# Master City of San José Consultant Agreement Approved Service Order (Non-Capital Projects)

### **Cover Page**

1a.	Intentionally Omitted		1b.	AC Contract No.:	32014 (GI	LES OC-000370)
2.	Approved Service Order No. 4					
3.	Consultant's Name: Golder Associate	s, Inc.				
4.	Project Name: Nine Par Groundwater	Monitoring ("Pro	ject")			
5.	Project Location: Former Nine Par lan	ndfill in RWF buff	erlands			
6.	The Consultant and the City will imple Agreement, this cover page and Attacl (Compensation Table), which are inco	hments "A" (Tasl	ks), "B"	Terms and Conditi		
7.	Budget/Fiscal:					
	a. Current unencumbered amount in	Master Agreeme	ent:		\$	805,400
	b. Maximum Service Order Compen	sation for this	Approv	ed Service Order:	\$	41,999
	c. New unencumbered balance in Mas	ster Agreement (	(7.a – 7.	b):	\$	763,401
	d. <b>Appropriation Certification</b> : I cert Service Order Compensation is ava encumbered to pay for this Approve	ailable in the follo ed Service Order	wing fu	nd(s) and that such		vill be
	Authorized Signature: Karen Evans (10/1/, Email: karen.evan	Evans			Date:	
8.	Mathew	Athew Chacka Chacko (9/29/2021) athew.chacko@sanjoseca.(	gov		Date:	
9.		nson@golder.com (9/29/2021) is_johnson@golder.com			Date:	
10.	Approval as to Form (City Attorney)	:				
	Service Order Form Approved by  (Maximum Service Order Compensation i  Approved as to Form:  (Sr.)		and the pr	•	order form ar Date:	
11.	City Director Approval: Napp Fu	app Fukuda kuda (10/1/2021) app,fukuda@sanjoseca.gov	,		Date:	

**Page:** 1 of 1

Service Order No.: 4

### **Attachment A: Tasks**

The Consultant shall provide the services and deliverables set forth in this **Attachment A**. The Consultant shall provide all services and deliverables required by this **Attachment A** to the satisfaction of the City's contract manager.

General Description of Project for which Consultant will Provide Services: The City owns the former 9Par landfill across from the Regional Wastewater Facility. Although the City purchased the property in the 1960s, the landfill was never formally closed by the State. In 2011, the City entered into a lease with Zero Waste Energy Development ("ZWED") for their construction of an anaerobic digester facility to convert organic waste into compost while generating energy on the former landfill. As part of the lease agreement, ZWED performed various closure investigations of the former landfill from 2011 thru 2013. During the groundwater investigation, high levels of volatile organic compounds, including trichloroethylene ("TCE") (up to 21,000 parts per billion) were discovered in the groundwater in the northwest portion of the former landfill, in a location not occupied by ZWED.

Most recently under a previous service order, the Consultant has performed groundwater monitoring and evaluated the monitoring data in comparison to the criteria in the California Regional Water Quality Control Board's Assessment Tool for Closure of Low-Threat Chlorinated Solvent Sites, Draft Final – July 31, 2009 (Low Threat Closure Document). One of the criteria for closure in the Low Threat Closure Document is that the plume concentrations exhibit decreasing trends over time and the plume is not moving or expanding. Recent monitoring has shown that the concentrations of chlorinated solvents in monitoring well EMW-C have not exhibited a stable or declining trend. In addition, since monitoring well EMW-D was added to the monitoring network, the groundwater gradient has been inconsistent.

Due to the instability of the chlorinated solvent concentrations and fluctuating groundwater gradient, Consultant recommends continuing a modified groundwater monitoring program and conducting a hydrogeologic evaluation and then re-evaluating low threat closure.

The proposed scope of work for the groundwater investigation includes two quarterly rounds of groundwater sampling and analysis and report writing. In addition, a Work Plan detailing next steps in the investigation will be completed. Consultant will perform groundwater monitoring during the next four quarters beginning in third quarter 2021 and ending in second quarter 2022. The hydrogeologic evaluation will include deploying groundwater-elevation sensors with data storage into three groundwater monitoring wells and one sensor in the nearby Artesian Slough.

