August 15, 2006

Mr. Barney Chan
ACEHS
1131 Harbor Bay Pkwy, Ste. 250
Alameda, CA 94502

RE: Chevron # 94816
301 14th Street, Oakland
ACEHS RO#: 478

Dear Mr. Chan:

This letter is to inform you of a change in management for the above-referenced site.

Effective immediately, the Cambria Environmental Technology, Inc. project manager is:

Laura Genin
Cambria Environmental Technology, Inc.
5900 Hollis St., Suite A
Emeryville, CA 94608
Office phone: 510-420-3367

Please contact Laura Genin at 510-420-3367 or Bob Foss at 510-420-3348 you have any questions.

Regards,

Cambria Environmental Technology, Inc.

Chevron

J. Mark Inglis
Project Manager

Retail & Terminal Business Unit
Chevron Environmental Management Company
6001 Bollinger Canyon Road,
Room K2256
San Ramon, CA 94583-2324
Tel 925 842 1589
Fax 925 842 8370
jmark.inglis@chevron.com

October 12, 2005

Mr. Ariu Levi
Chief Contract Project Director
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Closed LOP

RE: Case ID: RO0000290
Chevron #9-4816
301 14th St.
Oakland, CA 94612

Pursuant to your letter dated October 4, 2005, which was included with the notification of the case closure sent by your office, I am submitting this response regarding the current record owners of fee title at the site referenced above. Based on our review of available records, the list of current record owners of fee title submitted with your letter is complete, and all parties have been notified. As the underground-storage tanks were removed and the environmental case closed, our obligations at this site are complete.

I believe this satisfies your request. Thank you for the notification of case closure.

J. Mark Inglis

J. Mark Inglis

cc: D. Drogos
B. Chan
Jennifer Jordan, SWRCB
Peter Iwate, Kansai
Joseph Hernon, 301 14th Street Associates, LLC

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Joseph Hernon
301 14th Street Associates, LLC
795 Folsom St. 1st Floor
San Francisco, CA 94612

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* Casie Simpson C. Date of Delivery 10/27/05

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from ser* 7002 2030 0006 9574 1150

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

7

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 18, 2005

Mr. Mark Inglis
Chevron Environmental Management Co.
6001 Bollinger Canyon Rd., Room K2256
San Ramon, CA 94583-2324

Mr. Peter Iwate
Kansai Development Inc.
755 Sansome St.
San Francisco, CA 94111

Dear Messrs. Inglis and Iwate:

Subject: Fuel Leak Site RO0000290, 301 14th St., Oakland, CA 94612

Alameda County Environmental Health has received Water Board concurrence for closure of the subject underground tank site. Prior to issuing closure, we require that you properly destroy all wells, monitoring or remediation, at this site. Please contact the Alameda County Public Works Agency at (510) 670-6633 for specific requirements and send our office a copy of the well destruction report.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: files, D. Drogos
Mr. D. Wong, ICES, P.O. Box 99288, Emeryville, CA, 94662-9288
Wlclrq301 14th St

CAMBRIA

February 25, 2005

Mr. Barney Chan
ACHSA
1131 Harbor Bay Pkwy.
Oakland, CA 94502-6577

RE: 301 14th Street, Oakland
ACHSCA RO#: 0000290

Dear Mr. Chan:

This letter is to inform you of a change in management for the above-referenced site.

Effective immediately, the new ChevronTexaco project manager will be:

Mr. Mark Inglis
ChevronTexaco
6001 Bollinger Canyon Rd., K-2256
San Ramon, CA 94583
Phone: 925-842-1589

Please contact either Mr. Mark Inglis or Cambria if you have any questions.

Regards,

Cambria Environmental Technology, Inc.

cc: Mark Inglis, Chevron Texaco

Cambria
Environmental
Technology, Inc.

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

Site #: 94816

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

January 5, 2005

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Mr. Joseph Hernon
301 14th Street Associates LLC
795 Folsom Street, 1st Floor
San Francisco, CA 94107

Dear Mr. Hernon:

Subject: Fuel Leak Case RO0000290, Chevron Service Station #9-4816,
301 14th St., Oakland, CA 94612

Alameda County Environmental Health (ACEH) staff has recently reviewed the case file for the subject site including the December 10, 2004 Site Mitigation Plan (SMP) prepared by Innovative & Creative Environmental Solutions (ICES). As you are aware, ICES was contracted by Kansai Development Inc.,(Kansai), the purchaser of this site to complete site mitigation and expedite site closure. We understand that residential housing is proposed as the future use at this site. The SMP proposes to excavate residual "hot spot" soil contamination and remove petroleum- contaminated groundwater to below residential clean up levels. In addition, post remediation soil and groundwater samples will be collected in areas formerly impacted by gasoline. We concur with the SMP provided the following technical comments are adequately addressed.

TECHNICAL COMMENTS

1. Soil samples from the excavation are proposed for every 25 linear foot along the sidewalls and approximately every 225 square feet from the base of the excavation. The excavation sidewalls will be sampled at 5 foot intervals, every change in lithology and at any evidence of contamination as indicated visually or by PID reading. Samples will be analyzed for TPHg, BTEX, MTBE, ether oxygenates and lead scavengers (EDB and EDC) by EPA 5030/GDFID and EPA 8260. Soil and groundwater will be removed, as possible, to below environmental screening levels, (ESLs).
2. Post-remediation soil and groundwater samples will be collected in the seven areas proposed in the ICES January 5, 2005 Addendum I to the SMP. Soil samples will be generally collected at 20-22' bgs, where contamination was formerly found and at locations indicating contamination. These borings should be screened and analyzed similar to those from the excavation. Your groundwater sample should be collected from a slotted casing placed in the boring with an exposed screen interval of no longer than 4'.
3. Any well that will be damaged or destroyed during the excavation must be properly decommissioned under permit from Alameda County Public Works agency.

4. Your investigation report should be submitted following the schedule below. Your report should include data interpretation and recommendations including the potential collection of soil gas samples, if warranted. Please notify our office with 72 hours advance written notification (e mail preferred) prior to field work and sampling.

TECHNICAL REPORT REQUEST

- 90 days after approval of work plan- Soil and groundwater investigation report should be submitted to our office.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

Please call me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, D. Drogos
Mr. Peter Iwate, Mountain Bay Construction Inc., 755 Sansome St., San Francisco, CA 94111
Mr. Peng Leong, ICES, P.O. Box 99288, Emeryville, CA 94662-9288
Ms. Karen Streich, ChevronTexaco, 6001 Bollinger Canyon Rd, L2256 , P.O. Box 6012, San Ramon, CA 94583-2324

1_5_05 301 14th St

Chan, Barney, Env. Health

1B105 R0290

To: p leong
Subject: RE: 14th & Harrison

Peng:
I believe if you can delineate the vertical extent in the proposed excavation area and in the confirmation samples (including additional locations as recommended by our office) items 1 & 2 on my comments letter will be taken care of. The other items have been adequately addressed in your e mail. The rationale for post remediation samples is to verify the degree of success of the remediation, particularly in areas where initial contamination was detected. Therefore, confirmation samples should be taken from within the former tank pit and at locations down gradient which previously detected elevated soil concentrations exceeding the ESLs. So in addition to the locations you have proposed, I'd recommend additional borings near C-c, SP-5, VEW-3, C-B and near former CX2B within the former tank pit.

Sincerley,

Barney Chan
510-567-6765

-----Original Message-----
From: p leong [mailto:ices88@msn.com]
Sent: Monday, January 03, 2005 11:26 AM
To: Chan, Barney, Env. Health
Cc: dwongboard@hotmail.com
Subject: 14th & Harrison

Barney:

In response to your comments ...

Hot Spots
At a minimum, post remediation soil and groundwater samples will be collected at the following locations:
1. Between SP-2 and SP-7
2. SP-8
3. Between C-A and SP-1
4. Other locations that you specify
Note: VEW-1, C-3, SP-3, and SP-6 are within the proposed excavation limits. Previous soil data showed that elevated concentrations of petroleum constituents were encountered at depths of approximately 20 to 25 ft, primarily within the northern portion of the site. The latest groundwater and soil sample (which were collected in Dec 2004) results indicated that petroleum constituent levels at those depths have generally attenuated to non-detectable levels.

Vertical Extent
The excavation will terminate when excavation floor sample results indicate that residual petroleum constituent levels are below their respective ESLs. We anticipate that the floor of the excavation will be at a depth of approximately 25 to 27 feet.

Limitation of Excavator
The excavator that we shalll be using will has a vertical reach of 27 feet. The total depth will be 32 feet since we shall be benching down 5 feet.

Well Destruction
We propose to excavate out the wells pending approval from Alameda County Public Works Agency. In the event approval is not granted, the wells will be destroyed in accordance with their procedures.

Fax

Rorgo

MOUNTAIN BAY CONSTRUCTION INC
755 SANSOME STREET
SAN FRANCISCO, CA 94111
Phone # 415 394 7557
Fax # 415 394 7553

To: Barney Chang Fax #: 510-337-9335

From: Peter Iwate Pages: 2

Subject: Date: 12/17/04

[ ] Urgent [ ] For review [ ] Please comment [ ] Please reply

Comments:

301 14th Street Associates LLC
795 Folsom Street 1st Floor.
San Francisco CA 94107
PH; 415-675 9949
Email [redacted]

December 8th 2004.

