

desert petroleum inc.

John Rutherford
Director
Environmental Affairs

May 21, 1997

Mr. Michael Mosbacher
State Water Resources Control Board
Division of Clean Water Programs
UST Cleanup Fund
P. O. Box 944212
Sacramento, CA 94244-2120

RE: DESERT PETROLEUM INC. CLAIM #003274, OAKLAND, CA

Dear Mr. Mosbacher:

Enclosed please find our request for pre-approval for the above referenced location.

This request is for work consisting of a Tier Three (3) Health Risk Assessment for both on-site and off-site areas found to have both soil and groundwater contamination. Desert has expended a large amount for remedial work at this location. The purpose of the submitted risk assessment is to determine the areas remaining which may require further or more extensive work or which may be removed from additional work requirements based on findings of the risk assessment. As the areas of contamination involve off-site residential property a extensive risk assessment is needed to move the site to a closure at some future point.

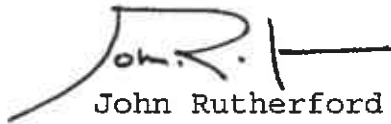
We are soliciting a waiver of the three bid requirement for this work for the following reasons:

- 1-The consultant providing our proposal for the subject assessment is currently familiar with the site and surrounding area.
- 2-The consultant has extensive experience in the design and implementation of this type of specialized investigation.
- 3-The consultant has access to existing data, the assessment can move quickly with costs for research and procurement of existing data reduced.
- 4-On 5/1/97 a meeting held in the office of Alameda County Health Care Services was attended by Mr. Sepehr the submitting consultant. The consultant is familiar with the parameters for the subject risk assessment discussed with agency staff.

5-Due to the impact to the surrounding residential area the scope of this assessment is extensive and beyond Tier 1 & 2 RBECA work production. This work requires specialized understanding of methods and criteria for this type of assessment. Consultants qualified to do this type of work are limited. The qualifications of the consultant SOMA Environmental Engineering Inc. support their selection to conduct this Health Risk Assessment.

Your consideration and approval for waver of the three bid requirement for this work is requested.

Very truly yours,



John Rutherford

Enclosures:

Jennifer Eberle, ACHCS
Madulla Logan, ACHCS
Kevin Graves, RWQCB
Mansour Sepehr, SOMA
Tony Razi

CALIFORNIA UNDERGROUND STORAGE TANK CLEANUP FUND
COST PRE-APPROVAL REQUEST

(Complete form, enclose required items, sign, date & return)

TO: MICHAEL MOSBACHER Fax: (916) 227-4530
UST Cleanup Fund, 2014 T Street, Sacramento, CA 95814

I. CLAIM INFORMATION

A. CLAIM NO. 003274 B. CLAIMANT DESERT PETROLEUM INC.

C. CLAIM STATUS (complete appropriate section)

- i) LOC ISSUED FOR \$ 150,000
ii) ON PRIORITY LIST? YES NO IF YES, PRIORITY CLASS A B C D
iii) NOT YET APPLIED TO THE FUND, EXPECTED APPLICATION DATE: _____

D. CONTACT PERSON: JOHN RUTHERFORD PHONE: (805) 644-6784
ADDRESS: P. O. BOX 1601 FAX: (805) 654-0720
OXNARD, CALIFORNIA 93032

II. TYPE OF REQUEST (check appropriate boxes)

PRE-APPROVAL \$ 26,120.00 AMOUNT REQUESTED

3-BID REVIEW THREE BID WAIVER PREFERRED BID (if applicable)

THE FOLLOWING DOCUMENTS ARE REQUIRED FOR THE SPECIFIED REQUEST. ALL DOCUMENTS REQUESTED MUST BE SUBMITTED OR THE REQUEST(S) WILL BE RETURNED UNPROCESSED.

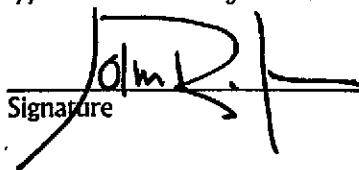
A. REQUEST FOR PRE-APPROVAL OF PROPOSED COSTS - The following items are required before review and determination will be made by Fund staff.

- A complete signed copy of the proposed Investigation Workplan or Corrective Action Plan (CAP) (as defined and required by Article 11, Chapter 16, California Underground Storage Tank Regulations). Corrective Action Plans must include the required feasibility study and chosen cost effective alternative.
- A signed copy of the oversight agency approval letter for the Workplan/CAP.
- A complete copy of the Request For Bids, including all attachments. A list of all firms requested to bid must be included.
- Complete copies of all bids and other correspondence submitted in response to the Request For bids.
- A time schedule, if not part of bid documents, anticipated for project initiation and duration.
- A detailed project budget, which includes breakdowns of staff/task/hour with associated estimated totals.

B. THREE-BID REVIEW/EVALUATION/DETERMINATION - Fund staff will assist any claimant requesting an evaluation of bids upon request. The following information must be submitted - 1, 2, 3 AND 4 as described in Item A above.

III. CERTIFICATION

I certify under penalty of perjury that all information submitted with this request is complete and accurate and in accordance with all applicable laws and regulations.


