the duration of this agreement and four (4) years thereafter, the CONSULTANT shall maintain professional errors and omissions insurance for work performed in connection with this Agreement in the minimum amount of One Million dollars ($1,000,000).

CONSULTANT shall provide evidence of compliance with these insurance requirements by providing a Certificate of Insurance.

9.0 **CONSULTANT'S INDEMNIFICATION OF CITY.** CONSULTANT shall indemnify and hold harmless the CITY and its officers, agents and employees against all claims or lawsuits for damages to persons or property arising out of the negligent acts, errors, omissions or wrongful acts or conduct of the CONSULTANT or its employees, agents, subcontractors or others in connection with the execution of the work covered by this Agreement, except for those claims arising from the willful misconduct, sole negligence or active negligence of the CITY, its officers, agents or employees. CONSULTANT'S indemnification shall include any and all costs, expenses, expert fees, attorneys' fees and liability assessed against or incurred by the CITY, its officers, agents or employees in defending against such claims or lawsuits, whether the same proceed to judgment or not. Further, CONSULTANT, at its own expense, shall, upon written request by the CITY, defend any such suit or action brought against the CITY, its officers, agents or employees resulting or arising from the tortious acts or omissions of the CONSULTANT.

CONSULTANT'S indemnification of CITY shall not be limited by any prior or subsequent declaration by the CONSULTANT.

10.0 **ERRORS AND OMISSIONS.** In the event that the Water Utilities Director determines that the CONSULTANT'S negligence, misconduct, errors or omissions in the performance of work under this Agreement has resulted in expense to CITY greater than would have resulted if there were no such negligence, errors or omissions in the plans or contract specifications, CONSULTANT shall reimburse CITY for the additional expenses incurred by the CITY, including engineering, construction and/or restoration expense. Nothing herein is intended to limit CITY'S rights under Sections 7, 8 or 9.

11.0 **NO CONFLICT OF INTEREST.** The CONSULTANT shall not be financially interested in any other CITY contract for this project. For the limited purposes of interpreting this section, the CONSULTANT shall be deemed a "City officer or employee", and this Section shall be interpreted in accordance with Government

Code section 1090. In the event that the CONSULTANT becomes financially interested in any other CITY contract for this project, that other contract shall be void. The CONSULTANT shall indemnify and hold harmless the CITY, under Section 9 above, for any claims for damages resulting from the CONSULTANT'S violation of this Section.

12.0 **OWNERSHIP OF DOCUMENTS.** All plans and specifications, including details, computations and other documents, prepared or provided by the CONSULTANT under this Agreement shall be the property of the CITY. The CITY agrees to hold the CONSULTANT free and harmless from any claim arising from any use, other than the purpose intende3d, of the plans and specifications and all preliminary sketches, schematics, preliminary plans, architectural perspective renderings, working drawings, including details, computation and other documents, prepared or provided by the CONSULTANT. CONSULTANT may retain a copy of all material produced under this Agreement for the purpose of documenting their participation in this project.

13.0 **COMPENSATION.**

13.1 For work performed by CONSULTANT in accordance with this Agreement, CITY shall pay CONSULTANT a lump sum amount for the performance of all services detailed in Exhibit "A", attached hereto and incorporated herein by reference. No rate changes shall be made during the term of this Agreement without prior written approval of the Water Utilities Director. CONSULTANT'S compensation for all work performed in accordance with this Agreement and as outlined in the scope of work (Exhibit "A") shall not exceed the total contract price of $49,766.

No work shall be performed by CONSULTANT in excess of the total contract price without prior written approval of the Water Utilities Director. CONSULTANT shall obtain approval by the Water Utilities Director prior to performing any work which results in incidental expenses to CITY as set forth in Section 13.2.2.

13.2 CONSULTANT shall maintain accounting records including the following information:

13.2.1 Names and titles of employees or agents, types of work performed and times and dates of all work performed in connection with this Agreement which is billed on an hourly basis.

13.2.2 All incidental expenses including reproductions, computer printing, postage, mileage and subsistence.

13.3 CONSULTANT'S accounting records shall be made available to the Water Utilities Director for verification of billings, within a reasonable time of the Water Utilities Director's request for inspection.

13.4 CONSULTANT shall submit monthly invoices to CITY. CITY shall make partial payments to CONSULTANT not to exceed the total contract price within thirty (30) days of receipt of invoice, subject to the approval of the Water Utilities Director.

14.0 **TERMINATION OF AGREEMENT.** Either party may terminate this Agreement by providing thirty (30) days written notice to the other party.

If any portion of the work is terminated or abandoned by the CITY, then the CITY shall pay CONSULTANT for any work completed up to and including the date of termination or abandonment of this Agreement, in accordance with Section 13. The CITY shall be required to compensate CONSULTANT only for work performed in accordance with the Agreement up to and including the date of termination.