Mr Barney Chan
Alameda County Health Care Services Agency
Department of Environment Health
1131 Harbour Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Former Chevron Service Station #9- 4816
301 14th Street, Oakland, California.

Dear Mr Chan,

I would like to inform you that "Kansai Development Inc" (Kansai), is in the process of purchasing the above mentioned property from our Company. Issuance of a site closure/no further action status is required from your department in order to obtain financing for the purchase of the property and construction of the proposed development.

I have there authorised Kansai's environmental consultant "Innovative and Creative Environmental Solutions" (ICES) to work with you to resolve the outstanding environmental issues at the property. We have a maximum of three months to conclude the sale/purchase of the property based on administrative and financial time constraints.
If you have any questions or require additional information, you can reach me by email address above, or my lawyer Rob Nicholas by phone at 415-788 6330

Thanks you for your assistance and co-operation.

Sincerely,
Joseph Hernon
The Hernon Group LLC
Manager: 301 14th Street Associates LLC.

Chan, Barney, Env. Health

To: ices88@msn.com

Subject: 301 14th St., Former Chevron Station

Peng/Derek: 10/29/04 R290

I've reviewed the files and the faxxed information you sent. The following items are issues which I believe would need to be addressed prior to closure consideration:

1. For those areas where residual concentrations exceeded the relevant Water Board ESL, some type of verification sampling must be done to show that concs. have been reduced to acceptable levels. I noticed you used residential/water is or is potentially a drinking water source. I think that we could use the ESL where groundwater is not a drinking water source if you support this with chemical/physical properties or other logic.
2. Would want to see a rose diagram to show the varying gradient directions to confirm the plume is defined.
3. The verfication samples should be able to define the vertical extent of contamination meaning sampling of saturated soils. Would need to show that there wasn't a potential for submerged NAPL. It appears that residual groundwater contamination is localized and a verification sample could be advanced there. Residual soils contamination (if still present) appears to be the issue.

Barney M. Chan
Hazardous Materials Specialist
Alameda County Environmental Health
510-567-6765

State Water Resources Control Board

Division of Clean Water Programs
1001 I Street • Sacramento, California 95814
P.O. Box 944212 • Sacramento, California • 94244-2120
(916) 341-5714 • FAX (916) 341-5806 • www.swrcb.ca.gov/cwphome/ustcf

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov.

SEP 26 2002

Alameda County
OCT 01 2002
Environmental Health

Chevron Products Company
Bob Cochran
P O Box 6004 Bldg V
San Ramon, CA 94583-0804

UNDERGROUND STORAGE TANK CLEANUP FUND (FUND), CLAIM NO. 005993, FOR SITE ADDRESS: 301 14TH ST, OAKLAND

The State Water Resources Control Board (State Board) is able to issue, pursuant to applicable regulations, the enclosed Letter of Commitment (LOC) in an amount not to exceed $135,000. This LOC is based upon our review of the corrective action costs you reported to have incurred to date. The LOC may be modified by the State Board.

It is very important that you read the terms and conditions listed in the enclosed LOC. Claims filed with the Underground Storage Tank Cleanup Fund far exceed the funding available and it is very important that you make use of the funding that has been committed to your cleanup in a timely manner.

You are reminded that you must comply with all regulatory agency time schedules and requirements and you must obtain three bids for any required corrective action. Only corrective action costs *required* by the regulatory agency to protect human health, safety and the environment can be claimed for reimbursement. **You are encouraged to obtain *preapproval of costs* for all future corrective action work (form enclosed).** If you have any questions on obtaining preapproval of your costs or the three bid requirement, please call Sunil Ramdass, our Technical Reviewer assigned to claims in your Region, at (916) 341-5757. Failure to obtain preapproval of your future costs may result in the costs not being reimbursed.

The following documents needed to submit your reimbursement request are enclosed:

"Reimbursement Request Instructions" package. **Retain this package for future reimbursement requests.** These instructions must be followed when seeking reimbursement for corrective action costs incurred after January 1, 1988.

"Reimbursement Request" forms which you **must use to request reimbursement of costs incurred.**

"Spreadsheet" forms which you **must use in conjunction with your reimbursement request.**

☛ **THIS IS IMPORTANT TO YOU, PLEASE NOTE:**

You have 90 calendar days from the date of this letter to submit your first reimbursement request for incurred corrective action costs. **NO EXTENSIONS CAN BE GRANTED**. If you fail to do so, your LOC funds will automatically be reduced to zero (deobligated). Once this occurs, any future funds for this site are subject to availability when you submit your first reimbursement request. We continuously review the status of all active claims. You must continue to remain in compliance and submit a reimbursement request every 6 months. Failure to do so will result in the Fund taking steps to withdraw your LOC.

If you have any questions regarding the enclosed documents, please contact Toru Okamoto at (916) 341-5649.

Sincerely,

Allan V. Patton, Manager
Underground Storage Tank Cleanup Fund

Enclosures

Lustis Case #: 01-0355

cc: Mr. Steve Morse
RWQCB, Region 2
1515 Clay Street, Ste. 1400
Oakland, CA 94612

Ms. Donna Drogos
Alameda County EHD
1131 Harbor Bay Pkway, 2nd Fl.
Alameda, CA 94502-6577

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

RO0000290

September 3, 2002

Ms. Karen Streich
Chevron Products Co
P.O. Box 6004
San Ramon, CA 94583

RE: Former Chevron 9-4816 at 301 14th Street, Oakland, CA

Dear Ms. Streich:

I have completed review of Gettler Ryan Inc.'s July 2002 *Groundwater Monitoring and Sampling Report* prepared for the above referenced site. Groundwater monitoring wells were sampled in June 2002. Groundwater from well C-3 contains benzene (11,000 ug/l) at levels that exceed the calculated ASTM/RBCA SSTLs (2,600 ug/l) for the site.

For the next sampling event, please analyze groundwater for ethanol, other ether oxygenates, EDB and 1,2-DCA. Also, prepare geologic cross-sections that include residual soil TPH and benzene concentrations, conduits, well screen interval, former tank locations, etc.

Lastly, do you have plans to remediate elevated TPH and benzene in well C-3? If so, please provide a workplan detailing remediation technology of choice.

If you have any questions, I can be reached at (510) 567-6762.

eva chu
Hazardous Materials Specialist

email: James Brownell (Delta Environmental)
Deanna Harding (Gettler Ryan)

chevron4816-1

Chu, Eva, Env. Health

From: Chu, Eva, Env. Health
Sent: February 22, 2002 2:01 PM
To: 'Bauhs, Tom'
Cc: 'Brownell, James'; 'Del Frate, Todd'; 'Harding, Deanna'
Subject: Former Chevron 9-4816 at 301 14th St, Oakland

Hi Tom,

Reviewed the 2nd Semi-Annual groundwater monitoring event of Dec 2001 for the above site. It is noted that the lid is missing for well C-8. Please have lid replaced and verify that the well is structurally sound.

How are the plans coming along for the reduction of TPH in the vicinity of well C-3? I haven't heard about that for quite some time now. Please update.

Thanks,

eva
evachu

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
(510) 567-6762
(510) 337-9335 fax

Delta
Environmental
Consultants, Inc.

3164 Gold Camp Drive
Suite 200
Rancho Cordova, CA 95670-6021
U S A.
916/638-2085
FAX: 916/638-8385

November 15, 2000

Ms. Eva Chu
Alameda County Health Care Services
Environmental Health Services
11311 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: *Risk-Based Corrective Action*
Former Chevron Station No. 9-4816
301 14th Street
Oakland, California
Delta Project No. DG94-816

Dear Ms. Chu:

Delta Environmental Consultants, Inc. (Delta) has been authorized by Chevron U.S.A. Product Company (Chevron) to review investigative work conducted at former Chevron Service Station No. 9-4816, located at 301 14th Street, Oakland, Alameda County, California. A Residual Management Plan (RMP), dated June 10, 1997 was prepared by Terra Vac using on-site Site Specific Target Levels (SSTL) limits for the exposure pathway of volatilization of dissolved benzene in groundwater to indoor air. SSTL's were calculated using Groundwater Services, Inc.'s *Tier 2 Guidance Manual for Risk-Based Corrective Action* (RBCA) model. The RMP proposed that if biodegradation was verified and the average on-site benzene concentration did not exceed the SSTL (2,600-ppb) for three years, the site should be granted regulatory closure. However, the SSTL was exceeded four times between December 1997 and June 2000.

At your request, Delta will re-run RBCA model for the subject site. The representative concentration of benzene will be based on the average ground water monitoring results from the on-site wells C-1 through C-3, C-5 and CR-1, during the last four quarters beginning in January 1999.

