

## **RESOLUTION NO. 2015- 155**

### **A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ROHNERT PARK AUTHORIZING AND APPROVING TASK ORDER NO. 2015-05 TO THE DESIGN PROFESSIONAL SERVICES WITH GHD, INC. FOR ENVIRONMENTAL CLEANUP OF CORPORATION YARD UNDERGROUND STORAGE TANK SITE AND INCREASING APPROPRIATIONS**

**WHEREAS**, in 1989, the City removed a leaking Underground Storage Tank (UST) containing diesel and gasoline at the Corporation Yard located at 600 Enterprise Drive; and

**WHEREAS**, on January 10, 2003, the City approved a letter proposal with Winzler & Kelly to investigate the site; and

**WHEREAS**, on October 28, 2003, the City Council approved Resolution No. 2003-260 authorizing Amendment No. 1 to the letter proposal which provided for environmental cleanup and site remediation activities in accordance with Sonoma County Department of Health Services and the North Coast Regional Water Quality Board requirements; and

**WHEREAS**, on July 27, 2004, the City Council approved Resolution No. 2004-198 authorizing the execution of a Master Agreement with Winzler & Kelly to provide General Municipal Engineering Services; and

**WHEREAS**, on September 14, 2004, the City Council approved Resolution No. 2004-244 authorizing Task Order No. 2004-16 with Winzler & Kelly for the destruction of wells; groundwater monitoring, sampling and reporting; water characterization and disposal; and preparation of Underground Storage Tank Cleanup Fund (USTCF) reimbursement claims; and

**WHEREAS**, on March 28, 2006, the City Council approved Resolution No. 2006-87 authorizing Task Order No. 2006-04 to conduct soils investigations and prepare a Corrective Action Plan and Remedial Action Plan; and

**WHEREAS**, on November 17, 2007, the City Council approved Resolution No. 2007-185 authorizing Task Order No. 2007-09 for additional professional services, specifically soil investigation and performance of compliance groundwater sampling required by the Sonoma County Department of Health Services and the North Coast Regional Water Quality Board; and

**WHEREAS**, on September 25, 2009, in accordance with Rohnert Park Municipal Code, Chapter 3.04, Purchasing Program, the City Manager authorized Task Order No. 2009-02 for continued monitoring and reporting work; and

**WHEREAS**, on January 11, 2011, the City Council approved Resolution No. 2011-01 authorizing Task Order No. 2011-01 for remedial work including extracting impacted groundwater and residual soil; and

**WHEREAS**, on January 11, 2011, the City Council approved Resolution No. 2011-06 authorizing the execution of a Master Agreement with Winzler & Kelly for Design Professional

Services ("Master Agreement") to provide general municipal engineering services, general city planning services, development review, and capital projects engineering and studies; and

**WHEREAS**, on February 2, 2012, Winzler & Kelly, GHD, Inc. and the City entered into an Assignment, Novation and Consent Agreement, whereby Winzler & Kelly assigned, transferred, and conveyed to the GHD, Inc. all of Winzler & Kelly's title, right, obligations, and interest in, to and under the Master Agreement, and the City consented to the substitution and novation of GHD, Inc. in place of Winzler & Kelly; and

**WHEREAS**, the City now requires additional professional services to continue UST site remediation, bring the site to closure, and to prepare the State Fund reimbursement package for submittal; and

**WHEREAS**, GHD, Inc. is uniquely familiar with the work, and the City and GHD now desire to enter into this Task Order No. 2015-05 to provide for final remediation activities.

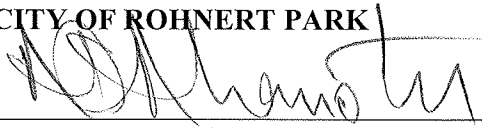
**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Rohnert Park that it does authorize and approve Task Order No. 2015-05 by and between GHD, Inc. and the City of Rohnert Park for professional services for the environmental cleanup of the Corporation Yard Underground Storage Tank Site for an amount not to exceed \$199,724.

**BE IT FURTHER RESOLVED** that the City Manager is hereby authorized and directed to take all actions to effectuate this Task Order for and on behalf of the City of Rohnert Park, including execution, if necessary, in substantially similar form to Task Order No. 2015-05 attached hereto as Exhibit "A," subject to minor modifications by the City Manager or City Attorney.

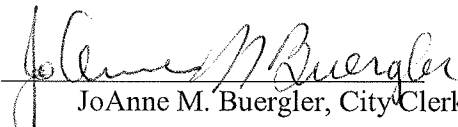
**BE IT FURTHER RESOLVED** that the Finance Director is authorized to increase appropriations in the amount of \$199,724 in the Public Works General Services budget and increase budgeted revenue from USTCF reimbursements to cover the costs of Task Order No. 2015-05.

**DULY AND REGULARLY ADOPTED** this 22<sup>nd</sup> day of September, 2015.

**CITY OF ROHNERT PARK**

  
\_\_\_\_\_  
Amy O. Ahanotu, Mayor

**ATTEST:**

  
\_\_\_\_\_  
JoAnne M. Buergler, City Clerk

Attachment: Exhibit A

CALLINAN: Aye MACKENZIE: Aye STAFFORD: Absent BELFORTE: Aye AHANOTU: Aye  
AYES: ( 4 ) NOES: ( 0 ) ABSENT: ( 1 ) ABSTAIN: ( 0 )

EXHIBIT A

**TASK ORDER NO. 2015-05**

**CITY OF ROHNERT PARK  
AND  
GHD Inc.**

**AUTHORIZATION TO PROVIDE ENGINEERING SERVICES FOR  
CORPORATION YARD UNDERGROUND STORAGE TANK ENVIRONMENTAL CLEANUP**

**SECTION 1 – PURPOSE**

The purpose of this Task Order is to authorize and direct **GHD Inc.** to proceed with the work specified in Section 2 below in accordance with the provisions of the Master Agreement between the City of Rohnert Park ("City") and **GHD Inc.** ("Consultant") dated February 8, 2011 and authorized by Resolution No. 2011-06 ("Master Agreement").

**SECTION 2 – SCOPE OF WORK**

The items authorized by this Task Order are presented in Attachment "A" - Scope of Services, which is attached hereto and incorporated by this reference.

**SECTION 3 – COMPENSATION AND PAYMENT**

Compensation shall be as provided in the Master Agreement between the parties hereto referenced in SECTION 1 above. The total cost for the services set forth in SECTION 2 of this Task Order shall be actual costs (time and materials) based on Consultants' standard labor charges in accordance with the provisions of the Master Agreement and as shown in Attachment "B," which is attached hereto and incorporated by this reference, for an amount not-to-exceed \$199,724.00.