15.0 **ASSIGNMENT AND DELEGATION.** This Agreement and any portion thereof shall not be assigned or transferred, nor shall any of the CONSULTANT'S duties be delegated, without the express written consent of the CITY. Any attempt to assign or delegate this Agreement without the express written consent of the CITY shall be void and of no force or effect. A consent by the CITY to one assignment shall not be deemed to be a consent to any subsequent assignment.

This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

16.0 **ENTIRE AGREEMENT.** This Agreement comprises the entire integrated understanding between CITY and CONSULTANT concerning the work to be performed for this project and supersedes all prior negotiations, representations or agreements.

17.0 **INTERPRETATION OF THE AGREEMENT.** The interpretation, validity and enforcement of the Agreement shall be governed by and construed under the laws of the State of California. The Agreement does not limit any other rights or remedies available to CITY.

The CONSULTANT shall be responsible for complying with all local, state and federal laws whether or not said laws are expressly stated or referred to herein.

Should any provision herein be found or deemed to be invalid, the Agreement shall be construed as not containing such provision and all other provisions, which are otherwise lawful, shall remain in full force and effect, and to this end the provisions of this Agreement are severable.

18.0 **AGREEMENT MODIFICATION.** This Agreement may not be modified orally or in any manner other than by an Agreement in writing, signed by the parties hereto.

19.0 **DISPUTE RESOLUTION.**

a. Any controversy or claim arising out of or relating to this Agreement, or concerning the breach or interpretation thereof, shall be first submitted to mediation, the cost of which shall be borne equally by the parties.

b. No suit shall be brought on this contract unless all statutory claims filing requirements have been met.

20. **NOTICES.** All notices, demands, requests, consents or other communications which this Agreement contemplates or authorizes, or requires or permits either party to give to the other, shall be in writing and shall be personally delivered or mailed to the respective party as follows:

TO CITY:	TO CONSULTANT:
City of Oceanside Water Utilities Director 300 North Coast Highway Oceanside, CA 92054	Weston Solutions, Inc. 2433 Impala Drive Carlsbad, CA 92010

Either party may change its address by notice to the other party as provided herein.

Communications shall be deemed to have been given and received on the first to occur:

a. Actual receipt at the offices of the party to whom the communication is to be sent, as designated above, or

State of Pennsylvania:

County of Chester:

On this, the 30th day of March 2011, before me Michelle Walker, the undersigned officers, personally appeared Vincent A. Laino, Jr., Senior Vice President, CFO & CIO and Stephen N. Freed, Assistant Secretary, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged that Vincent A. Laino, Jr. and Stephen N. Freed executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Michelle Walker

Notary Public

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Michelle Walker, Notary Public
West Whiteland Twp., Chester County
My Commission Expires April 17, 2012
Member, Pennsylvania Association of Notaries

b. Three (3) working days following the deposit in the United States mail of registered or certified mail, postage prepaid, return receipt requested, addressed to the offices of the party to whom the communication is to be sent, as designated above.

21.0 **SIGNATURES.** The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity and authority to enter into and to execute this Agreement on behalf of the respective legal entities of the CONSULTANT and the CITY.

IN WITNESS WHEREOF the parties hereto for themselves, their heirs, executors, administrators, successors and assigns do hereby agree to the full performance of the covenants herein contained and have caused this Professional Services Agreement to be executed by setting hereunto their signatures on the dates indicated below:

WESTON SOLUTIONS, INC.

By: _____

Name/Title Corporation
Vincent A. Laino, Jr.
Sr. Vice President, CFO & CIO

Date: March 30, 2011

By: _____

Name/Title
Stephen N. Freed, Assistant Secretary

Date: 3/30/11

23-1501990
Employer ID No.

CITY OF OCEANSIDE

By: _____
Peter A. Weiss, City Manager

Date: 5-18-11

APPROVED AS TO FORM:

_____
City Attorney

NOTARY ACKNOWLEDGMENTS OF CONSULTANT MUST BE ATTACHED.

Exhibit A

WESTON SOLUTIONS, INC.
2433 Impala Drive
Carlsbad, CA 92010
(760) 795-6900 / (760) 931-1580 FAX
www.westonsolutions.com

March 17, 2011

Mr. Jason Dafforn
Water Utilities Department
300 North Coast Highway
Oceanside, CA 92054

Subject: Scope of Work and Cost Estimates for Monitoring and Analysis Support in Response to San Diego Regional Water Quality Control Board Investigative Order No. R9-2011-0035 (Buena Vista Creek and Lagoon)

Dear Mr. Dafforn:

