

FAX

Alameda County Health Services Agency
1131 Harbor Bay Parkway, Suite 280
Alameda, CA 94502-6577

Date: 3/16/99

Project No.: 261112

Number of pages including cover sheet: 7

To:

Eva Chu

Alameda County Health Services Agency

1131 Harbor Bay Parkway, Suite 280

Alameda, CA 94502-6577

Bob Price
General Contractor
100 Pine Street, Suite 100
San Francisco, CA 94111

Phone: 510-567-6762

Fax Phone: 510-337-9335

CC:

Phone: 415-434-9400

Fax Phone: 415-434-1365

Email:

REMARKS:

- Hard copy to follow
- Urgent
- For your review
- Reply ASAP
- Please comment

Eva,

Geomatrix is no longer working on this project, although Bob Price has asked us to submit a bid for the well installations as part of the three bid requirement for the Tank Fund. Attached is our 8/4/98 cost estimate submitted to Bob Price for the previously required groundwater investigation and disposal of investigation-derived wastes. The background information, particularly the drum inventory, should be useful. I visited the site on 7/21/98 and observed the drums and buckets. Some are old, but all appeared structurally sound. They are resting on a small concrete pad and it is very easy to determine whether additional drums have been added as there is no further space on the pad.

My contact numbers for Bob Price are 541-476-9977 (home phone), 541-471-2253 (home fax), and 888-315-1460 (mobile phone).

Please call if you any more questions.

4 August 1998
Project 2611.01

Mr. Bob Price
537 Hidden Valley Road
Grants Pass, Oregon 97527

Subject: Scope of Work and Cost Estimate - Limited Groundwater Investigation and
Disposal of Investigation-Derived Wastes
Clark's Home and Garden
23040 Clawiter Road
Hayward, California

Dear Mr. Price:

At your request, Geomatrix Consultants, Inc. (Geomatrix), has prepared the following scope of work and cost estimate to perform additional groundwater sampling and to dispose of investigation-derived waste (IDW) stored at the subject site. The scope of work proposed by Geomatrix is designed to satisfy requirements of the Alameda County Environmental Health Services (ACEHS) and the Alameda County Public Works Agency, Clean Water Program (ACPWA-CWP).

SCOPE OF WORK

Geomatrix proposes the following scope of work:

Task 1: Limited Additional Groundwater Investigation

ACEHS, in their 15 December 1997 letter, requested additional groundwater investigation to determine the extent of petroleum in off-site groundwater. Based on a telephone conversation with Mr. Brian Oliva of ACEHS on 15 April 1998, ACEHS requires additional investigation consisting of two groundwater sampling points placed west of the borings B-5 and B-6, which were advanced at the west side of Clawiter Road on 19 February 1997. Mr. Oliva indicated that a brief addendum to the existing Work Plan¹ should be submitted before proceeding with the additional work.

Based on this information, we have prepared a cost estimate to perform this additional work, which will be conducted using a similar approach to that used in conducting previous work at the site. The scope of work is summarized as follows. We will advance two borings for groundwater sampling on the property west of Clawiter Road, directly across from Clarks

¹ Geomatrix Consultants, Inc., 1996, Groundwater Screening Results and Scope of Work for Additional Groundwater Investigation, June.

Geomatrix Consultants, Inc.
Engineers, Geologists, and Environmental Scientists

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Home and Garden site. It will be necessary to obtain permission from the property owner prior to advancing these borings. Therefore, we have included an estimated cost to negotiate an access agreement. Based on our previous off-site work in February 1997, we anticipate that the two borings will be advanced to a depth of 20 feet below ground surface, and grab groundwater samples will be collected. The scope of work and costs associated with this work will depend on the groundwater conditions encountered off-site; additional analytical testing (total petroleum hydrocarbons as diesel [TPHd] analyses following laboratory filtration and silica gel cleanup) may be necessary as described in the Work Plan. A letter report of our findings will be prepared and submitted to ACEHS.

Task 2: Disposal of Investigation-Derived Wastes

During a recent inspection of the site by Mr. Paul Smith of ACPWA-CWP, the following containers of IDW were observed: eight 55-gallon drums and four 5-gallon buckets. He requested that these drums be properly disposed. Of these drums, the following were generated by Geomatrix during the November 1995 and February 1997 investigations: four 5-gallon buckets of soil cuttings, three 55-gallon drums of cleaning water, and one 55-gallon drum of purge water from on-site well MW-1. The four remaining 55-gallon drums contain solids (3 drums) or liquids (1 drum). Although the contents of the remaining four 55-gallon drums are not known, the solids drums may be from the installation of well MW-1 by Terratech in 1991 and the liquids drum from routine groundwater monitoring by Blainetech. In addition to these IDW containers, we anticipate that the scope of work proposed in Task 1 will result in the generation of two additional 5-gallon buckets of soil cuttings and one additional 55-gallon drum of cleaning water.