In response to our telephone conversation on August 29, 2000, the following revisions to the default values will be incorporated into the RBCA model:

- The California Maximum Contaminant Level (MCL) for dissolved benzene of 1 ppb will be used instead of the default (federal standard) valve of 5 ppb.
- The default slope factor of 0.29 will be replaced with the California value of 0.1 for benzene.
- The air exchange rate for commercial buildings will be modified from twenty exchanges per day to two exchanges per hour, as specified in the Uniform Building Code, Section 1205(c).

why 2 exch/hr?

- A target risk of 1x 10^{-6} will be used for volatilization of benzene to indoor air on-site.

If you have any questions concerning this project, please contact Ben Heningburg at (916) 536-2623.

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Benjamin I. Heningburg
Project Manager

BIH (C1001.4816 doc)

cc: Mr. Tom Bauhs – Chevron U.S.A. Products Company
Mr. Jim Brownell – Delta Environmental Consultants, Inc.

Chu, Eva, Public Health, EHS

From: Chu, Eva, Public Health, EHS
Sent: September 15, 2000 5:32 PM
To: 'jbrownell@deltaenv.com'
Subject: 310 14th Street, Oakland

I had a chance to review the Terra Vac, December 1996 and March 1997 reports. I didn't really like all I saw. So I took the liberty and input a couple of site specfic data into the Oakland RBCA Tier 2 Spreadsheet for sand sediments. I came up with cleanup levels for benzene at:

Commercial scenario: 23,000ppb
Residential scenario: 1,500ppb

Maybe the case can be close for a comercial site, with a deed restriction (no residential use without further assessment, etc).

Or, confirmation soil (at 15'bgs) and groundwater samples can be collected from hydropunches advanced 10' and 20' from Well C3, to evaluate effectiveness of the remediation conducted at the site. The data from this investigation can be averaged with groundwater data from C3, and if it does not exceed 1,500ppb, maybe the case can be closed without a deed restriction.

Let me know your thoughts on this.

Those are my thoughts for a Friday afternoon. And, as a woman, I have the perogative to change my mind.

Chevron

March 5, 1999

Chevron Products Company
6001 Bollinger Canyon Road
Building L, Room 1110
PO Box 6004
San Ramon, CA 94583-0904

Philip R. Briggs
Project Manager
Site Assessment & Remediation
Phone 925 842-9136
Fax 925 842-8370

Ms. Eva Chu
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station # 9-4816
301 14th Street
Oakland, California

99 MAR 10 PM 3:09

Dear Ms. Chu:

Enclosed is a copy of the fourth Quarter Groundwater Monitoring Report for 1998, prepared by our consultant Blaine Tech Services, Inc. for the above noted site. Ground water samples were collected and analyzed for TPH-g, BTEX and MtBE constituents.

As part of the Residual Management Plan on this site, the sampling schedule is as follows: semi-annually monitoring for the next two years until July 2000 for wells C-1, C-2, C-3 and CR-1. Annual monitoring for the next two years until July 2000 for wells C-4, C-5, C-6, C-7, C-8, C-9, MW-10 and MW-11. The semi-annually event will be conducted in the 2nd and 4th quarters, while the annual event will be performed in the 2nd quarter.

The four wells were sampled on 12/23/98, with wells C-1 and C-2 below method detection limits for all constituents. The benzene constituent declined in well CR-1 from the previous sampling event, while increasing dramatically in well C-3. (14,000 ppb) The average concentration of benzene in all onsite wells from the 12/23/98 sampling event was 3552.75 ppb, which is above the 2,600 ppb threshold limit noted in the Residual Management Plan (RMP) approved for this site.

In the RMP, if the average concentration of onsite wells exceed SSTL (2600 ppb-benzene) during any sampling event, your office should be notified within 30 days of the event and the wells re-sampled within 15 days of the sampling event. I was advised on 1/22/99 of the results and advised you the same day. Upon receiving the results I immediately advised the consultant to resample the wells, since the average concentration of benzene exceeded the threshold limit. This resampling was conducted on 1/28/99. The 12/23/98 sampling results, were not reported by the lab until 1/11/99, and to me on 1/22/99. The date to perform the resampling appears to be close to the established timeline.

In the resampling event of 1/28/99, the average concentration of benzene was 562.36 ppb, which is below the threshold limit of 2600 ppb. No further action was needed. This decrease in the average concentration of benzene was due to the dramatic decrease in the benzene concentration in well C-3 from the 12/23/98 sampling event.

Confirmation of MtBE by EPA Method 8250 was conducted in wells C-3 and CR-1 in the 1/28/99 sampling event. In well C-3 the results were less than 40 ppb and below method detection limits in CR-1.

The depth to ground water varied from 19.10 feet to 20.14 feet below grade with a direction of flow northerly.

If you have any questions or comments, call me at (925) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

Cc. Ms. Bette Owen, Chevron

Ms. Anne Payne, ChvPrk, V-1156

Ms. Joyce Massaro, Trustee
Stowell Family Trust
233 Polhemus Avenue
Atherton, CA 94025

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

June 29, 1998

STID 478

Philip Briggs
Chevron USA Inc.
P.O. Box 5504
San Ramon, CA 94583-0804

re: former Chevron sta. 9-4816, 301 - 14th St., Oakland, CA 94612

Dear Mr. Briggs:

This office has received and reviewed a Fourth Quarter Groundwater Monitoring Report, dated February 11, 1998, by Blaine Tech Services, Inc., and your cover letter and comments dated February 13, 1998, for the above site. The following are comments concerning this report:

1. You mention that the benzene concentration was above the average concentration listed as a threshold limit in the RMP approved for this site. You say that the wells are to be resampled within 15 days and yet this office has not received a subsequent report of such resampling. Furthermore, a first quarter report for 1998 would also be due for this site.
2. You requested that the site be resampled in February and this office should have received a report by now.
3. At this time it seems we will also be getting a second quarter sampling report as well, as it is almost the third quarter.

Please call me if you have any questions at (510) 567-6782.

Sincerely,

Thomas F. Peacock, Manager
Division of Environmental Protection

c: LeRoy Griffin, City of Oakland Hazardous Materials
Joyce Massaro, 233 Polhemus Ave., Atherton, CA 94027
Francis Thie, Blaine Tech Svs, 1680 Rogers Ave., San Jose, CA 95112
Dick Pantages, Chief - **files- Tom**

Chevron

February 13, 1998

Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583

Ms. Pam Evans
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Site #478

Re: Former Chevron Service Station # 9-4816
301 14th Street
Oakland, California 94612

Dear Ms. Evans:

Enclosed is a copy of the Fourth Quarter Groundwater Monitoring Report for 1997, prepared by our consultant Blaine Tech Services, Inc. for the above noted site. Ground water samples were collected and analyzed for TPH-g, BTEX and MtBE constituents.

As part of the Residual Management Plan on this site, the sampling schedule is as follows: semi-annually monitoring for the next three years for wells C-1, C-2, C-3 and CR-1; and annual monitoring for the next three years for wells C-4, C-5, C-6, C-7, C-8, C-9, MW-10 and MW-11. The semi-annually event will be conducted in the 2nd and 4th quarters, while the annual event will be performed in the 2nd quarter.

In this sampling event, monitoring well C-2 was below method detection limits for all constituents, while well C-1 was below method detection limits for the BTE and MtBE constituents. The benzene constituent declined in well CR-1, while increasing in well C-3. The average concentration of benzene in all wells from this sampling event was 3052.5 ppb, which is above the 2,600 ppb threshold limit noted in the Residual Management Plan (RMP) approved for this site.

In the RMP, if the average concentration of onsite wells exceed SSTL (2600 ppb-benzene) during any sampling event, your office should be notified within 30 days of the event and the wells re-sampled within 15 days of the sampling event. However, I just received this report and I'm now notifying your office of the exceeded concentration. As of today, I have requested Blaine Tech Services, Inc. to re-sample wells C-1, C-2, C-3 and CR-1 and they will be conducting this sampling event next week.

The exceeded total average concentration of benzene may be an anomaly, as it is approximately five times the concentration from the previous sampling event. The re-sampling requested is expected to clarify these totals, with the report submitted within 30 days. Any future concentrations exceeded will be reported in the appropriate timeline. .

The depth to ground water varied from 19.37 feet to 20.80 feet below grade with a direction of flow easterly.

If you have any questions or comments, call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Ms. Bette Owen, Chevron

Ms .Anne Payne, Chevron

Ms. Joyce Massaro
233 Polhemus Avenue
Atherton, CA 94025

Robert A. Dahl
Project Manager
Terra Vac
1651 Alvarado Street
San Leandro, CA 94577-2636

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

January 14, 1998
STID 478

Philip Briggs
Chevron USA Inc.
P.O. Box 5504
San Ramon, CA 94583-0804

re: former Chevron sta. 9-4816, 301 - 14th St., Oakland, CA 94612

Dear Mr. Briggs:

This office has received and reviewed a Second Quarter Groundwater Monitoring Report, dated August 4, 1997, by Blaine Tech Services, Inc., and your cover letter and comments dated August 6, 1997, for the above site. The following are comments concerning this reports:

The Residual Management Plan has been acceptable. The sampling schedule is acceptable.

This site will be overseen by Pam Evans, who you may call with any questions at (510) 567-6770.