Weston Solutions, Inc. (Weston) is pleased to provide this Scope of Work (Scope) and Cost Proposal to provide monitoring and analysis support in response to San Diego Regional Water Quality Control Board (Regional Board) Investigative Order No. R9-2011-0035 (Order). The Order is attached for reference purposes (attachment 1). Based on our conversation on 3/16/11, we are providing this scope and estimate to respond to items #17 and #18 of the Order in response to the sewer line break which occurred just upstream of North Haymar Drive on Buena Vista Creek in the City of Oceanside (City). The scope is based on our best professional opinion of the efforts needed to satisfy the Regional Board's requests within the time frame provided. We recommend addressing the requirements in two phases. Phase I is to satisfy the immediate short and long-term requirements by the April 11, 2011 submittal date. Phase II provisions are provided to satisfy the long-term requirements while providing a plan to respond to the Regional Board by showing good faith effort. Phase II efforts will be assessed based on the results from the Phase I effort.

Weston provides added value to the City of Oceanside (City) in that we are currently performing monitoring for the Regional Copermittee Monitoring Program, which the City is contributing to) and have collected data prior to and after the spill occurred which will provide valuable baseline and short and long-term benefits for assessing any impacts that might be related to the spill. Additionally, the long-term Phase II efforts (if deemed necessary by Phase I results) will benefit from the planned dry weather sampling for the Copermittees scheduled in May and June 2011 at the Buena Vista TWAS-1 location. The Phase II Scope will be provided as a subsequent document to this scope in the near future.

The following tasks that correspond to addressing items #17 and #18 of the Order are proposed:

Task 1	**Water Quality Sampling of Sewer Influent Upstream of Spill Location** (Addresses item #17)
Task 2	**Water Quality Sampling and Analysis** (Addresses item #18 assessment of short and long-term ecological impacts)
Task 3	**Sediment Sampling and Analysis** (Addresses item #18 assessment of short and long-term ecological impacts)
Task 4	**Bioassessment Survey** (Addresses item #18 assessment of short and long-term ecological impacts).
Task 5	**Fish Tissue Analysis** (Addresses item #18 assessment of public health impacts).
Task 6	**Biological Vegetation and Wildlife Survey** (Addresses item #18 Sensitive and Endangered Species Assessment).
Task 7	**Draft and Final Monitoring and Assessment Report**
Task 8	**Project Management and As-Needed Technical Support**

The scope, approach, deliverables and estimated effort for each of the listed tasks are presented as follows. An overall cost summary and schedule are presented following the task specific descriptions.

Task 1. Water Quality Sampling of Sewer Influent Upstream of Spill Location (Addresses item #17)

"Characterize the quality of the influent to the San Luis Rey WWTP for the following chemical constituents: Total Nitrogen, Total Dissolved Solids (TDS), chloride, sulfate, iron, manganese, biochemical oxygen demand (BOD), and methylene blue active substances (MBAS)."

To address the requirements of the item #17 of the Order as listed above, Weston will collect one 1-hour composite of the influent (@10 minute interval pacing) and one instantaneous grab sample. The sample will be collected at a location upstream of the spill location for the purposes of being representative of the discharge at the location of interest. Based on our conversation, the City will collect the sample at the San Luis Rey WWTP. The purpose would be to assess hourly and instantaneous variability. A field blank and duplicate sample will be collected for quality assurance/quality control (QA/QC) purposes. Weston assumes that access to the sampling location will be provided by the City of Oceanside Wastewater Department Staff.

a. Samples would be collected by an autosampler.

b. Field logs will be completed for the sample event.

c. Samples collected under strict chain-of-custody procedures.

d. Samples would be analyzed with a 3 day turnaround time to have time for data QC, data verification, tabulation, and report summarization to meet the deliverable deadline.

e. Samples will be analyzed by a laboratory certified by the California Department of Public Health, Environmental Laboratory Accreditation Program (ELAP).

f. Samples will be analyzed using accredited/certified methods per 40CFR136.

Deliverable: Weston will provide summary analytical tables and the certified analytical laboratory report.

Estimated Cost: $3,255

Tasks 2 through 7

Options to Satisfy Item #18: "***An assessment of the potential short and long term impacts of the discharge on public health, animal and plant communities (including sensitive and/or endangered species), and on the overall ecosystem downstream of the discharge. The assessment must include:***

a. A summary of all threatened and endangered species located downstream of the spill site within or adjacent to Buena Vista Creek, Buena Vista Lagoon, and the Pacific Ocean.

b. A description of all observations and sampling activities, conducted by or on behalf of the City, associated with potential short-term and long-term impacts to human health, vegetation, and wildlife from the spill and an evaluation of these impacts.

Task 2: Water Quality Sampling and Analysis (Addresses item #18 assessment of short and long-term ecological impacts)

Weston proposes to assess the short and long-term impacts through sampling, analysis, and comparison of recently collected historical data. The goals will be to assess upstream of spill site, downstream of spill site, and the lagoon for comparison purposes.

