



**Ceres**  
Associates

*Sustaining  
Environments  
Worldwide*

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April 17, 2006  
Proposal: CA1264-4

Ted Dang  
Tomorrow Development  
1305 Franklin, #500  
Oakland, California

**Proposal:**  
**Soil Vapor Survey**  
**Deeper Soil & Groundwater Sampling**  
2547 East 27th Street  
Oakland, California

Dear Mr. Dang:

Ceres Associates is pleased to forward this proposal to conduct a soil vapor survey and deeper soil and groundwater sampling at 2547 East 27th Street, Oakland, California (Property).

**Purpose**

Ceres Associates has prepared an interim corrective action plan which includes a risk assessment for the Property. The risk assessment is complete, with the exception of data relevant to potential future vapor intrusion risks associated with in-place benzene, toluene, ethylbenzene, and xylene concentrations as well as subsurface petroleum hydrocarbon concentrations.

Further, contamination beneath the Property as well as off-site, has been defined vertically to approximately 20 feet below ground surface. However, deeper analysis has not yet been conducted. Ceres Associates proposes advancing deeper soil borings to assess for the potential that contamination in the first hydrogeologic zone (shallow groundwater) has migrated vertically and the potential for impacts to other, deeper hydrogeologic zones.

**Scope**

Ceres Associates proposes conducting the following activities at the Property in furtherance of the risk assessment and Corrective Action Plan being prepared for the Property:

- Health and Safety Plan
- Notification of Underground Service Alert
- Obtaining appropriate permits

- Soil Vapor Survey
- Soil and Groundwater Sampling
- Completion of the Risk Assessment

### Health and Safety Plan

A site-specific Health and Safety Plan (HASP) will be prepared by Ceres Associates prior to commencing field operations. The HASP will address known or potential health and safety hazards that may be present at the Property, and possible precautions to avoid personal injury from the hazards. The HASP will include a map of the Property area with a direct route to the nearest emergency medical facility. Ceres Associates will conduct worker's Health and Safety meetings prior to the commencement of each day's scheduled field activities.

### Underground Services Alert (USA)

At least 48 hours prior to initiating field activities, Ceres Associates will mark the anticipated sampling locations on the surface of the Property and notify Underground Services Alert (USA). USA will notify its database of utility companies to visit the Property to find if the proposed sample locations will potentially impact subsurface utility lines. In addition, each boring location will be cleared with a private utility locator.

### Permits

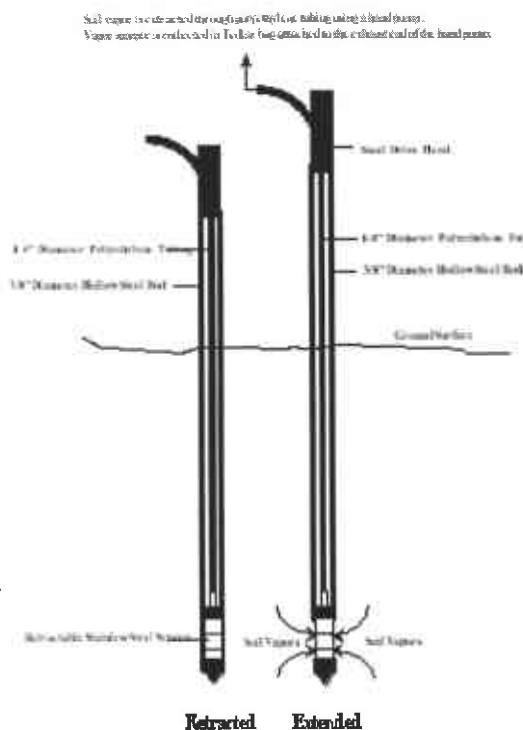
Ceres Associates will obtain necessary permits from the Alameda County Public Works Department and other appropriate agencies as required by law.

### Soil Vapor Survey

Ceres Associates will install borings using an hydraulically driven Geoprobe type system. Two soil vapor samples from each of ten locations will be collected. Sampling points will be placed across the Property.

The soil vapor samples will be collected from target depths of approximately 2 and 5 feet below ground surface (bgs) using portable soil vapor sampling equipment shown in the diagram below. Samples will be collected in laboratory-cleaned single-use syringes and delivered to a state-certified laboratory for analysis,

#### SOIL VAPOR PROBE ASSEMBLY



using U.S. EPA Method 8260 for volatile organic compounds (VOCs).

The soil vapor boreholes will be backfilled to ground surface with neat cement after sampling is completed.

### **Deeper Soil & Groundwater Sampling**

Ceres Associates proposes to advance an additional two (2) borings on the Property to approximately 40 feet below ground surface utilizing dual-walled sampling equipment and direct push rigs. The samples will be placed in the general vicinity of EX-1. The purpose of this sampling is to assess the potential impact to soil and groundwater beneath 20 feet.