Prior to disposal, these IDW must be characterized to determine appropriate disposal options. We therefore propose that these containers be sampled at the conclusion of Task 1 and the samples be submitted for laboratory analysis. Because of the potential presence of volatile compounds, one sample will be collected per container. We propose the following characterization program. The soil cuttings (four existing and two anticipated 5-gallon buckets from Task 1) will be consolidated into a single 55-gallon drum and one soil sample will be collected for analysis. One water sample will be collected from each of the four cleaning water drums (three existing and one anticipated from Task 1) for analysis, and one water sample will be collected from the purge water drum for analysis. Because source of water in these drums is known, each of these samples will be analyzed for constituents of concern in groundwater at the site, including benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), and TPHg in accordance with EPA Method 8021/8020 and TPHd in accordance with EPA Method 8015M. Because source of contents in the four remaining drums is somewhat uncertain, one sample will be collected from each of the four unknown IDW drums and

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analyzed for volatile organic compounds (VOCs) in accordance with EPA Method 8260 and TPHd.

Based on the results of these analyses we will assist you with the evaluation of disposal options. After your selection of a disposal facility, we will coordinate transport and disposal with Clearwater Environmental. Appropriate manifests or bills of lading will be forwarded for your review and signature prior to removal of materials from the site. Following proper disposal and receipt of facility-signed documentation, we will prepare a brief letter that summarizes the removal and disposal and includes copies of disposal documentation.

ESTIMATED BUDGET


Based on the scope of work described above and in the Work Plan, we estimate that the cost to complete the scope of work will range from \$15,082 to \$15,362 depending on the number of analyses performed and disposal costs. A breakdown of our estimated budget by task is presented on the attached table.

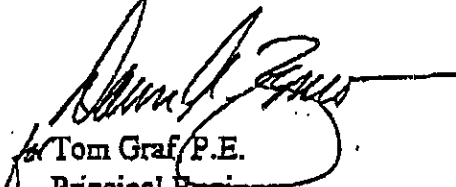
Our services will be performed on a time-and-materials basis in accordance with our standard schedule of charges and conditions (attached). We will invoice only for the actual expenses and number of hours expended on the project and will not exceed the maximum estimated budget of \$15,362 without your prior authorization.

We will not commence implementation of the scope of work until we receive your written authorization to proceed. Please contact either of the undersigned if you have any questions or require additional information.

Sincerely,

GEOMATRIX CONSULTANTS, INC.


Ross A. Steenson, R.G., C.Hg.
Senior Hydrogeologist


for Tom Graf, P.E.
Principal Engineer

RS/mrcm
K:\Doc_Safe\2611\clarklr.doc

Attachments



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AUTHORIZATION

If this cost estimate meets with your approval and you would like us to proceed with the work described herein at the 23040 Clawiter Road property, Hayward, California, please sign the authorization and return one complete original letter to us for our files. Geomatrix services will be conducted in accordance with the terms and conditions in our 28 December 1996 Schedule of Charges and Conditions (attached). We will not exceed the estimated maximum budget of \$15,362 without your prior knowledge and authorization.

Approval and acceptance of this scope of work and billing rates are acknowledged by the signatures of duly authorized representatives of the parties to this agreement.

MR. BOB PRICE

Signature	Title	Date
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GEOMATRIX CONSULTANTS, INC.

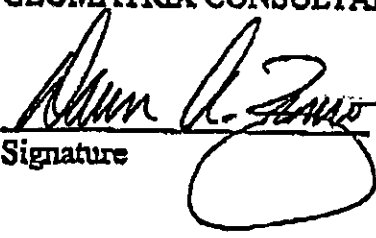
 Signature	Vice President Title	8/4/98 Date
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TABLE 1

**LIMITED GROUNDWATER INVESTIGATION
COST ESTIMATE
Clark's Home and Garden
22430 Clawiter Road
Hayward, California**

Subcontractors

Utility Clearance (3 hours)	\$150	
Drilling and Sampling (2 off-site boring locations) Includes lawn replacement and continuous coring for lithologic logging.	\$1,600	
Analytical Costs Two grab groundwater samples and 1 QA/QC sample for BTEX, MTBE, TPHg and TPHd with silica gel cleanup (\$200/sample). Per the work plan, additional sample volume will be collected from each grab groundwater sampling location. If residual petroleum hydrocarbons are encountered in the vadose zone, these additional samples will be passed through a 0.7 micron glass fiber filter before analysis for TPHd after silica gel cleanup. The purpose of the filtering is to evaluate the potential impact of petroleum absorbed to sediment in the two grab groundwater samples. The additional cost to analyze these samples is \$140 each.	\$1,020	\$1,300
Overnight Air/Courier Costs to Friedman & Bruya	\$90	
Subtotal:	\$3,060	\$3,340