- Water Quality (WQ) Sampling:
  - Continuous Monitoring Meters - Weston will install continuous logging water quality meters (Sondes) in 3 locations (upstream, downstream, and in lagoon). WQ sondes will be installed for a 1-week period to assess the immediate upstream (within 1000 m), immediate downstream (within 1000 m), and central portion of the eastern lagoon. Logging will be

performed at 15 minute intervals for pH, conductivity, temperature, turbidity, and dissolved oxygen. The goal of this monitoring is to show that dissolved oxygen criteria are supportive of beneficial uses (fish habitat). The data will be compared to recently collected continuous monitoring data from the Lagoon Investigation Order in 2007-2008 (R9-2006-076). This assessment has been completed and is readily available for comparison to the proposed newly collected data.

Estimated Cost: $4,386

- Load Comparison – Weston will compare flow data from continual monitoring data from the Buena Vista Temporary Watershed Assessment Station (TWAS) that is currently in place for the Regional Monitoring Program (Order R9-2007-0001). There was also a wet weather sampling event on 2/16/11 that can be used to compare to the data collected for assessing the near term impacts. Load analysis can be conducted to assess the contribution and dilution effects from the storm. Storm event criteria will also be provided (it is currently estimated that this was a 100-year return storm).

Estimated Cost: $2,215

- Chemistry analyses – 1 time sampling upstream, downstream, and lagoon samples will be collected and analyzed for comparison to item #17. Samples will be analyzed for the suite of constituents listed in Table 1 and additional minimum parameters needed to assess biological health. Samples will be collected as grab samples as the ambient flows in Buena Vista Creek currently indicate low variability in flow rates and there would be no need to assume variable flows would bias the data at this time. Toxicity testing was not deemed necessary at this time based on sample results from the February 14, 2011 storm event monitoring at the BVC-TWAS-1 location. No toxicity was observed to the water flea *Ceriodaphnia dubia* or the freshwater algae *Selenastrum capricornutum*. However, toxicity was observed to the freshwater amphipod *Hyalella azteca* which was likely attributable to Synthetic pyrethroids from urban runoff which is a known statewide issue (Weston Solutions, 2010).

Estimated Cost: $2,712

Estimated Task Cost: $9,312

Task 3. Sediment Sampling and Archive for Potential Phase II Analyses (Addresses item #18 assessment of short and long-term ecological impacts)

- Sediment Sampling and Analysis – Weston will collect creek bed surface sediment samples (top 2 cm) upstream, downstream, and in the eastern portion of the lagoon. Data will be collected with a Ponar or Eckman type grab sampler in the lagoon and other relevant sampling devices in the creek as applicable. Samples in the creek will be collected from three transects of five equidistant samples perpendicular to the creek bank and then composited into one representative sample per location. Samples will be processed and fixed with preservative and archived for future analysis under Phase II if deemed necessary. Samples will also be stored frozen for sediment chemistry in the event that further analysis is deemed necessary under Phase II for the analytes listed in Table 2. Bioassessment Surveys in Task 4 will satisfy the biological evaluation of the creek sites. Data will be compared to bioassessment survey data from the 2007-2008 Copermittee Monitoring Season. Benthic infaunal analysis may be conducted for the lagoon samples under Phase II if deemed necessary.
    a. Total of 3 sediment samples, including duplicate, and one field blank.

Estimated Cost: $1,825

Task 4. Bioassessment Survey (Addresses item #18 assessment of short and long-term ecological impacts).

- Stream bioassessment will be conducted at two sites using the Surface Water Ambient Monitoring Protocol (SWAMP) (Ode, 2007). One site will be located upstream of the point source of the discharge and one site will be located downstream of the discharge. The upper of the downstream sites will be located in the immediate vicinity of the discharge (within ~1000 m) and the lower downstream site will be located near the BVC-TWAS-1 station at El Camino Real. Every effort will be made to locate the sites in similar habitat conditions to eliminate variability due to non-water quality based influences.

  The bioassessment survey will include the collection and identification of stream benthic macroinvertebrates (BMI). Algae samples will be collected and fixed (preserved) for future analysis under Phase II if deemed necessary. Weston will assess the quality and condition of the in-stream physical habitats and adjacent riparian zones using the California Rapid Assessment Method (CRAM). Using species-specific tolerance values (TVs) and community composition, numerical biometric indices will be calculated that will determine the ecological health of the stream above and below the discharge point. The primary tools for assessing stream health will be the Southern California Index of Biotic Integrity (IBI) (Ode et al, 2005) for the BMI.

BMI reside in streams for periods ranging from one month to several years and have varying sensitivities to physical, biological, and chemical disturbances in the stream. By assessing the BMI community structure of a stream, a realistic, long-term measure of stream habitat health and ecological response is obtained. This methodology has been used extensively in San Diego County to assess biological integrity, including Buena Vista Creek, which will enable the use of historical data to establish a baseline for this current impact analysis.