At four or five-foot intervals, deeper than 20 feet below ground surface, soil will be placed in a Ziplock® bag and allowed to volatilize. Photoionization Detector (PID) readings will be taken from the Ziplock® bag using a headspace method. Two samples of undisturbed soil nearest the highest PID readings will be submitted for analysis and the others will be held at the laboratory for further analysis if necessary.

One groundwater sample (consisting of three VOAs and one amber bottle) will be collected from each boring if a hydrogeologic zone is encountered deeper than 20 feet below ground surface but within 40 feet of the surface.

Additionally, soil logs will be generated for these two borings from at least 20 to 40 feet below ground surface.

#### Soil Sampling

Soil samples will be collected in 1½-inch diameter polypropylene tubes. The sample tubes will be driven into undisturbed soil, the ends of the tubes will be sealed with plastic caps. The tubes will be labeled with unique identification information and stored in a chest cooled with ice, for delivery to the state certified analytical laboratory. Ceres Associates will follow chain-of-custody protocol.

#### Groundwater Sampling

Groundwater samples from each soil boring will be collected by placing a temporary PVC well screen into each boring and allowing groundwater to penetrate the well screen or by utilizing a direct push hydropunch to sample water from a specified depth (according to the soils analysis, where groundwater is likely to be encountered below 20 feet). Disposable polyethylene bailers or tubing will be used to collect groundwater. Groundwater samples will be placed into laboratory-cleaned glass containers, labeled with unique identification numbers and placed into an ice-cooled chest for delivery to a State of California-certified analytical laboratory.

Borings will be backfilled with Portland cement and bentonite.

Laboratory Analyses

Soil and groundwater samples collected from sampling activities at the Property will be sent to McCampbell Analytical Inc., of Pacheco, California (a State certified laboratory) for analysis. Ceres Associates will request that the laboratory analyze selected soil and groundwater samples for:

- Volatile organic compounds (VOCs) using US EPA method 8260b

**Cost**

Ceres Associates proposes to conduct the aforementioned scope of work for the following consideration:

**Soil Vapor Analysis**

	Rate	Day 1	Subtotal
H&S Plan	\$ 250.00	1	\$ 250.00
Sub (Vironex)	\$ 3,000.00	1	\$ 3,000.00
Sub (McCampbell)	\$ 4,500.00	1	\$ 4,500.00
Equipment	\$ 600.00	1	\$ 600.00
Mileage	\$ 0.75	60	\$ 45.00
<i>Field</i>			
Staff Professional	\$ 95.00	10	\$ 950.00
Project Professional	\$ 110.00	10	\$ 1,100.00
Project Manager	\$ 120.00	4	\$ 480.00
Snr Project Manager	\$ 150.00	2	\$ 300.00
<i>Report</i>			
Staff Professional	\$ 95.00	6	\$ 570.00
Project Professional	\$ 110.00	2	\$ 220.00
Project Manager	\$ 120.00	2	\$ 240.00
Snr Project Manager	\$ 150.00	1	\$ 150.00
Clerical	\$ 60.00	1	\$ 60.00
Supplies	\$ 100.00	1	\$ 100.00
		<i>Sub (SVA)</i>	\$ 12,565.00

**Soil and Groundwater Sampling**

	Rate	Day 1	Subtotal
H&S Plan	\$ 250.00	1	\$ 250.00
Permits	\$ 1,500.00	1	\$ 1,500.00
Mileage	\$ 0.75	60	\$ 45.00
Sub (Vironex)	\$ 3,500.00	1	\$ 3,500.00
Sub (McCampbell)	\$ 2,500.00	1	\$ 2,500.00

Equipment	\$	250.00	1	\$	250.00
<i>Field</i>					
Staff Professional	\$	95.00	10	\$	950.00
Project Professional	\$	110.00	10	\$	1,100.00
Project Geologist	\$	120.00	5	\$	600.00
Project Manager	\$	120.00	2	\$	240.00
Snr Project Manager	\$	150.00	1	\$	150.00
<i>Report</i>					
Staff Professional	\$	95.00	8	\$	760.00
Project Professional	\$	110.00	4	\$	440.00
Project Geologist	\$	120.00	2	\$	240.00
Project Manager	\$	120.00	2	\$	240.00
Snr Project Manager	\$	150.00	1	\$	150.00
Clerical	\$	60.00	1	\$	60.00
Supplies	\$	100.00	2	\$	200.00
CAD Operator	\$	115.00	6	\$	690.00

Sub(S&GW) \$ 13,865.00

**Total \$ 26,430.00**

If the preceding scope of work and costs are acceptable, please indicate so by returning a signed copy of this proposal to Ceres Associates.

If you have questions or comments, please don't hesitate to contact us at (707) 748-3170 or via email at [ryanmeyer@ceresassociates.com](mailto:ryanmeyer@ceresassociates.com).