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment A: Tasks

Form/File No.: 1349220/T-32026

Service Order No.: 4

### Task No. 1: Field Activities - Groundwater Sampling

A. <u>Services</u>: Groundwater monitoring wells MW-1 through MW-3 and EMW-A through EMW-C are monitored semiannually by an adjacent property owner (second and fourth quarter). Consultant will monitor well MW-1, EMW-C, and EMW-D on a quarterly basis, therefore, this service order includes monitoring EMW-D quarterly and monitoring MW-1 and EMW-C semiannually alternating with the schedule of the adjacent property owner. Therefore, in the third quarter 2021, Consultant will monitor MW-1, EMW-C, and EMW-D. The monitoring schedule is listed in the following table.

Quarter	Wells Monitored Under this Service Order	Wells Monitored by Adjacent Property Owner
3Q2021	MW-1, EMW-C, EMW-D	None
4Q2021	EMW-D	MW-1, MW-2, MW-3, EMW-A, EMW-B, EMW-C
1Q2022	MW-1, EMW-C, EMW-D	None
2Q2022	EMW-D	MW-1, MW-2, MW-3, EMW-A, EMW-B, EMW-C

Consultant will perform the groundwater monitoring by measuring depths to groundwater and collecting groundwater samples using methodologies consistent with previous events performed by Consultant. The Consultant's technician will place the samples in a cooler with ice for transport via courier to BC Laboratories of Bakersfield, California (BC). BC Laboratories is a California state-certified analytical laboratory (CA ELAP Certificate Number 1186). BC will analyze the samples for volatile organic compounds (VOCs) by EPA Method 8260.

В.	<u>Deliverable</u> : No	ne
C.		<b>e</b> : The Consultant must complete the services and deliverables for this task in whichever one of the following time is marked:
	$\boxtimes$ (	On or before the following date: July 31, 2022.
		On or before Business Days from

### Task No. 2: Hydrogeologic Assessment

- A. <u>Services</u>: Consultant will install transducers in three groundwater monitoring wells and one in Artesian Slough, download data during quarterly sampling events and evaluate data. Consultant will perform slug testing in MW-1, EMW-C, and EMW-D.
- B. **Deliverable**: None
- **C.** <u>Completion Time</u>: The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

$\boxtimes$	On or before the f	ollowing date: July 31, 2022.	
	On or before	Business Days from	

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment A: Tasks

Form/File No.: 1349220/T-32026

Service Order No.: 4

### Task No. 3: Quarterly Summary Reports

B. Deliverable: Quarterly Summary Reports

A. <u>Services</u>: Consultant will prepare a data summary after each monitoring event updating the time series graphs of VOC concentrations versus time and provide the summary to the City. Three of these update reports are included in this proposal: following third and fourth quarter 2021 and first quarter 2022. Following second quarter 2022, Consultant will provide a proposal for completing the closure report or develop recommendations for continued monitoring and/or additional investigation, as warranted. These data summary reports will provide indications of whether the data will meet closure criteria. Consultant will prepare quarterly summary reports of the sampling results from the monitoring wells sampled in Task 1.

C.	<u>Completion Time</u> : The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:
	On or before the following date: July 31, 2022.
	On or before Business Days from
Took N	la 4. Duaiset Managament and Law Threat Classina Fivelingtion Consultation
Iaski	No. 4: Project Management and Low Threat Closure Evaluation Consultation
A.	<b>Services:</b> Consultant will perform an evaluation of data and develop a Work Plan to determine next steps for further investigation and potential remedial options (if recommended). Consultant will attend meetings with the City and provide regular updates to the City's project manager. Work will include a discussion with the case handler from the Water Board for input in their requirements.
В.	<u>Deliverable</u> : None
C.	<u>Completion Time</u> : The Consultant must complete the services and deliverables for this task in accordance with whichever one of the following time is marked:

On or before the following date: July 31, 2022.