Estimated Task Cost: $ 4,916

Task 5. Fish Tissue Analysis (Addresses item #18 assessment of public health impacts).

Because Buena Vista Lagoon supports recreational fishing, Weston proposes to collect and analyze tissue filets that would be representative of potential species consumed from Buena Vista Lagoon. Sampling will follow similar protocols as listed in the requirements of the Waste Discharge Requirements for Padre Dam Municipal Water District (R9-2009-0037). Weston will collect 6 fish of edible size (or as achievable) from three different species (Large Mouth Bass, Bluegill, and Catfish proposed). Fish tissue analysis will be performed by a California Certified Analytical Laboratory (ELAP) for the analytes listed in Table 3. This data will provide baseline information and can be compared to similar species caught from Padre Dam.

Estimated Task Cost: $6,210

Task 6. Biological Vegetation and Wildlife Survey (Addresses item #18 Sensitive and Endangered Species Assessment). To be performed by ~~Dudek and Associates.~~ per Marquez & Associates

A biological Vegetation and Wildlife Survey will be performed by a qualified subcontractor that specializes in threatened and endangered species surveys. To be provided are:

- Biological Review and Reconnaissance Survey
- Biological Letter Report

Estimated Task Cost: $17,089

Task 7. Draft Monitoring and Assessment Report

Weston will prepare a draft monitoring and assessment report. The draft report will be provided to the City of Oceanside by April 5, 2011. Weston will provide three hardcopies

and an electronic deliverable of the draft report. The report will consist of methods, results, data tables, figures, and limited summary data interpretations. Final report will be provided assuming minimal revisions are needed. Any additional effort will be conducted as part of Phase II or on an as-needed basis.

Estimated Task Cost: $4,540

Task 8. Project Management and As-Needed Technical Support

This task involves oversight for planning and implementing the project, as well as coordinating with The City of Oceanside and subcontractors to ensure that project goals, budgets, and schedules are met. Weston's management team will perform the following tasks:

- Administration and daily management of the contract for this project
- Coordination and communication with the City of Oceanside
- Attendance at Relevant Meetings
- Coordination and communication with subcontracting laboratories
- Kick-off Meeting with Weston staff

Weston will also provide as-needed technical support as directed by the City of Oceanside Manager at the labor rates provided (Table 4).

Estimated Task Cost: $2,619

Project Budget Summary

TASK	TASK DESCRIPTION	ESTIMATED COST
Task 1	**Water Quality Sampling of Sewer Influent Upstream of Spill Location** (Addresses item #17)	$3,255
Task 2	**Water Quality Sampling and Analysis** (Addresses item #18 assessment of short and long-term ecological impacts)	$9,312
Task 3	**Sediment Sampling and Archive for Potential Phase II Analyses** (Addresses item #18 assessment of short and long-term ecological impacts)	$1,825
Task 4	**Bioassessment Survey** (Addresses item #18 assessment of short and long-term ecological impacts).	$4,916
Task 5	**Fish Tissue Analysis** (Addresses item #18 assessment of public health impacts).	$6,210
Task 6	**Biological Vegetation and Wildlife Survey** (Addresses item #18 Sensitive and Endangered Species Assessment).	$17,089
Task 7	**Draft and Final Monitoring and Assessment Report**	$4,540
Task 8	**Project Management and As-Needed Technical Support**	$2,619
Total Project Base Cost Estimate – Lump Sum (Not To Exceed)		**$49,766**

If additional work is requested, the work will be performed on an as-needed basis on a time and materials basis, to be performed based on the rates provided in Table 4.

Schedule

TASK	Estimated Date
Project Set-up and Sampling	From Notice to Proceed through March 30, 2011
Data Analysis and Reporting	March 28-April 1, 2011
Draft and Final Report Delivery to Client	April 5, 2011
As-Needed Support	TBD

Weston will be able to mobilize immediately upon receiving a written notice proceed. Weston will make all efforts to meet the existing deadlines of the project schedule. However, some task elements may be subject to delays based on weather conditions that may result in confounding conditions for data analysis. Weston will provide immediate communication to the City of Oceanside in the event of any unforeseen conditions. As previously mentioned above, a Phase II Scope of Work will be provided as options to satisfy long-term impacts if deemed necessary.

Should you require any further information, please do not hesitate to call me at 760-795-6903 or via email at dave.renfrew@westonsolutions.com.

Sincerely,

David S. Renfrew, REA-I, CPSWQ
Project Manager
Weston Solutions, Inc.