Sincerely,  
Ceres Associates

Accepted by:

\_\_\_\_\_  
Ryan Meyer                      Date  
Project Manager

\_\_\_\_\_  
Ted Dang                                      Date  
Tomorrow Development

EXHIBIT A  
SCOPE OF WORK

**BACKGROUND:**

The property was formerly developed with a fuel and service station between 1927 and 1994. In 1994, one 100- gallon waste oil UST and four 500-gallon gasoline UST's were removed from the property. After the tanks were removed, the excavation pits were lined with visqueen plastic and backfilled with the excavated materials.

The current owner acquired the subject property at a tax default sale from the County of Alameda. In 2001, a Phase I ESA report, was conducted that verified the prior use of the property and the removal of the UST's. The consultant concluded that "Soil remediation and subsurface investigation of the subject site must be performed before redeveloping the property.

In 2002, a Phase II ESA report was completed. Three borings were made and monitoring wells were installed in each boring. This report concluded that concentrations of TPH-g, TPH-d, and xylenes exceeded regulatory action limits. They recommended additional soil and groundwater sampling to determine the extent of soil contamination and to confirm the groundwater results from their initial study.

In 2005 Ceres Associates was retained to complete additional soil and groundwater sampling. The petroleum hydrocarbon and BTEX compounds identified were above regulatory action limits in the groundwater, but generally not in the soil. This conclusion includes both on and off site sample points. The property lacks an impermeable surface layer, and given the rate of precipitation for Oakland, the rate of infiltration of contaminants from the soil to the groundwater has likely increased since the removal of the asphalt surface during demolition. The potential migration of target analyte contaminants to deeper aquifer layers is not yet known; however, based upon the general soil profiles of sites in the City of Oakland and at the property, it is anticipated that the clay layers of varying thickness, located throughout the soil horizon, will help retard the vertical flow of contaminants.

Ceres is now preparing a Corrective Action Plan. They believe that the off site contamination is not a big risk. Upon completion of a risk assessment, they are prepared to request closure from the County.

**WORK TO BE PERFORMED BY GRANTEE:**

Grantee shall conduct response actions located at Oakland, California.

The Grantee shall be responsible for the performance of the work as described herein.

- a) The Grantee shall immediately notify the State Water Board Grant Manager and propose an amendment agreement in the event that, for reasons beyond the reasonable control of the grantee or reasons that cannot be anticipated at the execution of the agreement, the response action exceeds the scope or budget of the agreement or it becomes apparent that the grantee will be unable to complete the work. The proposed amendment must include the following:

- 1) Justification for amendment;

- 2) A description of the additional services required to complete the Scope of Work.

## SCOPE OF WORK

### **Past Eligible Assessment Response Work Conducted**

1/28/05 Soil and Groundwater Sampling Report \$17,150

2/28/2006 Additional Soil and Groundwater Sampling with Monitoring Well Installations  
\$62,549

### **Proposed Assessment Response Work**

The remaining work includes the following:

1. Conduct pilot test of EX-1 for pump and treat
2. Conduct soil vapor survey on property surface
3. Conduct sampling of deeper aquifer to confirm that release is limited to upper aquifer.
4. Conduct sampling of monitoring wells already installed to assess present extent of contamination
5. Operate pump and treat system and re-assess contamination extent.

Ceres Associates believe that the off site contamination is not a big risk. Depending on the results of some additional borings and current analysis of monitoring wells samples, an updated risk assessment will be provided. If those results indicate no increase in concentration of contaminants, they are prepared to request closure from the County . .

EXHIBIT B  
INVOICING AND BUDGET DETAIL

1. INVOICE PACKAGES

1.1 No disbursement under this Grant Agreement will be made except upon receipt of an acceptable Standard Form Payment Request (Exhibit E) duly executed by or on behalf of the Grantee. The Grantee's duly authorized representative, who has been approved by the State Water Board, must execute all Payment Request forms. A Payment Request form must accompany all invoice packages. The invoice packages shall be submitted to the State Water Board's Grant Manager not to exceed one invoice package per month and in the minimum amount of \$5,000. The address for submittal is:

Judy Reid, Grant Manager  
State Water Resources Control Board  
Division of Financial Assistance  
P. O. Box 944212  
Sacramento, CA 94244-2120

1.2 Payment of any invoice shall be made only after receipt of a complete, adequately supported, properly documented and accurately addressed invoice. Invoices received by The State Water Board that are not consistent with the approved format will be cause for an invoice to be disputed. In the event of an invoice dispute, The State Water Board's Grant Manager will notify the Grantee by initiating an "Invoice Dispute Notification" form. Payment will not be made until the dispute is resolved and a corrected invoice submitted. Failure to use the address exactly as provided above may result in return of the invoice to the Grantee. Payment shall be deemed complete upon deposit of the payment, properly addressed, postage prepaid, in the United States mail. All invoices must be approved by The State Water Board's Grant Manager.