On or before \_\_\_\_ Business Days from \_\_\_\_\_

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment A: Tasks

Form/File No.: 1349220/T-32026

City Attorney Approval Date: September 2016

 $\boxtimes$ 

Service Order No.: 4

### **Attachment B: Terms and Conditions**

1. <u>City's Contract Manager</u>: The City's contract manager for this Approved Service Order is:

Name: Geoff Blair	Phone No.: (408) 975-2576
Department: Environmental Services	E-mail: geoffrey.blair@sanjoseca.gov
Address: 200 E. Santa Clara Street, 10 <sup>th</sup> Floor, San Jose, CA 95113	

2. Consultant's Contract Manager and Other Staffing: Identified below are the following: (a) the Consultant's contract manager for this Approved Service Order, and (b) the Consultant(s) and/or employee(s) of the Consultant who will be principally responsible for providing the services and deliverables. If an individual identified below does not have a current Form 700 on file with the City Clerk for a separate agreement with the City, and is required to file a Form 700, the Consultant must comply with the requirements of Subsection 17.2 of the Master Agreement, entitled "Filing Form 700."

		Required t	o File Form 70	<u>0?</u>
Consultant's Contract Manager		Yes Already Filed (Date Filed)	Yes Need to File	No
Name: Kris Johnson, Practice Leader	Phone No.: (408) 220- 9242			<u>X</u>
Address: 425 Lakeside Drive, Sunnyvale, California 94085  Other Staffing	E-mail: kris johnson@golder.com			
<u>Name</u> :	<u>Assignment</u> :			
Mark Naugle, Senior Consultant	Project Management			<u>x</u>
Eric McNeil, Staff Technician	Groundwater Sampling			<u>x</u>
Kevin Kimball	Data Review and Report Writing			<u>X</u>

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment B: Terms and Conditions

Form/File No.: 1349220/T-32026

Subo	<u>Subconsultants</u> : Whichever of the following is marked applies to this Approved Service Order:						
	The Consultant can <i>not</i> use any subconsultants.						
$\boxtimes$	The Consultant can use the following subconsultant and deliverables:	s to assist i	in providing the required	ser			
	Subconsultant's Name	4	Area of Work				
	BC Laboratories	Laborato	ory Testing				
Serv ident	Reimbursable Expenses: If the Compensation Table set forth in Attachment C of this Approximately Service Order states that the City will reimburse the Consultant for expenses, then only the expendentified in Subsection 10.5.3 of the Master Agreement are Reimbursable Expenses unless the following box is marked and additional reimbursable expenses are set forth:						
	In addition to the expenses identified in Subsection following expenses are Reimbursable Expenses:	10.5.3 of th	ne Master Agreement, the	е			
	Additional Reimbursable Expense(s)		Mark-up	]			

Notwithstanding the foregoing, any additional reimbursable expense(s) set forth in the above table will be disregarded if the Compensation Table states that the City will *not* reimburse the Consultant for any expenses.

Form Name: Master Consultant Agreement (Non-Capital Projects)
Service Order - Attachment B: Terms and Conditions

Form/File No.: 1349220/T-32026

Master Agreement AC No.: 32014

Master Agreement AC No.: 32014 Consultant: Golder Associates Inc. Service Order No.: 4

# Attachment C: Compensation Table

The City will compensate the Consultant for providing the services and deliverables set forth in **Attachment A** in accordance this Compensation Table. This Compensation Table is subject to the terms and conditions set forth in the Master Agreement, including without limitation Section 10 of the Master Agreement.

	Part 1 – Com	pensation for Se	Compensation for Services and Deliverables		
Column 1	Column 2		Column 3		Column 4
Task Nos. from Attachment A	Basis of Compensation		Invoice Period		Compensation
		Monthly X	☐ Completion of Task(s)	☐ Completion of Work	\$ 7,705
2		Monthly X	☐ Completion of Task(s)	☐ Completion of Work	\$ 16,694
ဧ		Monthly	☐ Completion of Task(s)	☐ Completion of Work	\$ 6,600
4	☐ Time & Materials	Monthly X	☐ Completion of Task(s)	☐ Completion of Work	\$ 11,000
	☐ Time & Materials ☐ Fixed Fee	☐ Monthly	☐ Completion of Task(s)	☐ Completion of Work	
	Pa	Part 2 – Reimbursable Expenses	ble Expenses		
No expenses Column 4 of I	<ul><li>☒ No expenses are separately reimbursable. The amount(s) in Column 4 of Part 1 include(s) payment for all expenses.</li></ul>	Expense	Expenses are separately reimbursable in the maximum amount of:	the maximum amount of:	₩
	Ь	Part 3 - Subconsultant Costs	ultant Costs		
⊠ Subconsultar amount(s) in	<ul><li>Subconsultant costs are not separately compensable. The amount(s) in Column 4 of Part 1 include(s) subconsultant costs.</li></ul>		Subconsultant costs are separately compensable in the maximum amount of:	ensable in the maximum	\$
		Maximum	Maximum Service Order Compensation (sum of Parts 1 through 3):	(sum of Parts 1 through 3):	\$ 41,999