**SECTION 4 – TIME OF PERFORMANCE**

The work described in SECTION 2 of this Task Order shall be completed by December 31, 2016, or as extended in writing by the City Manager.

**SECTION 5 – ITEMS AND CONDITIONS**

Except as otherwise provided for in this Task Order, all terms and conditions of the Master Agreement are incorporated by reference and remain in full force and effect.

Approved this **22nd** day of **September, 2015**.

**CITY OF ROHNERT PARK**

**GHD Inc.**

\_\_\_\_\_  
Darrin Jenkins, City Manager (Date)  
Per Resolution No. 2015-\_\_\_\_\_ adopted by the  
Rohnert Park City Council at its meeting  
of 9/22/2015.

\_\_\_\_\_  
Name / Title (Date)



Ref: 02056-11001

August 26, 2015

Ms. Mary Grace Pawson  
City of Rohnert Park  
130 Avram Avenue, 2<sup>nd</sup> Floor  
Rohnert Park, CA 94928

**Re: Environmental Cleanup, City of Rohnert Park Corporate Yard, 600 Enterprise Drive,  
Rohnert Park, CA, SCDHS-EHD Site #1092, NCRWQCB Site #1TSO098**

Dear Ms. Pawson:

GHD, Inc. (GHD) is pleased to present this Proposal for the continuation of the environmental cleanup currently being performed at the City of Rohnert Park's (City's) Corporation Yard located at 600 Enterprise Drive, Rohnert Park, CA. This scope of work was prepared in response to the ongoing investigation and site remediation activities under the direction of the Sonoma County Department of Health Services, Environmental Health Division (SCDHS-EHD), and includes routine quarterly and annual monitoring and sampling of site monitoring wells as required by the SCDHS-EHD and the State Underground Storage Tank Cleanup Fund (USTCF).

In an August 6, 2015 letter, the SCDHS-EHD requested that the City continue the remediation efforts at the Corporation Yard. They have requested a workplan for the installation of an additional monitoring/extraction well and to implement an additional 30-day high vacuum dual phase extraction (HVDPE) event with the focus in the immediate vicinity of the former UST excavation. The workplan will include the installation of two monitoring/remediation wells and an operation plan for the 30-day HVDPE event. GHD is proposing a second monitoring/remediation well within the former UST excavation area to enlarge the effective extraction area and facilitate a faster site cleanup. The previous 31-day event removed over 700 pounds of residual hydrocarbons and proved to be a cost-effective remedial approach. Utilizing a mobile HVDPE unit is more cost-effective and will be less expensive over the duration of the project than a full design, permitting, construction, and operation of a fixed remediation unit.

The hydrocarbon source for the dissolved hydrocarbons in groundwater is believed to be emanating from impacted soils left in place after the underground storage tank (UST) removal and subsequent soil excavation in 1990. Residual hydrocarbons left in soils in the northern sidewall of the former UST pit is not feasible to be mechanically removed due to the proximity of the shop building and foundation piers. In 1990 and during the UST removal activities, depth-to-groundwater was at historical lows, representing drought conditions where groundwater was encountered at 20 to 22 feet below ground surface (bgs). Since the mid 1990's, groundwater has returned to normal conditions with first encountered groundwater at 6 to 8 feet bgs. Hydrocarbons detected in soil samples collected from the UST excavation sidewalls in 1990 from 15 to 17 feet bgs and below the extent of the vertical excavation of 18 feet are suspected of being remobilized and are now detected in the groundwater samples from MW-12.

The hydrocarbon impact appears to be limited to the soils in the northern wall and below the former UST excavation. Because of the previous HVDPE Pilot Test findings, GHD and the SCDHS-EHD surmises that an additional 30- to 60-day HVDPE event would provide immediate site remediation and move the site to closure. GHD has teamed with CalClean, Inc. to provide a more cost-effective approach to implementing a HVDPE.



Our cost estimate is included in Attachment A with the following proposed scopes of work:

#### **Task 1 – Semi-Annual Groundwater Monitoring and Sampling Events**

Perform two (2) Semi-Annual (SA) groundwater monitoring and sampling events (2nd SA 2015 and 1st SA 2016) for up to nine (9) monitoring wells annually and up to six (6) monitoring wells semi-annually. Task includes collecting field measurements for pH, temperature, conductivity, dissolved oxygen, and oxidation reduction potential prior to purging and sampling the wells for the purpose of evaluating aerobic degradation activity. Task also includes sampling and profiling the purge water for disposal from the site.

#### **Task 2 – Prepare 2<sup>nd</sup> Semi-Annual 2015 Report**

Prepare one (1) semi-annual monitoring and sampling reports for the 2<sup>nd</sup> SA event of 2015. This report will summarize the analytical data, include potentiometric maps, iso-concentration maps, groundwater contaminant trend graphs, conclusions, recommendations, and planned site activities.

#### **Task 3 – Prepare 1<sup>st</sup> Semi-Annual 2016 Report**

Prepare one (1) groundwater monitoring and sampling reports for the 1st SA event of 2016. The semi-Annual monitoring report will summarize the analytical data, include a contour map, a contaminant TPH-G/Benzene/MTBE concentration map, conclusions, and planned site activities.

#### **Task 4 – Prepare Workplan, Drilling Pre-Field, Permitting, USA Marking, and Coordination**

Prepare Workplan and Health and Safety Plan. Mark site as required by Underground Services Alert (USA) North, make required notifications to USA, SCDHS-EHD, and the City. Prepare drilling permits and pay fees. Coordinate with a drilling company to install two (2) shallow monitoring/extraction wells through the former UST excavation area inside the Corporation Yard property.

#### **Task 5 – Drill and Install Two Monitoring/Remediation Wells**

Install two 4-inch monitoring/remediation wells to a maximum depth of 25 feet bgs. Borings to be lithology logged and field screened for contaminants. Retain up to four (4) soil and two (2) groundwater samples to be delivered to the analytical laboratory for testing. As previously directed by the SCDHS-EHD, one saturated soil sample at the depth of 17 feet bgs (from the native material below the excavation depth) in one boring will be collected and submitted for analysis. Develop the monitoring/remediation well and contain all waste generated from the drilling activities in DOT approved drums, label, and profile for disposal. Complete a well head elevation survey of the top of casing (TOC) of the new well and the locations of the borings.