Sincerely,

Thomas F. Peacock, Manager
Division of Environmental Protection

c: Tony Dahl, Terra Vac, 1651 Alvarado St., San Leandro, CA 94577-2636
Joyce Massaro, 233 Polhemus Ave., Atherton, CA 94027
Francis Thie, Blaine Tech Svs, 1680 Rogers Ave., San Jose, CA 95112
Dick Pantages, Chief - files

Chevron

August 6, 1997

Chevron Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

Marketing – Sales West
Phone 510 842-9500

Ms. Jennifer Eberle
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station # 9-4816
301 14th Street
Oakland, California 94612
Site ID 478

Dear Ms. Eberle:

Enclosed is a copy of the Second Quarter Groundwater Monitoring Report for 1997, prepared by our consultant Blaine Tech Services, Inc. for the above noted site. Ground water samples were collected and analyzed for TPH-g, BTEX and MtBE constituents.

Terra Vac's Final Remediation Status Report and Request for No Further Action Report which included a risk assessment and Residual Management Plan was submitted to your office for review and approval. Your letter of July 15, 1997 noted approval of the risk assessment with revisions and that no further active remediation is warranted. As part of the Residual Management Plan the site will continued to be monitored and sampled to insure that natural attenuation is occurring.

The sampling schedule is as follows: semi-annually monitoring for the next three years for wells C-1, C-2, C-3 and CR-1; and annual monitoring for the next three years for wells C-4, C-5, C-6, C-7, C-8, C-9, MW-10 and MW-11. The semi-annually event will be conducted in the 2nd and 4th quarters, while the annual event will be performed in the 2nd quarter, with the next event in 1998.

As per the Residual Management Plan, if the average concentration of onsite wells exceed SSTL (2,600 ppb benzene) during any sampling event, your office should be notified within 30 days of the event and the wells resampled within 15 days of the sampling event, and the case will be reevaluated if necessary. However, if biodegradation is verified and threshold limits are not reached over the next three years, the wells will be destroyed and site will be closed.

In this sampling event, monitoring wells C-4, C-6, C-7, C-9, MW-10, and C-11 were below method detection limits for all constituents. Well C-1 was below method detection limits for the benzene constituent, while the benzene constituent declined in wells C-8 and CR-1. The benzene constituent increased slightly in wells C-2, C-5 and MW-12. There was an increase in the benzene constituent in well C-3. The average concentration of benzene in all wells from this sampling event was 591.7 ppb, which is significantly below the 2,600 ppb threshold limit.

The depth to ground water varied from 19.21 feet to 20.81 feet below grade with a direction of flow northerly.

Chevron will continue to monitor the site in accordance with the sampling schedule outlined above. If you have any questions or comments, call me at (510) 842-9136.

Sincerely,
CHEVRON PRODUCTS COMPANY

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Ms. Bette Owen, Chevron

Mr. J. N. Robbins, Chevron

Ms. Joyce Massaro
233 Polhemus Avenue
Atherton, CA 94025

Robert A. Dahl
Project Manager
Terra Vac
1651 Alvarado Street
San Leandro, CA 94577-2636 (Less lab results)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

July 15, 1997
STID 478

Phil Briggs
Chevron USA Inc.
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron Service Station 9-4816, 301-14th St., Oakland CA 94612

Dear Mr. Briggs,

This letter is being sent to expound on the 6/27/97 letter signed by Dale Klettke of this office (while I was on vacation). This office has received and reviewed the following documents:

1) "Final Remediation Status Report and Request for no Further Action" report, prepared by Terra Vac (TV), dated 11/14/96;

2) Revised (draft and unsigned) "Final Remediation Status Report and Request for no Further Action" report, prepared by Terra Vac (TV), dated 3/25/97;

3) letter from TV dated 4/11/97 (notice of termination of air sparging operations); and

4) "Residual Management Plan," prepared by TV, dated 6/10/97.

Items #1, 2, and 4 document the use of Risk-Based Corrective Action (RBCA) to evaluate the risk of leaving residual concentrations of contaminants onsite. A Tier 2 risk assessment was conducted for this site. The risk assessment evaluated benzene as the single chemical of concern via the "groundwater to indoor air inhalation" pathway. The Site Specific Target Level (SSTL) was calcuated as 2,600 ppb benzene in onsite groundwater. A commercial use scenario was used. [The soil pathway was evaluated and found to not pose a problem.]

The risk assessment with revisions is approved. No further active remediation is warranted. The groundwater at the site will continue to be monitored and sampled to ensure that passive bioremediation or natural attenuation is occurring. The sampling schedule is as follows: semi-annual sampling for the next 3 years for wells C-1, C-2, C-3, and CR-1; and annual sampling for the next 3 years for wells C-4 through C-9, MW-10, and MW-11. As per the 6/10/97 "Residual Management Plan," if the average concentration of the onsite wells exceed the SSTL (2,600 ppb benzene) during any sampling event, this office should be notified within 30 days of the sampling event, the well(s) will be resampled within 15 days of the sampling event,

and the case will be reevaluated if necessary. However, if biodegradation is verified and threshold limits are not reached over the next 3 years, the wells will be destroyed and the case closure process will ensue.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

for Madhulla Logan
Hazardous Materials Specialist

cc: Tony Dahl, Terra Vac, 1651 Alvarado St., San Leandro CA 94577-2636
Joyce Massaro, 233 Polhemus Ave., Atherton CA 94027
J. Eberle/file

je.478-E

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 27, 1997
STID 478

Phil Briggs
Chevron USA Inc.
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron Service Station 9-4816, 301-14th St., Oakland CA 94612

Dear Mr. Briggs,

This office is in receipt of and has reviewed the following documents:

1) "Final Remediation Status Report and Request for No Further Action" report, prepared by Terra Vac (TV), dated 11/14/96;

2) "No Further Action Requests-draft addendums/revisions" report, prepared by Terra Vac (TV), dated 3/26/97;

3) "1st Quarter 1997 Monitoring at 9-4816" report, prepared by Blaine Tech Services (BTS), under cover letter from Chevron dated 5/17/97;

4) "Residual Management Plan," prepared by Terra Vac (TV), dated 6/10/97;

In the cover letter dated May 17, 1997 Chevron requested that monitoring wells C-4, C-6, C-7, C-8, C-9, MW-10 and MW-11 be monitored annually, and wells C-1 and C-2 be monitored quarterly. However, information submitted with the March 25, 1997 addendum/revisions to the November 14, 1996 Terra Vac report, states that semi-annual groundwater monitoring of wells C-1 through C-3 and CR-1 would be performed for the first three years. In addition, wells C-4 through C-9, MW-10 and MW-11 would be sampled and monitored quarterly for the first year and annually thereafter. **This revised sampling schedule is approved, as shown in Table 2 of the Terra Vac March 25, 1997 addenum/revision report.** A copy of Table 2 is enclosed for your review.

In addition, as per the proposed monitoring plan, if the average concentration of the onsite wells exceed the SSTL during a sampling event, the ACHCSA will be notified, the well(s) will be resampled and the site reevaluated if necessary.

If you have any questions, please feel free to contact me directly at 510-567-6761. I look forward to hearing from you soon.

TERRA VAC

We're gaining new ground.

FAX

Date: 7/8/97

Number of pages including cover sheet: 9

To: Jennifer Eberle

Phone:

Fax phone: 337-9335

CC:

From: Tony Dahl

SAN LEANDRO OFFICE

1651 ALVARADO STREET

SAN LEANDRO, CA 94577

Phone: (510) 351-8900

Fax phone: (510) 351-0221

REMARKS: ☐ Urgent ☐ For your review ☐ Reply ASAP ☐ Please comment

This is what I thought I faxed as a draft to madhulla before but must have slipped in a partially revised table.

TERRA VAC
1651 Alvarado Street, San Leandro, CA 94577-2636
Tel (510) 351-8900 ❑ Fax (510) 351-0221

June 10, 1997

Ms. Madhulla Logan
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Way Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Residual Management Plan
Former Chevron Service Station #9-4816
301 14th Street
Oakland, CA

Dear Ms. Logan:

As per our discussion, we are presenting a revised table of site threshold limits for continued monitoring at the above site. The table now shows onsite threshold limits of calculated cleanup target levels protective of human health from volatilization of dissolved benzene to indoor air. These values are site specific target levels (SSTLs) generated using RBCA software developed by Groundwater Services, Inc. Printouts are attached. The representative concentration is based on the groundwater monitoring results from the onsite wells C-1 through C-5 and CR-1, for the fourth quarter of 1996. There were several changes made to the default values of the software: 1) the California MCL for dissolved benzene of 1 ppb replaced the federal standard of 5 ppb; 2) the federal slope factor of 0.29 was replaced with the California value of 0.1 for benzene; and, 3) the air exchange rate for commercial buildings was modified from twenty exchanges per day to two exchanges per hour, as specified in the Uniform Building Code, Section 1205(c).

Utilizing a target risk of 1×10^{-5}, the modelled SSTL for volatilization of benzene to indoor air onsite is 2,600 ppb. As per the proposed monitoring plan, if the average concentration of the onsite wells exceed the SSTL during a sampling event, the ACHCS will be notified, the well(s) will be resampled and the site reevaluated if necessary. If biodegradation is verified and threshold limits are not approached over

TERRA VAC

the next three years, all wells will be destroyed and the site will be closed to further environmental activities.