Form Name: Master Consultant Agreement (Non-Capital Projects)
Service Order - Attachment C: Compensation Table
Form/File No.: 1349220/T-32026
City Attorney Approval Date: September 2016

**Page:** 1 of 1

Service Order No.: 4

## Attachment D: Sub Consultant Schedule of Rates and Charges

### **BC** Laboratories

Matrix	Methods	Analysis	Pricing
Solids	DISTLC Extraction	DISTLC Extraction	40
Solids	EPA 1664HEM	Oil and Grease	35
Solids	EPA 300.0	Chloride	9
Solids	EPA 300.0	Nitrate as N	9
Solids	EPA 300.0	Sulfate	9
Solids	EPA 3050	TTLC digestion	9
Solids	EPA 353.2	Nitrite as N	10
Solids	EPA 376.2M	Total Sulfide	28
Solids	EPA 600/R-93/116	Asbestos	65
Solids	EPA 6010B	STLC Copper, ICP	6
Solids	EPA 6010B	STLC Lead, ICP	6
Solids	EPA 6010B	STLC Nickel, ICP	6
Solids	EPA 6010B	Total Aluminium, ICP	6
Solids	EPA 6010B	Total Iron, ICP	6
Solids	EPA 6010B	Total Tin, ICP	6
Solids	EPA 6020	Total Antimony, ICP-MS	6
Solids	EPA 6020	Total Arsenic, ICP-MS	6
Solids	EPA 6020	Total Barium, ICP-MS	6
Solids	EPA 6020	Total Beryllium, ICP-MS	6
Solids	EPA 6020	Total Cadmium, ICP-MS	6
Solids	EPA 6020	Total Chromium, ICP-MS	6
Solids	EPA 6020	Total Cobalt, ICP-MS	6
Solids	EPA 6020	Total Copper, ICP-MS	6
Solids	EPA 6020	Total Lead, ICP-MS	6
Solids	EPA 6020	Total Molybdenum, ICP-MS	6
Solids	EPA 6020	Total Nickel, ICP-MS	6
Solids	EPA 6020	Total Selenium, ICP-MS	6
Solids	EPA 6020	Total Silver, ICP-MS	6
Solids	EPA 6020	Total Thallium, ICP-MS	6
Solids	EPA 6020	Total Vanadium, ICP-MS	6
Solids	EPA 6020	Total Zinc, ICP-MS	6
Solids	EPA 7196	DISTLC Hexavalent Chromium	30
Solids	EPA 7470A	STLC Mercury, CV	15
Solids	EPA 7471	Total Mercury, CV	15
Solids	EPA 8080	PCBs Only	60
Solids	EPA 8081	Organo-Chlorine Pesticides	75
Solids	EPA 8082	PCB Analysis	60
Solids	EPA 8141	Organo-Phosphorus Pesticides	85
Solids	EPA 8151	Chlorinated Herbicides	85
Solids	EPA 8260	Purgeable Halogenated & Aromatics	70
Solids	EPA 8260	Volatile Organic Analysis (Low Level)	70
Solids	EPA 8270	Acid Extractables and Base Neutrals	125
Solids	EPA 8270SIM	SIM - PNAs	125
Solids	EPA 9012	Total Cyanide	28
Solids	EPA 9030	Total Sulfide	28
Solids	EPA 9060	TOC	25
Solids	Luft Method	Fuel Fingerprint	65
Solids	SM 9221B	Total Coliform (Multiple Dilutions)	30
Solids	STLC Extraction	STLC Extraction	40
Solids	TTLC 17 Metals	TTLC 17 Metals	125
Solids	EPA 6020/7471	TTLC 17 Metals	125