#### **Task 6 –Additional Subsurface Investigation Report**

Prepare a technical report describing the field activities and findings of this investigation. The report will include a summary of findings including analytical data, dissolved concentration and soil concentration maps, potentiometric map, survey data, conclusions, and recommendations. Upload site data to GeoTracker as required.



### **Task 7 – Prepare and Conduct a HVDPE Event**

Prepare a workplan and submit to the SCDHS-EHD for approval. Conduct a HVDPE event based on the observed petroleum concentrations in MW-12 and within the former UST pit. The two proposed monitoring/remediation wells will be included in the HVDPE event. GHD anticipates conducting a 30-day HVDPE event with the provision for an additional 30-day event if necessary to complete the site remedial efforts at the site. The second event will be conducted only if necessary and based on the site data from the initial event. Concentration trends and mass removal rates will be monitored. The HVDPE event will be evaluated to estimate long-term results for this option. Other parameters will be assessed such as extraction well flow rate that can be sustained, projected mass removal rates, review dissolved concentration trends, and prepare recommendations. Assume 30 days of extraction and 80,000 gallons of water to contain, treat, and discharge to the sanitary sewer system.

### **Task 8 – HVDPE Event Report**

After the completion of the HVDPE event, a report of findings will be prepared. The report will summarize the data, compare initial and ending dissolved groundwater concentrations and trends, estimate radius of influence and mass removed, projections to reach cleanup goals, and recommendations for site closure. GHD will evaluate the effectiveness for possible additional events if necessary. If an additional HVDPE event is not conducted, prepare the evaluation report with initial data only.

### **Task 9 – Purge Water Disposal**

Profile and coordinate the disposal of the quarterly purge water generated from the two (2) monitoring and sampling events. One event for 2015 will include the soils and development water from the installation of the two monitoring/extraction wells and one event for 2016 are planned to off haul and dispose of the investigation derived waste. GHD will meet with the disposal company on site during pickup.

### **Task 10 – Prepare State UST Cleanup Fund Reimbursement Numbers 15 and 16**

GHD will prepare and submit two reimbursements to the USTCF for the corrective actions conducted at the site. GHD will need the assistance of the City in providing the necessary backup and cancelled checks that are required. Additional reimbursements will be prepared (if directed) for similar costs.

### **Task 11 – Prepare Low Threat Closure Policy Documentation**

This Task will involve the review of available files and site data to evaluate for site closure by Low Threat Underground Tank Case Closure Policy (August 2012) and Resolution No. 92-49, or closure per Tri-Regional Board Staff Recommendations dated April 16, 2004 (if required an addition \$5,000 is needed to cover the document preparation). This Task will be implemented once site conditions warrant.

### **Task 12 – Prepare Public Notice for Site Closure**

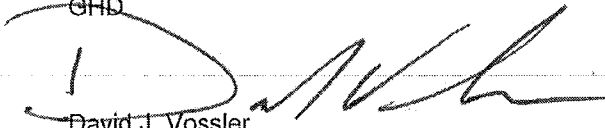
GHD will provide assistance and information to complete the public notification process for site closure consideration. The proposed scope of work includes: 1. Obtain available property owners names, addresses, Assessor's parcel numbers for a radius of not less than 200 feet and not more than 300 feet from the boundaries of the site; 2. Prepare a list of properties and transmit list to the SCDHS-EHD. Mailing labels will be provided if requested by the SCDHS-EHD.



This Proposal will provide the City the necessary environmental work to continue site cleanup activities to obtain case closure status. This HVDPE event will utilize CalClean Inc, a subcontractor that provides and operates the HVDPE equipment. The pilot test will run 24-hours a day during the 30- to 60-day event and there will be an operator at the site throughout the process. Using CalClean also provides the City with a special contracted benefit that they will defer their payment until the USTCF payment has been received the City. In essence there is no out of pocket money for CalClean's portion of work. GHD will complete and send in a reimbursement claim once we receive CalClean's invoice and final data transmittal. The estimated cost for CalClean's 60 day portion of the pilot test includes CalClean labor, equipment, permits, water treatment, and discharge is \$108,100.00. The total task order including CalClean's cost is \$199,724.00 and is fully eligible to be reimbursable from the USTCF (except possibly for the claim preparation, where there is a ceiling limit of \$5,000 per site).

GHD appreciates the opportunity to be of service to the City of Rohnert Park. If you have questions or comments regarding this Proposal, please contact me at your convenience.

Sincerely,  
GHD



David J. Vossler  
Project Manager

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Attachments:  
Attachment A  
Cost Estimating Sheets

**ATTACHMENT “ A ”**  
**TASK ORDER NO. 2015-XX**  
**SCOPE OF SERVICES**

**ENVIRONMENTAL CLEANUP OF CORPORATION YARD: SOIL INVESTIGATION AND  
PERFORMANCE OF COMPLIANCE GROUNDWATER SAMPLING**

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**1. General Description and Background**

The items authorized by this Task Order are to conduct required routine groundwater monitoring and sampling and remedial activities associated with the former underground storage tank (UST) that was located in the City of Rohnert Park's (City's) Corporation Yard located at 600 Enterprise Drive. This work is required by the Sonoma County Department of Health Services, Environmental Health Division (SCDHS-EHD) in a letter dated August 6, 2015 and the North Coast Regional Water Quality Control Board (NCRWQCB). In addition an annual budget is required by the State UST Cleanup Fund (USTCF), for which the City is being reimbursed for costs associated with the environmental cleanup.

The work performed for this Task Order will keep the City in compliance with the SCDHS-EHD and the NCRWQCB and move the site toward case closure. Two additional extraction wells in the source area and a 30 to 60 day HVDPE remedial event are planned for final site cleanup. The estimated cost for this work is \$199,724 and is reimbursable from the USTCF except for the claim preparation, which has a limit of \$5,000 per site.

**2. Project Tasks**

The Scope of Services to stay in compliance and enabling the City to proceed with the environmental cleanup of the Corporation Yard site is presented below.

**Task 1 – Semi-Annual Groundwater Monitoring and Sampling Events**

Perform two (2) Semi-Annual (SA) groundwater monitoring and sampling events (2nd SA 2015 and 1st SA 2016) for up to nine (9) monitoring wells annually and up to six (6) monitoring wells semi-annually. Task includes collecting field measurements for pH, temperature, conductivity, dissolved oxygen, and oxidation reduction potential prior to purging and sampling the wells for the purpose of evaluating aerobic degradation activity. Task also includes sampling and profiling the purge water for disposal from the site.

**Task 2 – Prepare 2<sup>nd</sup> Semi-Annual 2015 Report**

Prepare one (1) semi-annual monitoring and sampling reports for the 2<sup>nd</sup> SA event of 2015. This report will summarize the analytical data, include potentiometric maps, iso-concentration maps, groundwater contaminant trend graphs, conclusions, recommendations, and planned site activities.