Cc: Project File
Attachments (Analytical Tables)
Table 1. Water Quality Chemistry List
Table 2. Sediment Quality Chemistry List
Table 3. Fish Tissue Analyte List
Table 4. Labor Rates

Table 1

Method	Analyte	MDL	MRL	Units
Total Metals by EPA 6000/7000 Series Methods in Wastewater				
EPA 7470	Mercury	0.0000780	0.000100	mg/l
Total Metals by EPA 200 Series Methods in Wastewater				
EPA 200.7	Copper	0.00900	0.0500	mg/l
EPA 200.7	Iron	0.0500	0.100	mg/l
EPA 200.7	Lead	0.00800	0.0500	mg/l
EPA 200.7	Manganese	0.0300	0.0300	mg/l
EPA 200.7	Nickel	0.00400	0.0500	mg/l
EPA 200.7	Silver	0.0100	0.100	mg/l
EPA 200.7	Zinc	0.00400	0.0500	mg/l
Conventional Chemistry Parameters by Standard/EPA Methods in Wastewater				
Calculation	Total Nitrogen	0.500	0.500	mg/l
EPA 410.4	Chemical Oxygen Demand	25.0	25.0	mg/l
SM2540 C	Total Dissolved Solids	1.00	20.0	mg/l
SM4500 Cl C	Chloride	0.0500	0.0500	mg/l
SM4500 N C	Total Kjeldahl Nitrogen	0.299	0.500	mg/l
SM4500 NO3 E	Nitrate/Nitrite as N	0.00900	0.0500	mg/l
SM4500 P B, E	Phosphorus, Total	0.0200	0.0500	mg/l
SM4500 SO4 E	Sulfate as SO4	7.50	10.0	mg/l
SM5210 B	Biochemical Oxygen Demand	2.00	2.00	mg/l
SM5310B	Total Organic Carbon	0.404	1.00	mg/l
SM5540 C	Methylene Blue Active Substances	0.100	0.500	mg/l
Synthetic Pyrethroids				
GC/MS NCI Mode	Synthetic pyrethroids		2	ng/L
Bacteriological				
SM 9221B	Total coliforms		*	MPN/100mL
SM9221E	Fecal coliforms		*	MPN/100mL
SM 9230	Enterococci		*	MPN/100mL
Toxicity				
96-hr acute and seven-day chronic and reproductive test with the cladoceran *C. dubia.*				
Chronic test with the freshwater algae *S. capricornutum*.				
96-hr acute survival test with the amphipod *H. azteca*.				

*To six dilutions; results will be reported as a number not as a greater than value.

Table 2

Parameter	Method	Procedure	Method Detection Limit (dry weight)	Reporting Limit (dry weight)
Physical / Conventional Tests				
Ammonia	SM 4500-NH3F	ICP/MS	0.03 mg/wet kg	0.03 mg/wet kg
Dissolved Sulfides	Plumb (1981)	Titrametric	0.2 mg/kg	0.4 mg/kg
Grain Size	Plumb (1981)	Sieve/Pipette	1.00%	1.00%
Percent Solids	USEPA 160.3	Gravimetric	0.10%	0.10%
Total Organic Carbon	USEPA 9060A	Combustion IR	0.01%	0.02%
Total Nitrogen	SM 4500-N	Colorimetric	2 mg/kg	4 mg/kg
Total Phosphorus	SM 4500-P E	Colorimetric	0.016 mg/kg	0.05 mg/kg
Total Sulfides	Plumb (1981)	Titrametric	0.2 mg/kg	0.4 mg/kg
Metals				
Aluminum (Al)	USEPA 6020m	ICP/MS	1 µg/g	5 µg/g
Antimony (Sb)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Arsenic (As)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Barium (Ba)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Beryllium (Be)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Cadmium (Cd)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Chromium (Cr)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Copper (Cu)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Iron (Fe)	USEPA 6020m	ICP/MS	1 µg/g	5 µg/g
Lead (Pb)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Mercury (Hg)	USEPA 245.7m	CVAFS	0.01 µg/g	0.02 µg/g
Nickel (Ni)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Selenium	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Silver	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Zinc (Zn)	USEPA 6020m	ICP/MS	0.025 µg/g	0.05 µg/g
Synthetic Pyrethroids				
Allethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Bifenthrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Cyfluthrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Cypermethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Danitol (Fenpropathrin)	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Deltamethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Esfenvalerate	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Fenvalerate	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
L-Cyhalothrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Permethrin	USEPA 8270CmNCI	GC/MS-NCI	5 ng/g	25 ng/g
Prallethrin	USEPA 8270CmNCI	GC/MS-NCI	0.5 ng/g	2 ng/g
Organochlorine Pesticides				
2,4′-DDD	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2,4′-DDE	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2,4′-DDT	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
4,4′-DDD	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
4,4′-DDE	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g