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment D: Sub Consultant Schedule of Rates and

Charges

Form/File No.: 1349220/T-32026

Service Order No.: 4

Matrix	Methods	Analysis	Pricing
Water	EPA 310.1	Alkalinity	8
Water	Calculation	Anion/Cation Balance	N/C
Water	Aquatic Toxicity	Aquatic Toxicity	
Water	Calculation	CI as NaCl (Salinity)	10
Water	EPA 6010, 200.7/7471	Dissolved 17 Metals	125
Water	EPA 120.1	EC	9
Water	EPA 150.1	pH	8
Water	EPA 160.1	Total Dissolved Solids @ 180 C	10
Water	EPA 160.2	Total Suspended Solids (Glass Fiber)	10
Water	EPA 1664HEM	Oil and Grease	35
Water	EPA 1664SGT	TPH	40
Water	EPA 180.1	Turbidity	10
Water	EPA 200.2	TRM Digestion for 200.(7,8,9), 2xx.x	9
Water	EPA 200.7	Total Recoverable Aluminum, ICP	6
Water	EPA 200.7	Total Recoverable Arsenic, ICP	6
Water	EPA 200.7	Total Recoverable Boron, ICP	6
Water	EPA 200.7	Total Recoverable Cadmium, ICP	6
Water	EPA 200.7	Total Recoverable Calcium, ICP	6
Water	EPA 200.7	Total Recoverable Carcium, ICP	6
Water	EPA 200.7	Total Recoverable Cobalt, ICP	6
Water	EPA 200.7		6
		Total Recoverable Copper, ICP	6
Water	EPA 200.7	Total Recoverable Iron, ICP	
Water	EPA 200.7	Total Recoverable Lead, ICP	6
Water	EPA 200.7	Total Recoverable Magnesium, ICP	6
Water	EPA 200.7	Total Recoverable Manganese, ICP	6
Water	EPA 200.7	Total Recoverable Molybdenum, ICP	6
Water	EPA 200.7	Total Recoverable Nickel, ICP	6
Water	EPA 200.7	Total Recoverable Potassium, ICP	6
Water	EPA 200.7	Total Recoverable Selenium, ICP	6
Water	EPA 200.7	Total Recoverable Silver, ICP	6
Water	EPA 200.7	Total Recoverable Sodium, ICP	6
Water	EPA 200.7	Total Recoverable Vanadium, ICP	6
Water	EPA 200.7	Total Recoverable Zinc, ICP	6
Water	EPA 200.8	Total Recoverable Arsenic, ICP-MS	6
Water	EPA 200.8	Total Recoverable Barium, ICP-MS	6
Water	EPA 200.8	Total Recoverable Cadmium, ICP-MS	6
Water	EPA 200.8	Total Recoverable Chromium, ICP-MS	6
Water	EPA 200.8	Total Recoverable Copper, ICP-MS	6
Water	EPA 200.8	Total Recoverable Lead, ICP-MS	6
Water	EPA 200.8	Total Recoverable Nickel, ICP-MS	6
Water	EPA 200.8	Total Recoverable Selenium, ICP-MS	6
Water	EPA 200.8	Total Recoverable Silver, ICP-MS	6
Water	EPA 200.8	Total Recoverable Zinc, ICP-MS	6
Water	EPA 218.6	Dissolved Hexavalent Chromium	35
Water	EPA 245.1	Total Recoverable Mercury, CV	15
Water	EPA 300.0	Bromide, Ion Chromatograph	25
Water	EPA 300.0	Chloride, Ion Chromatograph	9
Water	EPA 300.0	Fluoride, Ion Chromatograph	9
Water	EPA 300.0	Nitrate as N, Ion Chromatograph	9
Water	EPA 300.0	Sulfate, Ion Chromatograph	9
Water	EPA 3005A	TRM Digestion for 6010, 7xxx	9