**Task 3 – Prepare 1<sup>st</sup> Semi-Annual 2016 Report**

Prepare one (1) groundwater monitoring and sampling reports for the 1st SA event of 2016. The semi-Annual monitoring report will summarize the analytical data, include a contour map, a contaminant TPH-G/Benzene/MTBE concentration map, conclusions, and planned site activities.

**Task 4 – Prepare Workplan, Drilling Pre-Field, Permitting, USA Marking, and Coordination**

Prepare Workplan and Health and Safety Plan. Mark site as required by Underground Services Alert (USA) North, make required notifications to USA, SCDHS-EHD, and the City. Prepare drilling permits and pay fees. Coordinate with a drilling company to install two (2) shallow monitoring/extraction wells through the former UST excavation area inside the Corporation Yard property.



#### **Task 5 – Drill and Install Two Monitoring/Remediation Wells**

Install two 4-inch monitoring/remediation wells to a maximum depth of 25 feet bgs. Borings to be lithology logged and field screened for contaminants. Retain up to four (4) soil and two (2) groundwater samples to be delivered to the analytical laboratory for testing. As previously directed by the SCDHS-EHD, one saturated soil sample at the depth of 17 feet bgs (from the native material below the excavation depth) in one boring will be collected and submitted for analysis. Develop the monitoring/remediation well and contain all waste generated from the drilling activities in DOT approved drums, label, and profile for disposal. Complete a well head elevation survey of the top of casing (TOC) of the new well and the locations of the borings.

#### **Task 6 –Additional Subsurface Investigation Report**

Prepare a technical report describing the field activities and findings of this investigation. The report will include a summary of findings including analytical data, dissolved concentration and soil concentration maps, potentiometric map, survey data, conclusions, and recommendations. Upload site data to GeoTracker as required.

#### **Task 7 – Prepare and Conduct a HVDPE Event**

Prepare a workplan and submit to the SCDHS-EHD for approval. Conduct a HVDPE event based on the observed petroleum concentrations in MW-12 and within the former UST pit. The two proposed monitoring/remediation wells will be included in the HVDPE event. GHD anticipates conducting a 30-day HVDPE event with the provision for an additional 30-day event if necessary to complete the site remedial efforts at the site. The second event will be conducted only if necessary and based on the site data from the initial event. Concentration trends and mass removal rates will be monitored. The HVDPE event will be evaluated to estimate long-term results for this option. Other parameters will be assessed such as extraction well flow rate that can be sustained, projected mass removal rates, review dissolved concentration trends, and prepare recommendations. Assume 30 days of extraction and 80,000 gallons of water to contain, treat, and discharge to the sanitary sewer system.

#### **Task 8 – HVDPE Event Report**

After the completion of the HVDPE event, a report of findings will be prepared. The report will summarize the data, compare initial and ending dissolved groundwater concentrations and trends, estimate radius of influence and mass removed, projections to reach cleanup goals, and recommendations for site closure. GHD will evaluate the effectiveness for possible additional events if necessary. If an additional HVDPE event is not conducted, prepare the evaluation report with initial data only.

#### **Task 9 – Purge Water Disposal**

Profile and coordinate the disposal of the quarterly purge water generated from the two (2) monitoring and sampling events. One event for 2015 will include the soils and development water from the installation of the two monitoring/extraction wells and one event for 2016 are planned to off haul and dispose of the investigation derived waste. GHD will meet with the disposal company on site during pickup.

#### **Task 10 – Prepare State UST Cleanup Fund Reimbursement Numbers 15 and 16**

GHD will prepare and submit two reimbursements to the USTCF for the corrective actions conducted at the site. GHD will need the assistance of the City in providing the necessary backup and cancelled checks that are required. Additional reimbursements will be prepared (if directed) for similar costs.

#### **Task 11 – Prepare Low-Threat Closure Policy Documentation**

This Task will involve the review of available files and site data to evaluate for site closure by Low Threat Underground Tank Case Closure Policy (August 2012) and Resolution No. 92-49, or closure per

Tri-Regional Board Staff Recommendations dated April 16, 2004 (if required an addition \$5,000 is needed to cover the document preparation). This Task will be implemented once site conditions warrant.

### **Task 12 – Prepare Public Notice for Site Closure**

GHD will provide assistance and information to complete the public notification process for site closure consideration. The proposed scope of work includes: 1. Obtain available property owners names, addresses, Assessor's parcel numbers for a radius of not less than 200 feet and not more than 300 feet from the boundaries of the site; 2. Prepare a list of properties and transmit list to the SCDHS-EHD. Mailing labels will be provided if requested by the SCDHS-EHD.

### **3. Schedule**

The anticipated schedule is shown in the table below. This schedule is dependent upon receiving timely lead agency approval on environmental submittals:

<b>Task</b>	<b>Start</b>	<b>Complete</b>
Notice to Proceed		September 2015
1 Semi-Annual Groundwater Sampling	December 2015	December 2015
2 Annual Report (One Report)	December 2015	February 2016
3 Semi-Annual Reports (One Report)	May 2016	October 2016
4 Drilling Pre-Field and Permitting	September 2015	November 2015
5 Install Two Wells	October 2015	December 2015
6 Prepare Additional Subsurface Report	October 2015	January 2016
7 Conduct HVDPE Event	November 2015	March 2016
8 Prepare HVDPE Pilot Test Report	December 2015	April 2016
9 Quarterly Groundwater Disposal	December 2015	December 2016
10 State USTCF Reimbursement	November 2015	December 2016

### **4. Fee**

The work described above will be completed on a time and materials basis for a not-to-exceed budget of \$199,724. Direct costs are to cover project expenses including office consumables and expenses. Using CalClean provides the City with a special contracted benefit that they will defer their payment until the USTCF payment has been received the City. In essence there is no out of pocket money for CalClean's portion of work. The estimated costs associated with performing each task are summarized in the attached Cost Estimating Sheets. Any additional services not included in this Scope of Services will be performed only after receiving written authorization from the City and a corresponding budget augmentation.