1.3 Notwithstanding any other provision of this Agreement, no disbursement shall be required at any time or in any manner which is in violation of or in conflict with federal or state laws, rules, or regulations, or which may require any rebates to the Federal Government, or any loss of tax-free status on state bonds, pursuant to any Federal statute or regulation.

1.4 Grantee shall provide proof of payment to the consultant or contractor for each invoice submitted for payment under this Grant. If the grantee is not able to demonstrate proof of payment, the State Water Board, at its discretion, may issue two-party checks for the payment of costs identified in Exhibit B, Budget (see Exhibit D). The two-party checks will require the endorsement of both Grantee and the company providing the services.

1.5 Notwithstanding any other provision of this Agreement, the Grantee agrees that The State Water Board may retain ten percent (10%) of the grant amount specified in this Agreement until "Notice of Completion/Final Inspection" from local regulatory agency of the Project is received.

1.6 The invoice shall contain the following information:

- 1.6.1 The word "INVOICE" and a sequential invoice number should appear in a prominent location at the top of the page(s);
- 1.6.2 Printed name of the consultant or contractor
- 1.6.3 Business address of the consultant or contractor, including P.O. Box, City, State, and Zip Code;
- 1.6.4 Printed name of the Grantee;
- 1.6.5 Business address of the Grantee, including P.O. Box, City, State, and Zip Code;



- 1.6.6 The date of the invoice;
  - 1.6.7 The number of the Agreement upon which the invoice is based;
  - 1.6.8 The site address (location) where the work was performed;
  - 1.6.9 All subcontractor invoices must be listed on the invoice; a copy of the subcontractor invoice should be attached to the consultants/contractors invoice and
  - 1.6.10 An itemized account of the work for which the grantee is seeking payment;
    - 1.6.10.1 A brief description of the work performed, including dates of performance and the name or initials of the person performing the work;
    - 1.6.10.2 The method of computing the amount due. On cost reimbursable agreements, invoices must be itemized based on the tasks specified in the Budget.
    - 1.6.10.3 The total amount due; this should be in a prominent location in the lower right-hand portion of the last page and clearly distinguished from other figures or computations appearing on the invoice; the total amount due shall include all costs incurred by the Grantee under the terms of this Agreement; and
- a) 1.7 Original signature and date (in ink) of Grantee or its authorized representative.
- b) 1.8 Final invoice shall be clearly marked "FINAL INVOICE" and submitted NO LATER THAN **one month after end date.**

**2. BUDGET CONTINGENCY CLAUSE**

The maximum amount to be encumbered under this Agreement for the 200X-XX fiscal year ending June 30, 200X shall not exceed Grant Amount Alpha (\$Numeric).

If the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of The State Water Board to make any payments under this Agreement. In this event, the State shall have no liability to pay any funds whatsoever to Grantee or to furnish any other considerations under this Agreement and Grantee shall not be obligated to perform any provisions of this Agreement. Nothing in this Agreement shall be construed to provide the Grantee with a right of priority for payment over any other Grantee.

If funding for any fiscal year is reduced or deleted by the Budget Act for purposes of this program, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an Agreement amendment to Grantee to reflect the reduced amount.

**3. BUDGET**

**Past Eligible Assessment Response Costs**

1/28/05	Soil and Groundwater Sampling Report	\$17,150
2/28/2006	Additional Soil and Groundwater Sampling with Monitoring Well Installations	<u>\$62,549</u>
<b>Total eligible assessment response action costs incurred to date:</b>		<b>\$79,699</b>

### **Proposed Assessment Response Costs**

1. Conduct pilot test of EX-1 for pump and treat
2. Conduct soil vapor survey on property surface
3. Conduct sampling of deeper aquifer to confirm that release is limited to upper aquifer.
4. Conduct sampling of monitoring wells already installed to assess present extent of contamination

Total for above \$26,430. See attached proposal from Ceres Associates dated 4/17/06 for details.

#### Additional work necessary:

Operate pump and treat system to get benzene levels below 1 part per billion in each well  
Monitor wells for at least 4 quarters  
Request closure from local regulators

We will not know how long the pump will need to run (a few weeks to a few months).  
Estimated costs to complete above scope \$150,000 - \$200,000

The above Budget includes all material, equipment and labor necessary to complete the project.  
The State Water Board shall not be responsible for the payment of any cost overruns.

#### **4. PAYMENT OF PROJECT COSTS.**

The Grantee agrees that it will provide for payment of its full share of Project costs and that all costs connected with the Project will be paid by the Grantee on a timely basis.

#### **5. AUDIT DISALLOWANCES.**

The Grantee agrees it shall return any audit disallowances to The State Water Board.