If you have any questions or comments, please call me at (510) 351-8900.

Sincerely,
Terra Vac Corporation

Robert A. Dahl
Project Manager

cc: Phil Briggs, Chevron
Jennifer Eberle, ACHCS
30-0220.10

Table 2
Management Plan Threshold Limits and Sampling Schedule
Former Chevron Station 9-4816
301 14th Street
Oakland, California

Biodegradation Indicator Wells					
C-1	1.2	2	*2,600	Yes	Semi-annually
C-2	1.2	2	*2,600	Yes	Semi-annually
C-3	100	42	*2,600	Yes	Semi-annually
CR-1	850	475	*2,600	Yes	Semi-annually
Trigger Wells					
C-4	<0.5	<0.5	*2,600	Yes	Annually
C-5	3.0	1	*2,600	Yes	Annually
C-6	<0.5	<0.5	5	Yes	Annually
C-7	<0.5	<0.5	5	Yes	Annually
C-8	58	28	580	Yes	Annually
C-9	<0.5	<0.5	5	Yes	Annually
MW-10	<0.5	<0.5	5	Yes	Annually
MW-11	<0.5	<0.5	5	Yes	Annually

* 2,600 ppb is limit as an average for onsite wells CR-1 and C-1 to C-5

RBCA SITE ASSESSMENT

Tier 2 Worksheet 9.3

Site Name: Former Chevron Station 9-4816
Site Location: 301 14th Street, Oakland, CA

Completed By: CMG
Data Completed: 3/17/1997

GROUNDWATER SSTL VALUES

Target Risk (Class A & B) 1.0E-5
Target Risk (Class C) 1.0E-5
Target Hazard Quotient 1.0E+0

■ MCL exposure limit?
☐ PEL exposure limit?

Calculation Option: 2

A

SSTL Results For Complete Exposure Pathways ("x" if Complete)

CONSTITUENTS OF CONCERN		Representative Concentration	X	Groundwater Ingestion			X	Groundwater Volatilization to Indoor Air		Groundwater Volatilization to Outdoor Air		Applicable SSTL	SSTL Exceeded ?	Required CRF
CAS No.	Name	(mg/L)		Residential: (on-site)	Commercial: 2000 feet	Regulatory(MCL): 2000 feet		Residential: (on-site)	Commercial: (on-site)	Residential (on-site)	Commercial: (on-site)	(mg/L	"■" If yes	Only if "yes" left
71-43-2	Benzene	1.6E-1		NA	>Sol	2.0E+2		NA	2.6E+0	NA	NA	2.6E+0	☐	<1

Software: GSI RBCA Spreadsheet
Version: v 1.0

Serial: g-337-yax-542

RBCA TIER 1/TIER 2 EVALUATION

Output Table 1

Site Name: Former Chevron Station 9-4818 | Site Identification: 30-0220
Site Location: 301 14th Street, Oakland, CA | Date Completed: 3/17/97
Completed By: CMG

Software: GSI RBCA Spreadsheet
Version: v 1.0

NOTE: values which differ from Tier 1 default values are shown in bold italics and underlined.

DEFAULT PARAMETERS

Exposure		Residential			Commercial/Industrial	
Parameter	Definition (Units)	Adult	(1-6yrs)	(1-16 yrs)	Chronic	Constrctn
ATc	Averaging time for carcinogens (yr)	70				
ATn	Averaging time for non-carcinogens (yr)	30	6	16	25	1
BW	Body Weight (kg)	70	15	35	70	
ED	Exposure Duration (yr)	30	6	16	25	1
EF	Exposure Frequency (days/yr)	350			250	180
EF.Derm	Exposure Frequency for dermal exposure	350			250	
IRgw	Ingestion Rate of Water (l/day)	2			1	
IRs	Ingestion Rate of Soil (mg/day)	100	200		50	100
IRadj	Adjusted soil ing. rate (mg*yr/kg-d)	1.1E+02			9.4E+01	
IRa.in	Inhalation rate indoor (m^3/day)	15			20	
IRa.out	Inhalation rate outdoor (m^3/day)	20			20	10
SA	Skin surface area (dermal) (cm^2)	5.8E+03		2.0E+03	5.8E+03	5.8E+03
SAadj	Adjusted dermal area (cm^2*yr/kg)	2.1E+03			1.7E+03	
M	Soil to Skin adherence factor	1				
AAFs	Age adjustment on soil ingestion	FALSE			FALSE	
AAFd	Age adjustment on skin surface area	FALSE			FALSE	
tox	Use EPA tox data for air (or PEL based)	TRUE				
gwMCL?	Use MCL as exposure limit in groundwater?	TRUE				

Matrix of Exposed Persons to		Residential	Commercial/Industrial	
Complete Exposure Pathways			Chronic	Constrctn
Groundwater Pathways:				
GW.i	Groundwater Ingestion	FALSE	TRUE	
GW.v	Volatilization to Outdoor Air	FALSE	FALSE	
GW.b	Vapor Intrusion to Buildings	FALSE	TRUE	
Soil Pathways				
S.v	Volatiles from Subsurface Soils	FALSE	FALSE	
SS.v	Volatiles and Particulate Inhalation	FALSE	FALSE	FALSE
SS.d	Direct Ingestion and Dermal Contact	FALSE	FALSE	FALSE
S.l	Leaching to Groundwater from all Soils	FALSE	FALSE	
S.b	Intrusion to Buildings - Subsurface Soils	FALSE	FALSE	

Matrix of Receptor Distance		Residential		Commercial/Industrial	
and Location on- or off-site		Distance	On-Site	Distance	On-Site
GW	Groundwater receptor (cm)	6.1E+04	FALSE	6.1E+04	FALSE
S	Inhalation receptor (cm)		FALSE		FALSE

Matrix of			
Target Risks		Individual	Cumulative
TRab	Target Risk (class A&B carcinogens)	***1.0E-05***	
TRc	Target Risk (class C carcinogens)	1.0E-05	
THQ	Target Hazard Quotient	1.0E+00	
Opt	Calculation Option (1, 2, or 3)	2	
Tier	RBCA Tier	2	

Surface			Commercial/Industrial	
Parameters	Definition (Units)	Residential	Chronic	Construction
t	Exposure duration (yr)	30	25	1
A	Contaminated soil area (cm^2)			
W	Length of affected soil parallel to wind (cm)			
W.gw	Length of affected soil parallel to groundwater (c			
Uair	Ambient air velocity in mixing zone (cm/s)	2.3E+02		
delta	Air mixing zone height (cm)	2.0E+02		
Lss	Definition of surficial soils (cm)			
Pe	Particulate areal emission rate (g/cm^2/s)	2.2E-10		

Groundwater	Definition (Units)	Value
delta.gw	Groundwater mixing zone depth (cm)	2.0E+02
I	Groundwater infiltration rate (cm/yr)	3.0E+01
Ugw	Groundwater Darcy velocity (cm/yr)	***1.8E+03***
Ugw.tr	Groundwater Transport velocity (cm/yr)	***4.7E+03***
Ks	Saturated Hydraulic Conductivity(cm/s)	2.8E-03
grad	Groundwater Gradient (cm/cm)	2.0E-02
Sw	Width of groundwater source zone (cm)	9.1E+02
Sd	Depth of groundwater source zone (cm)	1.5E+02
BC	Biodegradation Capacity (mg/L)	
BIO?	Is Bioattenuation Considered	TRUE
phi.eff	Effective Porosity in Water-Bearing Unit	3.8E-01
foc.sat	Fraction organic carbon in water-bearing unit	1.0E-03

Soil	Definition (Units)	Value		
hc	Capillary zone thickness (cm)	***4.6E+01***		
hv	Vadose zone thickness (cm)	***5.8E+02***		
rho	Soil density (g/cm^3)	1.7		
foc	Fraction of organic carbon in vadose zone	0.01		
phi	Soil porosity in vadose zone	0.38		
Lgw	Depth to groundwater (cm)	***6.2E+02***		
Ls	Depth to top of affected soil (cm)			
Lsubs	Thickness of affected subsurface soils (cm)			
pH	Soil/groundwater pH	6.5		
		capillary	vadose	foundation
phi.w	Volumetric water content	0.342	0.12	0.12
phi.a	Volumetric air content	0.038	0.26	0.26

Building	Definition (Units)	Residential	Commercial
Lb	Building volume/area ratio (cm)	2.0E+02	3.0E+02
ER	Building air exchange rate (s^-1)	1.4E-04	***5.6E-04***
Lcrk	Foundation crack thickness (cm)	1.5E+01	
eta	Foundation crack fraction	0.01	

Dispersive Transport			
Parameters	Definition (Units)	Residential	Commercial
Groundwater			
ax	Longitudinal dispersion coefficient (cm)		5.1E+03
ay	Transverse dispersion coefficient (cm)		2.0E+03
az	Vertical dispersion coefficient (cm)		3.0E+02
Vapor			
dcy	Transverse dispersion coefficient (cm)		
dcz	Vertical dispersion coefficient (cm)		