## Attachment B

### SUMMARY

#### COST ESTIMATING SHEET (UST FUND RATES)

PROJECT NAME: City of Rohnert Park Corporation Yard  
Project Phase Description: Quarterly M&S and Remedial Implementation (4rd Qtr 2015-2nd Qtr  
PROJECT NUMBER: 02056-11001 PROJECT MANAGER: David J. Vossler

Prepared by: David J. Vossler Reviewed By:  
Date: August 19, 2015 Review Date:

TASK / UNIT	GHD LABOR	EXPENSES	TOTAL COST
1) Semi-Annual Groundwater Monitoring and Sampling Events (2nd SA 2015-1st SA 2016; 2 events)	\$4,628	\$13,720	\$18,348
2) Prepare 2nd Semi-Annual 2015 Report	\$3,707	\$0	\$3,707
3) Prepare 1st Semi-Annual 2016 Report	\$3,707	\$0	\$3,707
4) Drilling Pre-Field, Permitting, USA Marking, and Coordination	\$3,499	\$549	\$4,048
5) Drill and Install Two (2) Monitoring/Remediation Wells	\$4,445	\$16,487	\$20,932
6) Additional Subsurface Investigation Report	\$5,204	\$0	\$5,204
7) Prepare and Conduct a HVDPE Event	\$10,104	\$115,627	\$125,731
8) HVDPE Event Report	\$6,721	\$0	\$6,721
9) Purge Water Disposal	\$1,308	\$2,486	\$3,794
10) Prepare State UST Cleanup Fund Reimbursement Numbers 15 and 16	\$2,954	\$0	\$2,954
11) Prepare Low-Threat Closure Policy Documentation	\$2,817	\$0	\$2,817
12) Prepare Public Notice for Site Closure	\$1,761	\$0	\$1,761
	<b>\$50,855</b>	<b>\$148,869</b>	<b>\$199,724</b>

\*\*\*Please note that these cost estimates are estimates only, and the actual cost may vary depending on field conditions at the time the work is completed.

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 1:** Semi-Annual Groundwater Monitoring and Sampling  
Events (2nd SA 2015-1st SA 2016; 2 events)

Prepare and conduct the 2nd semi-annual groundwater monitoring and sampling event for 2015 and 1st semi-annual groundwater monitoring and sampling event for 2016. Nine (9) monitoring wells will be monitored annually and up to six (6) monitoring wells quarterly; purge and sample according to the GHD SOP. Monitoring will include, but is not limited to, the collection of field measurements for DO, ORP, pH, temperature, and DTW to evaluate the aerobic degradation activity on site. This task will also include sampling the contained purge water for profiling and off-site disposal.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL		NA	2	\$0.00
Senior / Project Manager	\$139.00	HOURL	3	NA	2	\$834.00
Associate / Project Consultant	\$119.00	HOURL	12	NA	2	\$2,856.00
Sr. Staff Consultant	\$99.00	HOURL	4	NA	2	\$792.00
Junior Consultant/Senior Technician	\$92.00	HOURL		NA	2	\$0.00
Junior Technician	\$79.00	HOURL		NA	2	\$0.00
Drafting	\$73.00	HOURL		NA	2	\$0.00
Technical Report Reviewer	\$73.00	HOURL	1	NA	2	\$146.00
Clerical/Word Processing	\$59.00	HOURL		NA	2	\$0.00
SUBTOTAL EMPLOYEE LABOR			20			\$4,628.00
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	2	\$0.00
Concrete Corer		TASK	1	\$0.00	2	\$0.00
Traffic Control		TASK	1	\$0.00	2	\$0.00
Laboratory (See Attached Breakdown)	\$4,356.00	TASK	1	\$653.40	2	\$10,018.80
Confluence Sampler	\$1,200.00	TASK	1	\$180.00	2	\$2,760.00
Equipment Rental		TASK	1	\$0.00	2	\$0.00
Disposal/Landfill Fees	\$250.00	TASK	1	\$37.50	2	\$575.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY	2	NA	2	\$132.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH	2	NA	2	\$212.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo - Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE	20	NA	2	\$22.60
SUBTOTAL EXPENSES						\$13,720.40
<b>TASK #1 GRAND TOTAL =</b>						<b>\$18,348.40</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 2:** Prepare 2nd Semi-Annual 2015 Report

Prepare one annual monitoring and sampling report for the 2nd SA of 2015. This report will summarize the groundwater monitoring for a complete hydrologic cycle (year) and will include the potentiometric map, iso-concentration map, groundwater contaminant trend graphs, conclusions, recommendations, and planned site activities. This sampling event will also be post HVDPE to document groundwater conditions after the remedial effort.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL	1	NA	1	\$165.00
Senior / Project Manager	\$139.00	HOURL	4	NA	1	\$556.00
Associate / Project Consultant	\$119.00	HOURL	6	NA	1	\$714.00
Sr. Staff Consultant	\$99.00	HOURL	12	NA	1	\$1,188.00
Junior Consultant/Senior Technician	\$92.00	HOURL		NA	1	\$0.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL	6	NA	1	\$438.00
Technical Report Reviewer	\$73.00	HOURL	4	NA	1	\$292.00
Clerical/Word Processing	\$59.00	HOURL	6	NA	1	\$354.00
<b>SUBTOTAL EMPLOYEE LABOR</b>			39			<b>\$3,707.00</b>
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE		NA	1	\$0.00
<b>SUBTOTAL EXPENSES</b>						<b>\$0.00</b>
<b>TASK #2 GRAND TOTAL =</b>						<b>\$3,707.00</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 3:** Prepare 1st Semi-Annual 2016 Report

Prepare one (1) SA monitoring and groundwater sampling report for the 1st SA event of 2016. Report will summarize the analytical data, including a contour map, a contaminant distribution map, conclusions, and a planned activities section.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL	1	NA	1	\$165.00
Senior / Project Manager	\$139.00	HOURL	4	NA	1	\$556.00
Associate / Project Consultant	\$119.00	HOURL	6	NA	1	\$714.00
Sr. Staff Consultant	\$99.00	HOURL	12	NA	1	\$1,188.00
Junior Consultant/Senior Technician	\$92.00	HOURL		NA	1	\$0.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL	6	NA	1	\$438.00
Technical Report Reviewer	\$73.00	HOURL	4	NA	1	\$292.00
Clerical/Word Processing	\$59.00	HOURL	6	NA	1	\$354.00
SUBTOTAL EMPLOYEE LABOR			39			\$3,707.00
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE		NA	1	\$0.00
SUBTOTAL EXPENSES						\$0.00
<b>TASK #3 GRAND TOTAL =</b>						<b>\$3,707.00</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard