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment D: Sub Consultant Schedule of Rates and

Master Agreement AC No.: 32014 Consultant: Golder Associates Inc. Service Order No.: 4

Matrix	Methods	Analysis	Pricing
Water	EPA 3010A	Total Digestion for 200.7, 200.8, 6010	9
Water	EPA 310.1	Bicarbonate (HCO3) Alkalinity as CaCO3	8
Water	EPA 310.1	Carbonate (CO3) Alkalinity as CaCO3	8
Water	EPA 310.1	Hydroxide (OH) Alkalinity as CaCO3	8
Water	EPA 310.1	Total Alkalinity as CaCO3	8
Water	EPA 335.3	Total Cyanide	28
Water	EPA 335.4	Total Cyanide	28
Water	EPA 350.1	Ammonia As N	27
Water	EPA 351.2	Total Kjeldahl Nitrogen	28
Water	EPA 353.2	Nitrate/Nitrite as N, Cd Reduction	10
Water	EPA 365.1	ortho Phosphate	10
Water	EPA 365.1	ortho Phosphate as P	10
Water	EPA 365.4	Total Phosphate	10
Water	EPA 365.4	Total Phosphorus	10
Water	EPA 376.2	Total Sulfide	28
Water	EPA 410.4	Chemical Oxygen Demand	22
Water	EPA 415.1	Total Organic Carbon (Non-Volatile)	25
Water	EPA 420.4	Phenols	25
Water	EPA 504.1	EDB	65
Water	EPA 525.2	Acid Extractables and Base Neutrals	100
Water	EPA 549	Quat Ammo Herbicides	115
Water	EPA 632	Carb/Urea Herbicides	120
Water	EPA 600/4-79-020	Dissolved Filtration	10
		A CONTRACTOR OF THE CONTRACTOR	75
Water Water	EPA 601/602 EPA 6010B	Chlorinated Purgeables Dissolved Aluminum, ICP	6
	EPA 6010B		6
Water Water	EPA 6010B	Dissolved Antimony, ICP Dissolved Arsenic, ICP	6
	EPA 6010B		6
Water		Dissolved Barium, ICP	6
Water	EPA 6010B	Dissolved Beryllium, ICP	
Water	EPA 6010B	Dissolved Boron, ICP	6
Water	EPA 6010B	Dissolved Cadmium, ICP	
Water	EPA 6010B	Dissolved Calcium, ICP	6
Water	EPA 6010B	Dissolved Chromium, ICP	6
Water	EPA 6010B	Dissolved Cobalt, ICP	6
Water	EPA 6010B	Dissolved Copper, ICP	6
Water	EPA 6010B	Dissolved Iron, ICP	6
Water	EPA 6010B	Dissolved Lead, ICP	6
Water	EPA 6010B	Dissolved Magnesium, ICP	6
Water	EPA 6010B	Dissolved Manganese, ICP	6
Water	EPA 6010B	Dissolved Nickel, ICP	6
Water	EPA 6010B	Dissolved Potassium, ICP	6
Water	EPA 6010B	Dissolved Selenium, ICP	6
Water	EPA 6010B	Dissolved Silver, ICP	6
Water	EPA 6010B	Dissolved Sodium, ICP	6
Water	EPA 6010B	Dissolved Thallium, ICP	6
Water	EPA 6010B	EPA 6010B - Dissolved Tin, ICP	6
Water	EPA 6010B	EPA 6010B - Dissolved Vanadium, ICP	6
Water	EPA 6010B	EPA 6010B - Dissolved Zinc, ICP	6
Water	EPA 6010B	EPA 6010B - Total Aluminum, ICP	6
Water	EPA 6010B	EPA 6010B - Total Antimony, ICP	6
Water	EPA 6010B	Total Arsenic, ICP	6

Matrix	Methods	Analysis	Pricing
Water	EPA 6010B	Total Barium, ICP	6
Water	EPA 6010B	Total Beryllium, ICP	6
Water	EPA 6010B	Total Cadmium, ICP	6
Water	EPA 6010B	Total Calcium, ICP	6
Water	EPA 6010B	Total Chromium, ICP	6
Water	EPA 6010B	Total Cobalt, ICP	6
***		W . 10 100	