Table 2

4,4'-DDT	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Aldrin	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-alpha	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-beta	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-delta	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
BHC-gamma	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Chlordane-alpha	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Chlordane-gamma	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
cis-Nonachlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
DCPA (Dacthal)	USEPA 8270Cm	GC/MS SIM	5 ng/g	10 ng/g
Dicofol	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Dieldrin	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endosulfan I	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endosulfan II	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endosulfan Sulfate	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endrin	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endrin Aldehyde	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Endrin Ketone	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Heptachlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Heptachlor Epoxide	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Methoxychlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Mirex	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Oxychlordane	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Perthane	USEPA 8270Cm	GC/MS SIM	5 ng/g	10 ng/g
Toxaphene	USEPA 8270Cm	GC/MS SIM	10 ng/g	50 ng/g
trans-Nonachlor	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
PCBs				
PCB Congeners	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
PAHs				
1-Methylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
1-Methylphenanthrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
1,6,7-Trimethylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2,6-Dimethylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
2-Methylnaphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Acenaphthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Acenaphthylene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Anthracene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(a)anthracene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(a)pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(b)fluoranthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(e)pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(g,h,i)perylene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Benzo(k)fluoranthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Biphenyl	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Chrysene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Dibenzo(a,h)anthracene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g

Table 2

Fluoranthene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Fluorene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Indeno(1,2,3-cd)pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Naphthalene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Perylene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Phenanthrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g
Pyrene	USEPA 8270Cm	GC/MS SIM	1 ng/g	5 ng/g

Table 2

ALL SAMPLES ARCHIVED and STORED FROZEN
TO BE ANANLYZED UNDER PHASE II

Table 3

Method	Analyte	MDL	MRL	Units
Total Metals by EPA 6000/7000 Series Methods				
In Tissue				
EPA 6020	Arsenic	0.100	0.100	mg/kg
EPA 6020	Cadmium	0.100	0.100	mg/kg
EPA 6020	Chromium	0.100	0.100	mg/kg
EPA 6020	Copper	0.500	0.500	mg/kg
EPA 6020	Lead	0.100	0.100	mg/kg
EPA 6020	Nickel	0.100	0.100	mg/kg
EPA 6020	Selenium	0.100	0.100	mg/kg
EPA 6020	Silver	0.100	0.100	mg/kg
EPA 6020	Zinc	1.00	1.00	mg/kg
EPA 7471	Mercury	0.00500	0.0250	mg/kg
Organochlorine Pesticides (Specialized Compounds) by EPA 8081A				
In Tissue				
EPA 8081	Aldrin	0.990	2.00	ug/kg
EPA 8081	alpha-BHC	2.00	2.00	ug/kg
EPA 8081	beta-BHC	1.48	2.00	ug/kg
EPA 8081	gamma-BHC (Lindane)	1.48	2.00	ug/kg
EPA 8081	delta-BHC	1.48	2.00	ug/kg
EPA 8081	alpha-Chlordane	4.70	5.00	ug/kg
EPA 8081	gamma-Chlordane	4.70	5.00	ug/kg
EPA 8081	Chlordane (Total)	4.70	5.00	ug/kg
EPA 8081	2,4'-DDD	1.21	2.00	ug/kg
EPA 8081	4,4'-DDD	1.21	2.00	ug/kg
EPA 8081	2,4'-DDE	1.10	2.00	ug/kg
EPA 8081	4,4'-DDE	1.10	2.00	ug/kg
EPA 8081	2,4'-DDT	1.00	2.00	ug/kg
EPA 8081	4,4'-DDMU	1.00	2.00	ug/kg
EPA 8081	4,4'-DDT	1.00	2.00	ug/kg
EPA 8081	Dacthal	1.00	2.00	ug/kg
EPA 8081	Total DDT	1.00	2.00	ug/kg
EPA 8081	Dieldrin	1.30	2.00	ug/kg
EPA 8081	o,p'-Dicofol	1.00	2.00	ug/kg
EPA 8081	Endosulfan I	1.60	2.00	ug/kg
EPA 8081	Endosulfan II	1.60	2.00	ug/kg
EPA 8081	Endosulfan sulfate	1.40	2.00	ug/kg
EPA 8081	Endrin	1.49	2.00	ug/kg
EPA 8081	Endrin aldehyde	1.60	2.00	ug/kg
EPA 8081	Endrin ketone	2.00	2.00	ug/kg
EPA 8081	Heptachlor	1.70	2.00	ug/kg
EPA 8081	Heptachlor epoxide	1.70	2.00	ug/kg
EPA 8081	Methoxychlor	1.49	2.00	ug/kg
EPA 8081	Oxadiazon	1.00	2.00	ug/kg
EPA 8081	Toxaphene	8.82	20.0	ug/kg
EPA 8081	TCMX	0.00	0.00	Surrogate