Geomatrix

Drilling Permit	\$200
Access Agreement with Property Owner	\$1,016
Senior Geologist II (1 hour @ \$125/hour)	
Senior Geologist I (1 hour @ \$115/hour)	
Staff Geologist I (8 hours @ \$70/hour)	
Technical Typist (2 hours @ \$48/hour)	
Automobile and fuel (2 days @ \$60/day)	
Utility Clearance Coordination/Oversight	\$270
Staff Geologist I (3 hours @ \$70/hour)	
Automobile and fuel (1 day @ \$60/day)	
Investigation Field Staff	\$700
Staff Geologist I (10 hours @ \$70/hour)	
Equipment/Supplies (PID, groundwater sampling equipment, field vehicle)	\$500



TABLE 1

**LIMITED GROUNDWATER INVESTIGATION
COST ESTIMATE
Clark's Home and Garden
22430 Clawiter Road
Hayward, California**

Data Evaluation and Interface with RWQCB and ACHCSA	\$1,905
Principal Engineer (1 hour @ \$175/hour)	
Senior Geologist II (2 hours @ \$125/hour)	
Senior Geologist I (8 hours @ \$115/hour)	
Staff Geologist I (8 hours @ \$70/hour)	
Report Preparation	\$2,062
Senior Geologist II (2 hours @ \$125/hour)	
Senior Geologist I (6 hours @ \$115/hour)	
Staff Geologist I (10 hours @ \$70/hour)	
CAD/Graphic Designer (2 hours @ \$75/hour)	
Technical Typist (4 hours @ \$48/hour)	
Production Assistant (1 hour @ \$35/hour)	
Photocopies (300 pages @ \$0.15/page)	
Subtotal:	\$6,653
Total:	\$9,713 - \$9,993

Notes:

Subcontractor costs include Geomatrix 15% markup.

TABLE 2

**TASK 2: DISPOSAL OF INVESTIGATION-DERIVED WASTES
COST ESTIMATE**

 Clark's Home and Garden
 22430 Clawiter Road
 Hayward, California
Subcontractors¹

Analytical Costs - IDW generated by Geomatrix One soil sample and four water samples will be analyzed for BTEX, MTBE, and TPHg (\$80/sample) and TPHd with silica gel cleanup (\$120/sample).	\$1,000
Analytical Costs - IDW generated by others Four water samples will be analyzed for VOCs (\$150/sample) and TPHd (\$120/sample).	\$1,080
Transport/Disposal Cost Allowance ² Costs to transport and dispose are estimated at \$120 per 55-gallon drum. The six 5-gallon buckets of soil will be transferred into one 55-gallon drum. Therefore, a total of nine 55-gallon drums are to be disposed.	<u>\$1,080</u>
Subtotal:	\$3,160

Geomatrix

Sampling ³ Staff Geologist I (3 hours @ \$70/hour)	\$210
Coordination with Transporter, Disposal Facility, and Client Senior Geologist I (8 hours @ \$115/hour) Staff Geologist I (2 hours @ \$70/hour) Technical Typist (2 hours @ \$48/hour)	\$1,156
Observation of IDW Removal Staff Geologist I (4 hours @ \$70/hour) Automobile and Fuel (1 day @ \$60/day)	\$340



TABLE 2

TASK 2: DISPOSAL OF INVESTIGATION-DERIVED WASTES

COST ESTIMATE

Clark's Home and Garden
 22430 Clawiter Road
 Hayward, California

Preparation of Letter Documenting IDW Disposal	\$503
Senior Geologist II (1 hour @ \$125/hour)	
Senior Geologist I (1 hour @ \$115/hour)	
Staff Geologist I (2 hours @ \$70/hour)	
Technical Typist (2 hours @ \$48/hour)	
Photocopies (180 pages @ \$0.15/page)	
Subtotal:	\$2,209
Total:	\$5,369

Notes:

- ¹ Subcontractor costs include Geomatrix 15% markup.
- ² These costs are estimated based on our experience at other petroleum leak sites, but transport/disposal costs may differ substantially depending on the results of the analytical testing. We have assumed that results indicate that all waste is non-hazardous.
- ³ Assumes sampling of IDW drums is performed concurrently with the groundwater investigation activities (Task 1) to minimize mobilization costs.