**TASK 4:** Drilling Pre-Field, Permitting, USA Marking, and Coordination

Prepare Workplan, Health and Safety Plan, mark site as required by Underground Services Alert (USA) North, make required notifications to USA, SCDHS-EHD, and the City. Prepare drilling permits and pay fees. Coordination with a drilling company to install two (2) shallow monitoring/extraction wells through the former UST excavation area inside the Corporation Yard property.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL		NA	1	\$0.00
Senior / Project Manager	\$139.00	HOURL	4	NA	1	\$556.00
Associate / Project Consultant	\$119.00	HOURL	1	NA	1	\$119.00
Sr. Staff Consultant	\$99.00	HOURL	18	NA	1	\$1,782.00
Junior Consultant/Senior Technician	\$92.00	HOURL	4	NA	1	\$368.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL	2	NA	1	\$146.00
Technical Report Reviewer	\$73.00	HOURL	4	NA	1	\$292.00
Clerical/Word Processing	\$59.00	HOURL	4	NA	1	\$236.00
<b>SUBTOTAL EMPLOYEE LABOR</b>			37			<b>\$3,499.00</b>
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$330 + \$70 ea additional	\$400.00	TASK	1	\$60.00	1	\$460.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY	1	NA	2	\$66.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE	20	NA	2	\$22.60
<b>SUBTOTAL EXPENSES</b>						<b>\$548.60</b>
<b>TASK #4 GRAND TOTAL =</b>						<b>\$4,047.60</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard

**TASK 5:** Drill and Install Two (2) Monitoring/Remediation Wells

Install two (2) 4-inch monitoring/remediation wells. Borings to be lithology logged and field screened for contaminants. Retain soil and groundwater samples for analytical testing. As previously directed by the SCDHS-EHD, one saturated soil sample at the depth of 17 feet bgs in one boring will be collected and submitted for analysis. Develop monitoring/remediation wells. Contain all waste generated from the drilling activities in DOT approved drums, label, and profile for disposal. Survey TOC of the new well and the locations of the borings. Up to two (2) soil and two (2) groundwater samples to be delivered to the analytical laboratory for testing.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL		NA	1	\$0.00
Senior / Project Manager	\$139.00	HOURL	3	NA	1	\$417.00
Associate / Project Consultant	\$119.00	HOURL	3	NA	1	\$357.00
Sr. Staff Consultant	\$99.00	HOURL	24	NA	1	\$2,376.00
Junior Consultant/Senior Technician	\$92.00	HOURL	12	NA	1	\$1,104.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL		NA	1	\$0.00
Technical Report Reviewer	\$73.00	HOURL	1	NA	1	\$73.00
Clerical/Word Processing	\$59.00	HOURL	2	NA	1	\$118.00
<b>SUBTOTAL EMPLOYEE LABOR</b>			45			<b>\$4,445.00</b>
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance	\$350.00	TASK	1	\$52.50	1	\$402.50
Concrete Corer	\$750.00	TASK	1	\$112.50	1	\$862.50
Surveyor	\$1,750.00	TASK	1	\$262.50	1	\$2,012.50
Laboratory (See Attached Breakdown)	\$1,179.20	TASK	1	\$176.88	1	\$1,356.08
Driller	\$6,000.00	TASK	1	\$900.00	1	\$6,900.00
Confluence - Development/Sampling	\$2,000.00	TASK	1	\$300.00	1	\$2,300.00
Disposal/Landfill Fees	\$175.00	TASK	10	\$262.50	1	\$2,012.50
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY	4	NA	1	\$132.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH	2	NA	1	\$16.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH	2	NA	1	\$106.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY	1	NA	1	\$53.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY	3	NA	1	\$300.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE	20	NA	3	\$33.90
<b>SUBTOTAL EXPENSES</b>						<b>\$16,486.98</b>
<b>TASK #5 GRAND TOTAL =</b>						<b>\$20,931.98</b>



## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 6:** Additional Subsurface Investigation Report

Prepare a technical report describing the field activities and findings of this investigation. The report will include a summary of findings including analytical data, dissolved concentration and soil concentration maps, potentiometric map, survey data, conclusions, and recommendations. Upload site data to GeoTracker as required.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL	1	NA	1	\$165.00
Senior / Project Manager	\$139.00	HOURL	4	NA	1	\$556.00
Associate / Project Consultant	\$119.00	HOURL	3	NA	1	\$357.00
Sr. Staff Consultant	\$99.00	HOURL	8	NA	1	\$792.00
Junior Consultant/Senior Technician	\$92.00	HOURL	20	NA	1	\$1,840.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL	10	NA	1	\$730.00
Technical Report Reviewer	\$73.00	HOURL	4	NA	1	\$292.00
Clerical/Word Processing	\$59.00	HOURL	8	NA	1	\$472.00
<b>SUBTOTAL EMPLOYEE LABOR</b>			58			<b>\$5,204.00</b>
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE		NA	1	\$0.00
<b>SUBTOTAL EXPENSES</b>						<b>\$0.00</b>
<b>TASK #6 GRAND TOTAL =</b>						<b>\$5,204.00</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 7:** Prepare and Conduct a HVDPE Event

Prepare a workplan and submit to the SCDHS-EHD for approval. Conduct a HVDPE event based on the observed petroleum concentrations remaining on-site. The newly proposed monitoring/remediation wells in the former UST excavation area and MW-12. GHD anticipates conducting an initial 30 day HVDPE event with a provisional 30-day event if needed to obtain site closure at the site. The HVDPE events may be performed in two 30-day HVDPE events (60 days total) if preliminary data indicates. Concentration trends and mass removal rates will be monitored. Other parameters will be assessed such as extraction well flow rate that can be sustained, projected mass removal rates, review dissolved concentration trends, and prepare recommendations. Assume 30 days of extraction and 80,000 gallons of water to contain, treat, and discharge.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL	2	NA	1	\$330.00
Senior / Project Manager	\$139.00	HOURL	24	NA	1	\$3,336.00
Associate / Project Consultant	\$119.00	HOURL		NA	1	\$0.00
Sr. Staff Consultant	\$99.00	HOURL	16	NA	1	\$1,584.00
Junior Consultant/Senior Technician	\$92.00	HOURL	40	NA	1	\$3,680.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL	2	NA	1	\$146.00
Technical Report Reviewer	\$73.00	HOURL	6	NA	1	\$438.00
Clerical/Word Processing	\$59.00	HOURL	10	NA	1	\$590.00
SUBTOTAL EMPLOYEE LABOR			100			\$10,104.00
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)	\$4,488.00	TASK	1	\$673.20	1	\$5,161.20
CalClean Inc. Mobile HVDPE Contractor (30 days)	\$44,000.00	TASK	1	\$6,600.00	2	\$101,200.00
Water Treatment and Discharge	\$3,000.00	TASK	1	\$450.00	2	\$6,900.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit	\$1,000.00	TASK	1	\$150.00	1	\$1,150.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY	15	NA	2	\$990.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE	20	NA	20	\$226.00
SUBTOTAL EXPENSES						\$115,627.20
<b>TASK #7 GRAND TOTAL =</b>						<b>\$125,731.20</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 8:** HVDPE Event Report