RBCA CHEMICAL DATABASE

Physical Property Data

CAS Number	Constituent	type	Molecular Weight (g/mole) MW	ref	Diffusion Coefficients in air (cm2/s) Dair	re	in water (cm2/s) Dwat	re	log (Koc) or log(Kd) (@ 20 - 25 C) (l/kg) Koc	ref	Henry's Law Constant (@ 20 - 25 C) (atm-m3/mol)	(unitless)	re	Vapor Pressure (@ 20 - 25 C) (mm Hg) Pure Component	ref	Solubility (@ 20 - 25 C) (mg/l) Pure Component	ref	acid pKa	base pKb	ref
71-43-2	Benzene	A	78.1	5	9.30E-02	A	1.10E-05	A	1.58	A	5.29E-03	2.20E-01	A	9.52E+01	4	1.75E+03	A			

Site Name: Former Chevron Sta Site Location: 301 14th Street, Oa Completed By: CMG Date Completed: 3/17/1997

Software version: v 1.0

RBCA CHEMICAL DATABASE — Toxicity Data

CAS Number	Constituent	Reference Dose (mg/kg/day) Oral RfD_oral	ref	Inhalation RfD_inhal	re	Slope Factors 1/(mg/kg/day) Oral SF_oral	ref	Inhalation SF_inhal	ref	EPA Weight of Evidence	Is Constituent Carcinogenic ?
71-43-2	Benzene	-	R	1.70E-03	R	1.00E-01	A	1.00E-01	A	A	TRUE

Site Name: Former Chevr Site Location: 301 14th Street, Oakla Completed By: CMG Date Completed: 3/17/1997

Software version: v 1.0

RBCA CHEMICAL DATABASE

Miscellaneous Chemical Data

CAS Number	Constituent	Maximum Contaminant Level MCL (mg/L)	Maximum Contaminant Level reference	Permissible Exposure Limit PEL/TLV (mg/m3)	ref	Relative Absorption Factors Oral	Relative Absorption Factors Dermal	Detection Limits Groundwater (mg/L)	ref	Detection Limits Soil (mg/kg)	re	Half Life (First-Order Decay) (days) Saturated	Half Life (First-Order Decay) (days) Unsaturated	ref
71-43-2	Benzene	1.00E-03	52 FR 25690	3.20E+00	OSHA	1	0.5	0.002	C	0.005	S	720	720	H

Site Name: Former Chevr Site Location: 301 14th Street, Oakland, CA Completed By: CMG Date Completed: 3/17/1997

Software version: v 1.0

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 2

To	Tony Dahl	From	J. Eberle
Co.		Co.	
Dept.		Phone #	
Fax #		Fax #	

Sincerely,

Dale Klettke (for Jennifer Eberle)
Hazardous Materials Specialist

enclosure

c: Mark Frye, Terra Vac, 14798 Wicks Blvd., San Leandro CA 94577
Joyce Massaro, c/o Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Francis Thie, c/o Blaine Tech Services, Inc. 1680 Rogers Avenue, San Jose, CA 95112
Jennifer Eberle--files

je.478-D

Table 2
Management Plan Threshold Limits and Sampling Schedule
Former Chevron Station 9-4816
301 14th Street
Oakland, California

Well ID	Benzene Concentration 12/12/96 (ppb)	Average Benzene Concentrations Over The Last Four Qtrs. (ppb)	Benzene Concentration Threshold Limit (ppb)	Monitor & Sample	Sampling Interval
Biodegradation Indicator Wells					
C-1	1.2	2	*2,600	Yes	Semi-annually
C-2	1.2	2	*2,600	Yes	Semi-annually
C-3	100	42	*2,600	Yes	Semi-annually
CR-1	850	475	*2,600	Yes	Semi-annually
Trigger Wells					
C-4	<0.5	<0.5	*2,600	Yes	Annually
C-5	3.0	1	*2,600	Yes	Annually
C-6	<0.5	<0.5	5	Yes	Annually
C-7	<0.5	<0.5	5	Yes	Annually
C-8	58	28	580	Yes	Annually
C-9	<0.5	<0.5	5	Yes	Annually
MW-10	<0.5	<0.5	5	Yes	Annually
MW-11	<0.5	<0.5	5	Yes	Annually

* 2,600 ppb is limit as an average for onsite wells CR-1 and C-1 to C-5

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 27, 1997
STID 478

Phil Briggs
Chevron USA Inc.
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron Service Station 9-4816, 301-14th St., Oakland CA 94612

Dear Mr. Briggs,

This office is in receipt of and has reviewed the following documents:

1) "Final Remediation Status Report and Request for No Further Action" report, prepared by Terra Vac (TV), dated 11/14/96;

2) "No Further Action Requests-draft addendums/revisions" report, prepared by Terra Vac (TV), dated 3/26/97;

3) "1st Quarter 1997 Monitoring at 9-4816" report, prepared by Blaine Tech Services (BTS), under cover letter from Chevron dated 5/17/97;

4) "Residual Management Plan," prepared by Terra Vac (TV), dated 6/10/97;

In the cover letter dated May 17, 1997 Chevron requested that monitoring wells C-4, C-6, C-7, C-8, C-9, MW-10 and MW-11 be monitored annually, and wells C-1 and C-2 be monitored quarterly. However, information submitted with the March 25, 1997 addendum/revisions to the November 14, 1996 Terra Vac report, states that semi-annual groundwater monitoring of wells C-1 through C-3 and CR-1 would be performed for the first three years. In addition, wells C-4 through C-9, MW-10 and MW-11 would be sampled and monitored quarterly for the first year and annually thereafter. **This revised sampling schedule is approved, as shown in Table 2 of the Terra Vac March 25, 1997 addenum/revision report.** A copy of Table 2 is enclosed for your review.

In addition, as per the proposed monitoring plan, if the average concentration of the onsite wells exceed the SSTL during a sampling event, the ACHCSA will be notified, the well(s) will be resampled and the site reevaluated if necessary.

If you have any questions, please feel free to contact me directly at 510-567-6761. I look forward to hearing from you soon.

Sincerely,

Dale Klettke (for Jennifer Eberle)
Hazardous Materials Specialist

enclosure

c: Mark Frye, Terra Vac, 14798 Wicks Blvd., San Leandro CA 94577
Joyce Massaro, c/o Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Francis Thie, c/o Blaine Tech Services, Inc. 1680 Rogers Avenue, San Jose, CA 95112
Jennifer Eberle--files

je.478-D

Table 2
Management Plan Threshold Limits and Sampling Schedule
Former Chevron Station 9-4816
301 14th Street
Oakland, California

Well ID	Benzene Concentration 12/12/96 (ppb)	Average Benzenes Concentrations Over The Last Four Qtrs. (ppb)	Benzene Concentration Threshold Limit (ppb)	Monitor & Sample	Sampling Interval
Biodegradation Indicator Wells					
C-1	1.2	2	*2,600	Yes	Semi-annually
C-2	1.2	2	*2,600	Yes	Semi-annually
C-3	100	42	*2,600	Yes	Semi-annually
CR-1	850	475	*2,600	Yes	Semi-annually
Trigger Wells					
C-4	<0.5	<0.5	*2,600	Yes	Annually
C-5	3.0	1	*2,600	Yes	Annually
C-6	<0.5	<0.5	5	Yes	Annually
C-7	<0.5	<0.5	5	Yes	Annually
C-8	58	28	580	Yes	Annually
C-9	<0.5	<0.5	5	Yes	Annually
MW-10	<0.5	<0.5	5	Yes	Annually
MW-11	<0.5	<0.5	5	Yes	Annually

* 2,600 ppb is limit as an average for onsite wells CR-1 and C-1 to C-5

STID 428

TERRA VAC

We're gaining new ground.

FAX

Date: 6/11/97

Number of pages including cover sheet: 9

To:

Madhulla Logan

Phone:

Fax phone: 337-9335

CC:

From:

Tony Dahl
SAN LEANDRO OFFICE
1651 ALVARADO STREET
SAN LEANDRO, CA 94577

Phone: (510) 351-8900

Fax phone: (510) 351-0221

REMARKS: ☐ Urgent ☑ For your review ☐ Reply ASAP ☐ Please comment

I thought I'd fax this to you as a draft for your review. I believe this is the approach you asked us to take in modifying the management plan, and that you were satisfied with the other information provided for the Chevron site on 14th Street. Please call me as to whether this will be adequate

TERRA VAC
1651 Alvarado Street, San Leandro, CA 94577-2636
Tel (510) 351-8900 ❑ Fax (510) 351-0221

April 11, 1997

Ms. Jennifer Eberle
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Way Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Former Chevron Service Stations #9-4587, 9-4816
609 Oak Street & 301 14th Street
Oakland, CA

Dear Ms. Eberle:

The air sparging operations conducted at the above two sites were terminated at the end of November of 1996, two weeks prior to the fourth quarter sampling event. The system has remained down to eliminate any effect on the first quarter 1997 monitoring event. I apologize for the oversight in informing you.