Master Agreement AC No.: 32014 Consultant: Golder Associates Inc. Service Order No.: 4

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment D: Sub Consultant Schedule of Rates and

Service Order No.: 4

Matrix	Methods	Analysis	Pricing
Water	EPA 8141	Organo-Phosphorus Pesticides	85
Water	EPA 8151	Chlorinated Herbicides	85
Water	EPA 8260	BTXE, MTBE, TPPH	70
Water	EPA 8260	Volatile Organic Analysis (Low Level)	70
Water	EPA 8260	Purgeable Halogenated & Aromatics	70
Water	EPA 8260	Purgeable Halogenated & Aromatics	70
Water	EPA 8260	Purgeable Halogenated & Aromatics	70
Water	EPA 8260	Purgeable Halogenated & Aromatics	70
Water	EPA 8260	Purge. Halo. & Arom. (Appendix 2 List)	70
Water	EPA 8260	IBM Special Compound List	70
Water	EPA 8260 - 8021	IBM List	70
Water	EPA 8270	Acid Extractables and Base Neutrals	130
Water	EPA 8270	BNAs (Appendix 2 List)	130
Water	EPA 8270	1,4-Dioxane	125
Water	EPA 8270	NMP or Isoph only	125
Water	EPA 8310	Polynuclear Aromatic Hydrocarbons	150
Water	EPA-353.2	Nitrite as N, Colorimetric	10
Water	Calculation	Hardness (Dissolved)	12
Water	Calculation	Hardness (Total)	12
Water	Calculation	Hardness (TRM)	12
Water	Luft Method	Fuel Fingerprint	75
Water	Luft Method	TPH (Diesel or CC)	45
Water	Luft Method	TPH (Gas)	40
Water	RSK 175M	Methane	115
Water	RSK 175M	Methane Ethane Ethene	115
Water	SM 4500-CO2C	Carbon Dioxide	40
Water	SM 5210B	BOD (Seeded)	25
Water	SM 9215B	Heterotrophic Plate Count Aerobic	20
Water	SM 9221B/E	Total and Fecal Coliform (10 Tubes)	30
Water	SM 9221B/E	Total and Fecal Coliform (5,5,5)	30
Water	SM 9223B	Tot Coli + E. Coli (Colilert 10 tubes)	30
Water	SM2320 B	Bicarbonate (HCO3) Alkalinity as CaCO3	8
Water	SM2320 B	Carbonate (CO3) Alkalinity as CaCO3	8
Water	SM2320 B	Total Alkalinity as CaCO3	8
Water	SM2540C	Total Dissolved Solids @ 180 C	10
Water	SM2540D	Total Suspended Solids	10
Water		Total 17 Metals	125
Water	EPA Method 200.8/245.1		125
Water	EPA Method 6020/7470	TRM 17 Metals	125
Water	Calculation	Unionized Ammonia as N	n/c
Water	Calculation	Ion Balance Calc	n/c
Air	TO-14	TO-14	110
Air	TO-15	TO-15	130
Air	Summa Canister Rental	Summa Canister Rental	20
Other	EDF Report	EDF Report	1%
Other	EDD Report	EDD Report	
Other	Sample Disposal	Sample Disposal	2
Other	Composite charge	Composite charge	5
Water	EPA 7199	Hexavalent Chromium	35
Water	EPA 314.0	Perchlorate	35
Water	EPA 360.1	Dissolved Oxygen	15

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment D: Sub Consultant Schedule of Rates and

Service Order No.: 4

Matrix	Methods	Analysis	Pricing
Water	EPA 376.2	Sulfide	25
Water	EPA 524.2	1,2,3 TCP	70
Water	EPA 8270	SIM NDMA	175
Water	EPA 8290	Dioxins and Furans	850
Water	96 Hour Fathead Minnow	96 Hour Fathead Minnow Fish Toxicity	300
Air	TO-3 Methane	TO-3	70

Form Name: Master Consultant Agreement (Non-Capital Projects)

Service Order - Attachment D: Sub Consultant Schedule of Rates and