Prepare a findings report based on the HVDPE event (30 or 60 days). After the completion of the HVDPE event, summarize the data, compare initial and ending dissolved groundwater concentrations, estimate radius of influence, and mass removed. Evaluate option for additional events. Evaluate and make recommendations for site closure.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL	2	NA	1	\$330.00
Senior / Project Manager	\$139.00	HOURL	8	NA	1	\$1,112.00
Associate / Project Consultant	\$119.00	HOURL	24	NA	1	\$2,856.00
Sr. Staff Consultant	\$99.00	HOURL	8	NA	1	\$792.00
Junior Consultant/Senior Technician	\$92.00	HOURL	5	NA	1	\$460.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL	6	NA	1	\$438.00
Technical Report Reviewer	\$73.00	HOURL	6	NA	1	\$438.00
Clerical/Word Processing	\$59.00	HOURL	5	NA	1	\$295.00
SUBTOTAL EMPLOYEE LABOR			64			\$6,721.00
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE		NA	1	\$0.00
SUBTOTAL EXPENSES						\$0.00
<b>TASK #8 GRAND TOTAL =</b>						<b>\$6,721.00</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 9:** Purge Water Disposal

Profile and coordinate the disposal of the purge water generated from the Semi-Annual monitoring and sampling events; meet the disposal company at the site during pickup. Two planned events, one for 2015 and one for 2016.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL		NA	2	\$0.00
Senior / Project Manager	\$139.00	HOURL	1	NA	2	\$278.00
Associate / Project Consultant	\$119.00	HOURL	1	NA	2	\$238.00
Sr. Staff Consultant	\$99.00	HOURL	4	NA	2	\$792.00
Junior Consultant/Senior Technician	\$92.00	HOURL		NA	2	\$0.00
Junior Technician	\$79.00	HOURL		NA	2	\$0.00
Drafting	\$73.00	HOURL		NA	2	\$0.00
Technical Report Reviewer	\$73.00	HOURL		NA	2	\$0.00
Clerical/Word Processing	\$59.00	HOURL		NA	2	\$0.00
SUBTOTAL EMPLOYEE LABOR			6			\$1,308.00
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	2	\$0.00
Concrete Corer		TASK	1	\$0.00	2	\$0.00
Traffic Control		TASK	1	\$0.00	2	\$0.00
Laboratory (See Attached Breakdown)	\$339.00	TASK	1	\$50.85	3	\$1,169.55
Driller		TASK	1	\$0.00	2	\$0.00
Disposal/Landfill Fees Quarterly Event	\$225.00	TASK	1	\$33.75	2	\$517.50
Disposal/Landfill Fees Annual Event	\$225.00	TASK	1	\$33.75	3	\$776.25
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE	20	NA	2	\$22.60
SUBTOTAL EXPENSES						\$2,485.90
<b>TASK #9 GRAND TOTAL =</b>						<b>\$3,793.90</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard  
**TASK 10:** Prepare State UST Cleanup Fund Reimbursement  
Numbers 15 and 16

Prepare and submit two reimbursements to the USTCF. GHD will need the assistance of the City of Rohnert Park in providing the necessary backup and cancelled checks that are required. Additional reimbursements and follow-up to the USTCF will be prepared (if directed) for similar costs described below.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL		NA	1	\$0.00
Senior / Project Manager	\$139.00	HOURL	4	NA	2	\$1,112.00
Associate / Project Consultant	\$119.00	HOURL		NA	1	\$0.00
Sr. Staff Consultant	\$99.00	HOURL		NA	1	\$0.00
Junior Consultant/Senior Technician	\$92.00	HOURL		NA	1	\$0.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL		NA	1	\$0.00
Technical Report Reviewer	\$73.00	HOURL	11	NA	2	\$1,606.00
Clerical/Word Processing	\$59.00	HOURL	2	NA	2	\$236.00
<b>SUBTOTAL EMPLOYEE LABOR</b>			17			<b>\$2,954.00</b>
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE		NA	1	\$0.00
<b>SUBTOTAL EXPENSES</b>						<b>\$0.00</b>
<b>TASK #10 GRAND TOTAL =</b>						<b>\$2,954.00</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard

**TASK 11:** Prepare Low-Threat Closure Policy Documentation

This Task will involve the review of available files and site data to evaluate for site closure by Low Threat Underground Tank Case Closure Policy (August 2012) and Resolution No. 92-49, or closure per Tri-Regional Board Staff Recommendations dated April 16, 2004 (if required an addition \$5,000 is needed to cover the document preparation). This Task will be implemented once site conditions warrant.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL	1	NA	1	\$165.00
Senior / Project Manager	\$139.00	HOURL	1	NA	1	\$139.00
Associate / Project Consultant	\$119.00	HOURL	2	NA	1	\$238.00
Sr. Staff Consultant	\$99.00	HOURL	6	NA	1	\$594.00
Junior Consultant/Senior Technician	\$92.00	HOURL	10	NA	1	\$920.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL	4	NA	1	\$292.00
Technical Report Reviewer	\$73.00	HOURL	4	NA	1	\$292.00
Clerical/Word Processing	\$59.00	HOURL	3	NA	1	\$177.00
<b>SUBTOTAL EMPLOYEE LABOR</b>			31			<b>\$2,817.00</b>
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE		NA	1	\$0.00
<b>SUBTOTAL EXPENSES</b>						<b>\$0.00</b>
<b>TASK #11 GRAND TOTAL =</b>						<b>\$2,817.00</b>

## FEE ESTIMATING SHEET

**PROJECT:** City of Rohnert Park Corporation Yard

**TASK 12:** Prepare Public Notice for Site Closure

GHD will provide assistance and information to complete the public notification process for site closure consideration. The proposed scope of work includes: 1. Obtain available property owners names, addresses, Assessor's parcel numbers for a radius of not less than 200 feet and not more than 300 feet from the boundaries of the site; 2. Prepare a list of properties and transmit list to the SCDHS-EHD. Mailing labels will be provided if requested by the SCDHS-EHD.