Sampling results for the first quarter of 1997 indicate no significant changes in dissolved concentrations, with benzene remaining below detection limits in almost all wells. Based on these results, no further sparging appears to be necessary. Chevron concurs and we would appreciate your acquiesence on the removal of our equipment from the site.

If you have any questions or comments, please call me at (510) 351-8900.

Sincerely,
Terra Vac Corporation

Robert A. Dahl
Project Manager

cc: Phil Briggs, Chevron
30-0219.10
30-0220.10

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

Alameda County CC4580
Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Alameda CA 94502-6577

July 8, 1996
STID 478

Phil Briggs
Chevron USA Inc.
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron Service Station 9-4816, 301-14th St., Oakland CA 94612

Dear Mr. Briggs,

Since my last letter to Chevron (Mark Miller), dated 8/17/95, the following documents have been received in this office:

1) "2nd Quarter 1995 Monitoring at 9-4816" report, prepared by Blaine Tech Services (BTS), under cover letter from Chevron dated 8/10/95;

2) "Drilling Report," prepared by Terra Vac (TV), dated 8/31/95;

3) "System Startup Report," prepared by TV, dated 10/20/95, under cover letter from Chevron dated 11/18/95;

4) "3rd Quarter 1995 Monitoring at 9-4816" report, prepared by BTS, dated 10/24/95, under cover letter from Chevron dated 11/18/95;

5) letter from TV dated 12/18/95;

6) "Drilling Report," prepared by Terra Vac (TV), dated 11/7/95, under cover letter from Chevron dated 12/26/95;

7) fax from Chevron, dated 12/12/95, with Project Status update for December 1995;

8) Project Status updates for January 1996 and February 1996;

9) "Interim Soil Boring Installation Report," prepared by TV, dated 1/16/96, under cover letter from Chevron dated 2/13/96; and

10) "4th Quarter 1995 Monitoring at 9-4816" report, prepared by BTS, dated 1/25/96, under cover letter from Chevron dated 2/16/96.

This letter is being written to notify you of the correspondence received, and to notify you that the quarterly reports and Project Status updates are overdue. As per a telecon with your consultant Mark Frye today, he indicated that the last quarterly monitoring event occurred in late June. Mr. Frye also indicated that the June 1996 event represents the first sampling event since the DVE system ceased and air sparging operated as the only remediation method employed at the site.

Mr. Frye also indicated that he had submitted monthly Project Status updates to you through May, and he thought you would be arranging a meeting with me for June to discuss the progress of the remediation systems employed by Terra Vac. This was to be an informal meeting to discuss the future of this site, prior to presenting a formal report. I think is a good idea, and would give me a chance to meet the both of you in person for the first time. It would be best schedule the meeting for late July, when we are sure to have the results of the 2nd quarter. Perhaps you would like to include the property owner as well.

Please contact me directly at 510-567-6761 so that we may arrange a meeting. I look forward to hearing from you soon.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Mark Frye, Terra Vac, 14798 Wicks Blvd., San Leandro CA 94577
Joyce Massaro, c/o Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Acting Chief/file

je.478-D

TERRA VAC
14798 WICKS BOULEVARD
SAN LEANDRO, CALIFORNIA 94577-6718
TEL (510) 351-8900
FAX (510) 351-0221

December 18, 1995

Jennifer Eberle
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Re: Former Chevron Station 9-4816
301 14th Street, Oakland, CA

Dear Ms. Eberle:

We understand that you have reviewed the Project Status for December 1995 which we submitted on December 12, 1995. Operational data for the site indicates that continued operation of the DVE system is required before work plan goals can be achieved. Terra Vac will continue to optimize operations of the DVE and sparging systems to enhance remediation of the site.

Additionally, we propose to install four interim borings on December 20 and 21, 1995. The wells will be placed in the following locations: ten feet northwest of SP-3; ten feet southeast of SP-4; twenty feet southeast of C-2; ten feet northeast of MW-12. Although we will use drilling results to assess remediation progress, the primary reason for installing interim borings at this time is to expand the capacity of the sparing system. The borings will be installed in accordance with the work plan for the site with the following exception. Currently, ten extraction wells are available for use with the DVE system. We believe that these wells provide adequate coverage of source areas. At the same time, only four wells are available for sparging of the dissolved phase plume. Therefore, we propose to complete the four interim borings as sparge wells to enhance overall sparge coverage of the site. These wells will be connected to the sparge system and will be operated for the duration of sparging operations.

We believe that the proposed modification to the approved work plan will ultimately improve the effectiveness of site remediation and hope that you concur. Please contact us with your approval for this proposal as soon as possible as we would very much like to maintain our schedule for drilling on December 20, 1995. Thank you for your attention to this matter.

Sincerely,
Terra Vac Corporation

Mark Frye
Project Engineer

Chevron U.S.A Products Company

Mark Miller
Site Assessment & Remediation Engineer

1215jebe
30-0220.17

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Environmental Protection Division
1131 Harbor Bay Parkway, #250
Alameda, CA 94502-6577
(510) 567-6700

August 17, 1995
STID 478

Mark Miller
Chevron USA Inc.
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron Service Station 9-4816, 301-14th St., Oakland CA 94612

Dear Mr. Miller,

I have received and reviewed your letter dated 8/7/95, and Terra Vac's letter dated 7/28/95. This letter was written to clarify the comments made in my letter dated 6/1/95. As per our telecon today, we are in general agreement on all three items in Terra Vac's 7/28/95. We discussed the following clarifications concerning the three items, in the same order:

1) If DVE removal rates are less than 50 pounds per day, **and if** significant lighter end hydrocarbon constituents still exist, then the DVE system will continue until the lighter end hydrocarbon constituents exhibit a significant decrease.

2) Yes, the interim borings will be accepted as confirmatory borings if the concentrations encountered therein are <100 ppm TPH and <1 ppm benzene. However, these borings will be converted into vapor extraction wells and added to the DVE system to supplement extraction, as per page 6 of Terra Vac's 3/28/95 workplan.

3) Yes, the American Petroleum Institute Decision Support System (APIDSS) Exposure/Risk Assessment model and the ASTM Emergency Standard, Risk-Based Corrective Action (RBCA) document are both valid sources for the Risk Assessment.

If you have any questions, please contact me at 510-567-6700, ext 6761. **Your consultant is encouraged to submit reports on double-sided paper in order to save precious trees.**

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

Ravi Arulanatham
Staff Toxicologist

cc: Tim Warner, Terra Vac, 14798 Wicks Blvd., San Leandro CA 94577
Joyce Massaro, c/o Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Leroy Todd/file
je.478-C

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700

May 31, 1995
STID 478

Mark Miller
Chevron USA Inc.
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron Service Station 9-4816, 301-14th St., Oakland CA 94612

Dear Mr. Miller,

Since my last letter to you dated 2/9/95, the following documents have been received in this office:

a) Fourth Quarter 1994 Groundwater Monitoring report, dated 1/2/94, by Blaine Tech Services (BTS), under your cover letter dated 2/6/95.

b) Your letter dated 3/1/95, requesting extension of workplan submittal deadline.

c) Your fax dated 4/3/95: "Discharge Compliance Report, August 1 through October 31, 1994," prepared by Weiss Associates, dated 11/29/94.

d) Fax from BTS, dated 4/12/95: lab reports for 3/29/95 quarterly groundwater sampling.

In addition, I have received and reviewed the "Addendum Remediation Work Plan," prepared by Terra Vac, dated 3/28/95. As you know, this workplan involves dual vacuum extraction (DVE) and subsequent air sparging. A meeting was conducted in this office on 5/19/95, to discuss this workplan. Attendees included the property owner (Joyce Massaro), Tim Warner of Terra Vac, yourself, and myself. **The work plan is acceptable with the following clarifications and conditions:**

1) The DVE is intended to remediate onsite vadose zone soils to 100 ppm TPH and 1 ppm benzene.

2) DVE will be replaced by air sparging when vapor removal is such that asymptotic curves exist, indicating a decrease in the lighter HC constituents, and an increase in the heavier HC constituents over time.

3) The interim borings (page 6) and the confirmatory borings (page 7) may be the same boring in cases where ND concentrations are encountered. A proposal for these borings will be submitted to this office for approval prior to boring installation.

4) Cessation of air sparging will be predicated on concurrence by this office. At this point, a Management Plan will be submitted to this office, and will include the items specified in Task 9 (page 8). Passive remediation will eventually be acceptable providing the groundwater contamination plume is completely delineated, and does not migrate beyond the monitoring network, and contamination does not adversely affect beneficial uses of the groundwater. The frequency and termination of groundwater monitoring and sampling will also be predicated on concurrence by this office.

5) The efficacy of the remediation will be monitored during both the DVE and air sparging phases of remediation. This will occur as explained during our 5/19/95 meeting, as follows: to assess the relative rate of hydrocarbon destruction, CO_2 will be monitored at DVE startup and during DVE operation, as per the AQMD permit, from the system inlet. The pounds of hydrocarbons removed per day via DVE will be calculated. Oxygen Uptake Recovery (OUR) tests will be conducted during air sparging. The OUR test will determine the amount of hydrocarbons removed (in ppm) during air sparging.