Signature

MAY 21, 1997
Date

May 15, 1997

Mr. John Rutherford
Director of Environmental Affairs
Desert Petroleum, Inc.
P.O. Box 1601
Oxnard, CA 93032

Subject: SOMA Environmental Engineering, Inc. Proposal to Conduct
Human Health Risk Assessment at Former Desert Petroleum
Station # 793, Located at 4035 Park Boulevard, Oakland,
California

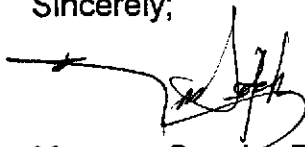
Dear Mr. Rutherford:

Based on my telephone conversation with Tony Razi, I am sending you a copy of SOMA Environmental Engineering, Inc. (SOMA) cost proposal to conduct human health risk assessment at the subject property. Based on Alameda County Health Agency's (ACHA) request, the risk assessment will include the following scenarios:

- On-site Industrial/commercial workers
- Off-site residents
- On and off-site construction workers

If the attached proposal is acceptable please notify us so we can prepare the work plan and submit to ACHA. SOMA will initiate the risk assessment after receiving ACHA's approval of the submitted work plan. Meanwhile please do not hesitate to call me at (510) 244-6600 if you need further assistance.

Sincerely;



Mansour Sepehr, Ph.D., P.E
Principal

Enclosures:

cc: Mr. Tony Razi without enclosures
Mr. Alireza Shirazian without enclosures

**Proposal to Conduct
Human Health Risk Assessment
Using Risk Based Corrective Action (RBCA)
at Former Desert Petroleum Station # 793
4035 Park Boulevard
Oakland, California**

Introduction

This proposal has been prepared by SOMA Environmental Engineering, Inc. (SOMA) per Desert Petroleum's request. On November 1989, Desert Petroleum was notified by the Alameda County Health Agency (ACHA) that gasoline is trickling into the sewer line on Brighton Avenue. Apparently the source of the released gasoline was the gasoline station on 4035 Park Boulevard (the "Site") which was owned by the Desert Petroleum. According to the Desert Petroleum's consultant, Western Geo-Engineers (WEGE), the regular unleaded supply line failed the subsequent tank and piping integrity tests. In response to ACHA request, on December 7, 1989 the station was shut down and fuel tanks were emptied. The subsequent investigation revealed a 1/2 inch-diameter hole in the regular unleaded supply line beneath the eastern pump island.

Since 1989, a number of on and off-site investigations have been conducted to evaluate the horizontal and vertical extent of petroleum hydrocarbon contamination beneath the site. According to WEGE, three underground gasoline storage tanks and one waste oil tank have been removed in June 1994. The pump island has been excavated to a maximum depth of 17 feet and the base of excavation has been filled with pea gravel to about 5.5 feet depth. In May 1996, soil probe survey along the sewer lateral in the northerly direction conducted to evaluate the extent of petroleum contamination. The results of WEGE investigation has revealed the presence of free product sheen in front yard of resident at 4032 Brighton Avenue. As a part of on-going soil and groundwater remediation, from August 14, 1996 until September 9, 1996 a total of 303 gallons of water and sheen of product have been removed by WEGE.

Based on ACHA request, on September, 20, 1996, air monitoring of the crawl spaces of some residences along with sewer manways conducted by WEGE. The results of laboratory analysis on soil gas samples collected from the crawl spaces and manways showed no detectable concentrations of petroleum hydrocarbons such as benzene, toluene, ethylbenzene, and xylenes (BTEX).

On May 6, 1997 letter of ACHA to Mr. John Rutherford, ACHA indicated that for site closure and definition of soil and groundwater cleanup levels, a public health

risk assessment should be conducted. This proposal has been prepared to conduct public health risk assessment in on-and off-site areas.

Scope of Work

The prime objective of this proposal is to conduct human health risk assessment to evaluate the current and future adverse human health effects of chemicals found in soil and groundwater on on-site workers, off-site residents and on and off-site construction workers. If the results of risk assessment indicates an adverse health effects on the site residents and occupants exist, the soil and groundwater cleanup-levels protective of human health will be defined. SOMA's scope of services to conduct the requested human health assessment are as follows:

- Task 1: Data Evaluation**
- Task 2: Preparation of Work Plan**
- Task 3: Conducting Chemical Transport Modeling**
- Task 4: Conducting Baseline Public Health Risk Assessment**
- Task 5: Defining Soil and Groundwater Clean-up Levels**
- Task 6: Report Preparation**
- Task 7: Project Management and Meetings**

These tasks are further described as follows:

Task 1: Data Evaluation:

The soil, soil gas and groundwater chemical data as well as the hydrogeologic data and free product readings will be compiled and input into the database. The data will be used initially to develop 2 and 3-dimensional soil and groundwater chemical plumes. The graphical presentation of current and future soil and groundwater contamination will help to visualize the extent of soil and groundwater contamination. SOMA will report any data gap(s) which may be gathered for conducting the proposed public health risk assessment. The data evaluation will help to develop a site's conceptual model for identification of chemical exposure pathways for on and off-site residents.