Table 3

Organochlorine Pesticides by EPA Method 8081B				
In Tissue				
EPA 8081	Aldrin	0.510	2.00	ug/kg
EPA 8081	alpha-BHC	0.270	2.00	ug/kg
EPA 8081	beta-BHC	0.430	2.00	ug/kg
EPA 8081	gamma-BHC (Lindane)	0.350	2.00	ug/kg
EPA 8081	delta-BHC	0.410	2.00	ug/kg
EPA 8081	alpha-Chlordane	0.470	5.00	ug/kg
EPA 8081	gamma-Chlordane	0.510	5.00	ug/kg
EPA 8081	Chlordane (Total)	4.70	5.00	ug/kg
EPA 8081	2,4´-DDD	1.21	2.00	ug/kg
EPA 8081	4,4´-DDD	0.490	2.00	ug/kg
EPA 8081	2,4´-DDE	1.10	2.00	ug/kg
EPA 8081	4,4´-DDE	0.470	2.00	ug/kg
EPA 8081	2,4´-DDT	1.00	2.00	ug/kg
EPA 8081	4,4´-DDT	0.320	2.00	ug/kg
EPA 8081	Total DDT	1.00	2.00	ug/kg
EPA 8081	Dieldrin	0.470	2.00	ug/kg
EPA 8081	Endosulfan I	0.420	2.00	ug/kg
EPA 8081	Endosulfan II	0.760	2.00	ug/kg
EPA 8081	Endosulfan sulfate	0.480	2.00	ug/kg
EPA 8081	Endrin	0.490	2.00	ug/kg
EPA 8081	Endrin aldehyde	0.300	2.00	ug/kg
EPA 8081	Endrin ketone	0.800	2.00	ug/kg
EPA 8081	Heptachlor	0.710	2.00	ug/kg
EPA 8081	Heptachlor epoxide	0.700	2.00	ug/kg
EPA 8081	Methoxychlor	0.740	2.00	ug/kg
EPA 8081	Toxaphene	8.80	20.0	ug/kg
EPA 8081	TCMX	0.00	0.00	Surrogate
Polychlorinated Biphenyls by EPA Method 8082				
In Tissue				
EPA 8082	Aroclor 1016	14.9	20.0	ug/kg
EPA 8082	Aroclor 1221	14.9	20.0	ug/kg
EPA 8082	Aroclor 1232	14.9	20.0	ug/kg
EPA 8082	Aroclor 1242	14.9	20.0	ug/kg
EPA 8082	Aroclor 1248	14.9	20.0	ug/kg
EPA 8082	Aroclor 1254	14.9	20.0	ug/kg
EPA 8082	Aroclor 1260	14.9	20.0	ug/kg
EPA 8082	TCMX	0.00	0.00	Surrogate
Organophosphorus Pesticides by EPA Method 8141A				
In Tissue				
EPA 8141	Bolstar	1.00	2.00	ug/kg
EPA 8141	Chlorpyrifos	1.00	2.00	ug/kg
EPA 8141	Diazinon	1.00	2.00	ug/kg
EPA 8141	Ethion	1.00	2.00	ug/kg
EPA 8141	Ethoprop	1.00	2.00	ug/kg

Table 3

EPA 8141	Mevinphos	1.00	2.00	ug/kg
EPA 8141	Methyl parathion	1.00	2.00	ug/kg
EPA 8141	Phorate	1.00	2.00	ug/kg
EPA 8141	Ronnel	1.00	2.00	ug/kg
EPA 8141	Trichlorinate	1.00	2.00	ug/kg
EPA 8141	Triphenyl phosphate	1.00	1.00	Surrogate
EPA 8141	Tribuytlphosphate	1.00	1.00	Surrogate
Conventional Chemistry Parameters by Standard/EPA Methods				
In Sediment				
SM4500 P E	Orthophosphate as P	0.500	0.500	mg/kg
Conventional Chemistry Parameters by Standard/EPA Methods				
In Tissue				
SM2540 G	% Solids	0.100	0.100	%
SM4500 P B, E	Phosphorus, Total	2.00	2.00	mg/kg

Weston Solutions, Inc.

Table 4

Category	Bill Rate
Project Principal	200.00
Project Manager, Senior	165.00
Project Manager	155.00
Engineer, Senior	200.00
Engineer	150.00
Engineer, Associate	115.00
Engineer, Junior	90.00
Scientist, Senior	140.00
Geologist, Senior	135.00
Geologist	130.00
Scientist 3	120.00
Scientist 2	100.00
Scientist 1	92.00
GIS Specialist	140.00
GIS Analyst	75.00
Environmental Analyst	84.00
Technician, Senior	75.00
Technician, Field / Laboratory	65.00
Assistant Laboratory Technician	52.00
Project Controls	75.00
W/P & Graphics	75.00
Administration	65.00

Yellow highlighted categories are most common for this project. However, specialty categroies may be used as needed and as approved by the City.