ITEM	RATE	UNIT	QUANTITY	MARKUP	TOTAL # EVENTS	TOTAL
<b>GHD LABOR</b>						
Principal Geologist	\$165.00	HOURL	0.5	NA	1	\$82.50
Senior / Project Manager	\$139.00	HOURL	2	NA	1	\$278.00
Associate / Project Consultant	\$119.00	HOURL		NA	1	\$0.00
Sr. Staff Consultant	\$99.00	HOURL	10	NA	1	\$990.00
Junior Consultant/Senior Technician	\$92.00	HOURL		NA	1	\$0.00
Junior Technician	\$79.00	HOURL		NA	1	\$0.00
Drafting	\$73.00	HOURL		NA	1	\$0.00
Technical Report Reviewer	\$73.00	HOURL	4	NA	1	\$292.00
Clerical/Word Processing	\$59.00	HOURL	2	NA	1	\$118.00
<b>SUBTOTAL EMPLOYEE LABOR</b>			18.5			<b>\$1,760.50</b>
<b>EXPENSES</b>						
<b>Subcontractors</b>						
Utility Clearance		TASK	1	\$0.00	1	\$0.00
Concrete Corer		TASK	1	\$0.00	1	\$0.00
Traffic Control		TASK	1	\$0.00	1	\$0.00
Laboratory (See Attached Breakdown)		TASK	1	\$0.00	1	\$0.00
Driller		TASK	1	\$0.00	1	\$0.00
Equipment Rental		TASK	1	\$0.00	1	\$0.00
Disposal/Landfill Fees		TASK	1	\$0.00	1	\$0.00
<b>Permits</b>						
Well/Boring Permits \$312 + \$66 ea additional		TASK	1	\$0.00	1	\$0.00
Discharge Permit		TASK	1	\$0.00	1	\$0.00
Encroachment Permit		TASK	1	\$0.00	1	\$0.00
<b>Equipment Costs</b>						
Misc. Small Items	\$33.00	DAY		NA	1	\$0.00
Tyvek/Polyethylene Suits	\$8.00	SUIT		NA	1	\$0.00
Gloves - Nitrile, Lined, Heavyweight	\$2.59	PAIR		NA	1	\$0.00
Gloves - Nitrile, Disposable, Unlined	\$0.50	PAIR		NA	1	\$0.00
Organic Vapor Cartridge R51A	\$10.08	PAIR		NA	1	\$0.00
2" Disposable Bailer with drain tube	\$8.00	EACH		NA	1	\$0.00
Purge Pump 2" submersible	\$59.00	DAY		NA	1	\$0.00
Pressurized Bailer with Filter	\$25.00	EACH		NA	1	\$0.00
Encore Sample Set (includes 3-(5) gm. Samplers)	\$30.00	EACH		NA	1	\$0.00
Soil Tubes (stainless steel)	\$10.00	EACH		NA	1	\$0.00
Hand Auger with Split Spoon and Hammer	\$30.00	DAY		NA	1	\$0.00
55-gal Drum	\$53.00	EACH		NA	1	\$0.00
2" Weighted Surge Block	\$5.00	EACH		NA	1	\$0.00
Locking Well Caps	\$29.00	EACH		NA	1	\$0.00
Padlock	\$13.00	EACH		NA	1	\$0.00
Water Level/Interface Indicator Probes	\$53.00	DAY		NA	1	\$0.00
Photovac TIP Photo -Ion Detector	\$100.00	DAY		NA	1	\$0.00
Dissolved Oxygen / ORP Multi-Meter	\$53.00	DAY		NA	1	\$0.00
Field Nitrate/Phosphate Tests	\$2.00	EACH		NA	1	\$0.00
Sensidyne Pump and Tubes	\$33.00	DAY		NA	1	\$0.00
Air Sampling Pump	\$50.00	DAY		NA	1	\$0.00
pH/Cond/Temp Meter	\$53.00	DAY		NA	1	\$0.00
Turbidity Meter	\$26.00	DAY		NA	1	\$0.00
Pipe Finder (metal detector)	\$20.00	DAY		NA	1	\$0.00
Surveying Equipment (Level/transit, tripod, rod/prism, tape/chain)	\$46.00	DAY		NA	1	\$0.00
Traffic Control Barricades	\$7.00	WEEK		NA	1	\$0.00
Mileage	\$0.565	MILE		NA	1	\$0.00
<b>SUBTOTAL EXPENSES</b>						<b>\$0.00</b>
<b>TASK #12 GRAND TOTAL =</b>						<b>\$1,760.50</b>



## LABORATORY ANALYSES

### Supplemental Cost Information: Commercial Rates for Laboratory Analyses

PROJECT NAME: City of Rohnert Park Corporation Yard  
PROJECT NUMBER: 02056-11001

PROJECT MANAGER:

David J. Vossler

Supplemental Cost Information: Commercial Rates for Laboratory Analyses								
Task #	Sample	Analysis	Laboratory Method	Soil, Water, or Air	Cost per Sample (without overhead)	# Samples	Total Cost Per Line	Total Cost Per Task
1	Semi-Annual/Annual Sampling	TPH-G, BTEX, 5 Oxy's, Pb	EPA Methods 8015M, 8260B	Water	\$195.00	20	\$3,900.00	
	Annual - 6 wells						\$0.00	
	Quarterly - 4 wells						\$0.00	
			Disposal	Water	\$3.00	20	\$60.00	
			GeoTracker (10%)		\$396.00	1	\$396.00	\$4,356.00
5	Well Installations	TPH-G, -D, BTEX, and MTB	EPA Method 8015M, 8260B	Soil	\$195.00	2	\$390.00	
	2 wells, 2 samples each			Water	\$195.00	2	\$390.00	
	Soil Disposal	TPH-G, -D, BTEX, and Lead		Soil	\$280.00	1	\$280.00	
			Disposal	Soil/Water	\$3	4	\$12.00	
			GeoTracker		\$107.20	1	\$107.20	\$1,179.20
7	HVDPE Pilot Test	TPH-G, BTEX, 5 Oxy's, Pb	EPA Methods 8015M, 8260B	Water	\$195.00	10	\$1,950.00	
		TPH-G, -D, -W, BTEX, and Dis		Air	\$210.00	10	\$2,100.00	
							\$0.00	
			Disposal		\$3.00	10	\$30.00	
			GeoTracker		\$408.00	1	\$408.00	\$4,488.00
9	Purge water disposal	TPH-G, D, BTEX, and MTB	EPA Method 8015M, 8260B	Water	\$110.00	3	\$330.00	
			Disposal		\$3.00	3	\$9.00	
							\$0.00	
							\$0.00	
							\$0.00	\$339.00
Total Analytical Cost =							\$10,362.20	\$10,362.20