Task 2: Preparation of Work Plan:

After data compilation, SOMA will construct site conceptual model. The site conceptual model will evaluate the exposure pathways and chemical source, exposure scenarios and involved receptors. The site conceptual model will be used as a guide to prepare a work plan to implement the human health risk assessment. The work plan will discuss the methodology, and rationale for including or excluding the proposed exposure pathways for conducting risk

assessment. The proposed work plan will be discussed with the ACHA staff. After obtaining the regulatory agency's approval, the work will be initiated.

Task 3: Conducting Chemical Transport Modeling

The modeling task will include:

1. Groundwater flow and chemical transport modeling to evaluate the extent of dissolved petroleum constituent in ground water under different management alternatives. The management alternatives will include no-action and action scenarios;
2. Evaluation of emission rate of volatile organic chemicals (i.e., BTEX and MTBE) from soil and groundwater and free product, if any;
3. Evaluation of indoor and outdoor air concentration of chemicals, and
4. Evaluation of impact of BTEX and MTBE residual concentrations on groundwater quality.

Task 4: Conducting Baseline Public Health Risk Assessment

Using the measured (for current) and estimated (simulated values using models) exposure point concentrations, the carcinogenic and non-carcinogenic impact of chemicals found in soil and groundwater on human health will be evaluated. In conducting human health risk, sensitive receptors such as day-care centers, schools, nursing homes, etc. in a 1/2 mile radius from the site will be located and used.

Per ACHA's request, the following scenarios will be included in conducting the human risk assessment:

1. Off-site residents
2. On-and off-site industrial/commercial workers
3. On and off-site construction workers

Task 5: Definition of Clean-up Levels

If the carcinogenic and non-carcinogenic human health risks exceed the agreed upon risk values, the soil and groundwater cleanup levels will be defined. The recommended cleanup levels will be the protective of human health and the environment.

Task 6: Report Preparation

Upon completion of the project, SOMA will prepare a written report. The report will include a summary of site's hydrogeologic setting, the results of data review and selection of chemicals of potential concern as well as the selected exposure routes and on and off-sensitive receptors. The report will also include the methodology, rationale and results of chemical transport modeling and associated carcinogenic and non-carcinogenic adverse health effects to the exposed receptors. The human receptors will include on and on-site workers, off-site residents as well as construction workers for an exposure duration of up to three month.

Task 7: Project Management and Meetings

Dr. Mansour Sepehr, P.E. will be the project manager. As such he will be responsible for administrative and technical aspects of project. Dr. William Bosan, Principal Toxicologist at SOMA will be responsible for conducting human health risk assessment. Mr. Ramkishore Rao, Staff hydrogeologist will assist in conducting chemical transport modeling and report preparation. We anticipate that we will have two meetings with ACHA. One meeting will be held to discuss the work plan and seek ACHA's approval of proposed work plan. Upon completion of the project, the second meeting will be held to present the results of risk assessment and discuss any possible comment or question that ACHA may have.

Estimated Budget

The work will be conducted based on time and material basis. However, the estimated budget will not be exceeded, unless ACHA or the client may wish to change the scope of work.

Table-1 presents the estimated budget for the conducting the human health risk assessment.

Schedule

Assuming timely receipt of the data and necessary documents for review, it is anticipated that SOMA can conduct the proposed scope of work in 5-6 weeks from approval of work plan by the ACHA..

Table-1				
Estimated Budget for				
Conducting Human Health Risk Assessment				
at 4035 Park Blvd., Oakland, California				
		Hour	Rate/hr	Price
Task 1:	Data Evaluation			
	Project Engineer/Geologist	20	\$80.00	\$1,600.00
			Task Total	\$1,600.00
Task 2:	Preparation of Work Plan			
	Principal Engineer/Toxicologist	20	\$100.00	\$2,000.00
	Project Engineer/Geologist	25	\$80.00	\$2,000.00
			Task Total	\$4,000.00
Task 3:	Groundwater Flow and Chemical Transport Modeling			
	Principal Hydrogeologist	26	\$100.00	\$2,600.00
	Project Hydrogeologist	45	\$80.00	\$3,600.00
			Task Total	\$6,200.00
Task 4:	Baseline Public Health Risk Assessment			
	Principal Toxicologist	32	\$100.00	\$3,200.00
	Project Geologist	35	\$80.00	\$2,800.00
			Task Total	\$6,000.00
Task 5:	Definition of Cleanup Levels			
	Principal Toxicologist	11	\$100.00	\$1,100.00
	Project Hydrogeologist	15	\$80.00	\$1,200.00
			Task Total	\$2,300.00
Task 6:	Report Preparation			
	Principal Hydrogeologist/Toxicologist	12	\$100.00	\$1,200.00
	Project Hydrogeologist	35	\$80.00	\$2,800.00
	Graphics			\$400.00
	Reproduction			\$200.00
			Task Total	\$4,600.00
Task 7:	Project Management/Meeting			
	Principal Hydrogeologist/Toxicologist	12	\$110.00	\$1,320.00
	Telephone/Fax			\$100.00
			Task Total	\$1,420.00
			Grand Total	\$26,120.00