If you have any questions, please contact me at 510-567-6700, ext 6761. **Your consultant is encouraged to submit reports on double-sided paper in order to save precious trees.**

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Joyce Massaro, c/o Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Tim Warner, Terra Vac, 14798 Wicks Blvd., San Leandro CA 94577
Mee Ling Tung/file

je.478-B

Chevron

Date: 5/19/95

To: JENNIFER EBERLE
ACHCS
337-9335

Chevron U.S.A. Products Company
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Marketing – Northwest Region
Voice 510 842-9134
Fax 510 842-8252

478

From: Mark Miller
Site Assessment and Remediation Engineer

Re: 9-4816 : OAKLAND - 14TH ST.

Message: HERE'S AN EXAMPLE OF WHERE THE REGIONAL BOARD APPROVED OUR WORK PLAN WITH THREE CONDITIONS. THIS MIGHT PROVIDE YOU WITH A LITTLE BACKGROUND ON WHAT TYPE OF APPROVAL TIMES WE NEED TO MOVE FORWARD.

3 Pages including cover sheet

STATE OF CALIFORNIA PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
2101 WEBSTER STREET, SUITE 500
OAKLAND, CA 94612
(510) 286-1255

December 29, 1994
File: 28-0124 (LBJ)

Mr. Mark Miller
Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Subject: Workplan Approval, Soil Remediation for Noyes Lumber, 795 Sosocol Avenue, Napa, CA.

Dear Mr. Miller:

This office has received and reviewed the Touchstone Developments revised workplan dated December 5, 1994 detailing the excavation and remediation of petroleum hydrocarbon contaminated soil at the subject site. Regional Board staff concur with the proposed scope of work and approve the workplan for implementation with the following comments:

1. Discrete samples should be obtained and analyzed from the contaminated stockpiles after aeration has been completed in order to assure that the soil is suitable for use as fill. Composite samples for both the segregated "clean" stockpiles and the initial characterization of the contaminated stockpiles are acceptable, given that the samples are composited in the laboratory.

2. Destruction of monitoring wells MW-3 and MW-8 and replacement with one well is acceptable, however, it will eventually be necessary to install at least two additional monitoring wells between the presumed source area and the Napa River in order to establish an appropriate non-attainment area monitoring program. It may be cost effective to submit an addendum to the workplan evaluating the total number and location of the monitoring wells currently on-site and addressing the abandonment and installation of any additional wells in one phase.

3. The Napa County Department of Environmental Management will issue a letter authorizing development of the site once the workplan has been successfully implemented.

As a reminder, the appropriate well permits should be obtained from the Napa County Department of Environmental Management (NCDEM). Additionally, this office and NCDEM should be provided with 48 hours advance notice of the

commencement of any major site activities. Our agency looks forward to receiving the results of the remediation. Should you have any questions, please do not hesitate to contact Mr. Brad Job at (510)-286-1382.

Sincerely,

for Stephen I. Morse
Division Chief
Toxics Cleanup Division

cc: Ms. Jaqueline Bertaina, Napa Co. D.E.M.

Ms. Catherine McCutchin
Geraghty and Miller
1050 Marina Way South
Richmond, CA 94804

Ms. Kathy Wojciechowski
Resolution Trust Corporation
3500 Maple Ave.
Dallas, TX 75219

O-M Management Group
Attn: Mr. Matt Burleigh
3131 McKinney Ave., Suite 250
Dallas, TX 75219

Mr. Bill Campton
JHL Commercial Properties
1450 Travis Blvd.
Fairfield, CA 94533

Mr. D. Lynn Walker
Environmental Engineer
Shell Oil Company
1390 Willow Pass Road, Suite 250
Concord, CA 94520

TERRA VAC

"Environmental Stewardship"

Subsurface Remediation Specialists

Post-it® Fax Note 7671	Date 5/19/95	# of pages ▶ 3
To JENNIFER EBERLE	From MARK MILLER	
Co./Dept. ACHCS	Co CHEVRON	
Phone #	Phone #	
Fax # 337-9335	Fax #	

ANOTHER EXAMPLE RE: 9-4816

FAX TRANSMITTAL

Voice: (510) 351-8900
FAX: (510) 351-0221

428

Date: 5/19/95

TERRA VAC
14798 WICKS BLVD.
SAN LEANDRO, CA 94577

From: Tim Wagner

To: Mark Miller

Fax No.: _____

Total Pages: 3

RE: No Further Active Remediation Letter

Message: Mark:

Here's the letter we discussed. Call if you have any questions on it.

Thanks,

Tim

9301ADM.IBM

STATE OF CALIFORNIA PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD —
CENTRAL COAST REGION
81 HIGUERA STREET, SUITE 200
SAN LUIS OBISPO, CA 93401-5427
(805) 549-3147

January 18, 1995

Mr. Thomas Bauhs
Chevron USA Products Company
P. O. Box 5004
San Ramon, CA 94583-0804

Dear Mr. Bauhs:

UGT; FORMER CHEVRON SERVICE STATION NO. 9-3858, 177 WILLIAMS ROAD, SALINAS, AND FORMER CHEVRON SERVICE STATION NO. 9-6381, 715 BROADWAY, KING CITY; PROPOSED REMEDIATION PLANS

Thank you and Tim Warner for taking the time to visit our office on January 11, 1995 and presenting the proposed remediation for the subject Chevron sites. Your proposal to utilize air sparging and vapor extraction at these sites is acceptable, as described below.

Remediation will consist of air sparging and vapor extraction to remove the more volatile fraction of contaminants from the soil and ground water. This active remediation will cease when soil concentrations are 100 mg/kg TPH, ground water contaminants are in a range treatable by intrinsic bioremediation, and vapor removal rates taper off to non-productive levels. Passive remediation of ground water contamination will then be monitored to track plume degradation and possible plume migration. Passive remediation is acceptable providing the ground water contamination plumes are completely delineated and the plumes do not migrate beyond the monitoring network and contaminants do not adversely affect beneficial uses of the water resources.

Closure of these sites will be considered when soil contamination is completed to the satisfaction of the Monterey County Health Department, and ground water contamination is remediated to at least MCL/ACL concentrations. Remediation of ground water to MCL/ACL concentrations may or may not be adequate to grant closure for these cases. A final closure decision will depend on regulatory constraints and protection of water resource beneficial uses.

Please direct questions to John Goni of this office. Mr. Goni's direct telephone number is (805) 542-4628.

Sincerely,

for ROGER W. BRIGGS
Executive Officer

JG:sg

cc: Timothy Warner
Terra Vac
14798 Wicks Blvd.
San Leandro, CA 94577

JG20A:CHEVKC4.LTR

Chevron

Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Site Assessment & Remediation Group
Phone (510) 842-9500

March 1, 1995

Ms. Jennifer Eberle
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland, CA

Dear Ms. Eberle:

Thank you for your letter of February 9, 1994 regarding the above referenced site. The issues raised in your letter identified many of the same concerns Chevron has regarding the remediation of this site. While we have communicated several times over the past few months regarding the remediation, it appears from your letter that Alameda County may not be fully aware of the rationale for the recent re-bid of this work. I'd like to take this opportunity to clarify the progress Chevron has made over the past several months and what our future direction will be.

7 Active remediation has been ongoing at the site since March of 1992. After removing the majority of the hydrocarbons from the vadose zone, the remediation system was modified during May through August, 1994, to remove the remaining hydrocarbons trapped below the ground water table. Upon startup of the modified system, it was quickly realized that a greater quantity of hydrocarbons were present beneath the ground water table than Chevron's initial estimates indicated. Consequently, it appeared that the modified system would need to operate for a longer time frame at a greater cost than initially anticipated.

At this point Chevron determined that the most cost effective solution to completing active remediation is to develop a comprehensive plan which clearly indicates what steps will be required to bring this site to a point where no further active remediation will be required. This will allow Chevron and Alameda County to determine up front the best remediation approach and agree on when the active phase of remediation will be complete. The plan will also include a post remediation monitoring and sampling plan which is consistent with the RWQCB's recent Non Attainment Area policy.

not the same as case closure

To assure that the remediation would be done in as cost effective manner as possible, this site was sent out to bid on December 22, 1994, along with 6 other Chevron sites located in Northern California. Bids were originally expected back by January 30, 1995, however the deadline had to be extended to February 21, 1995, due to the holidays and scheduling conflicts. We have now had sufficient time to review the bids and have tentatively selected the successful firm.

This firm has indicated that they would be able to provide a work plan by March 31, 1995. Chevron respectfully requests an extension to the deadline of March 9, 1995 for submittal of a remediation work plan to March 31, 1995. As soon as work plan approval is received from Alameda County, we will move forward with completing active remediation of the site.

I trust this letter clarifies Chevron's past actions and future intentions towards completing

remediation at this site. If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

cc: Mr. J.N. Robbins, CHVPK/V1156
Ms. B.C. Owen

Ms. Beth D. Castleberry
Gray, Cary, Ware & Freidenrich
400 Hamilton Avenue
Palo Alto, CA 94301-1825

File: 9-4816 LTR1

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
ALAMEDA COUNTY CC4580
DEPT. OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PKWY., #250
ALAMEDA CA 94502-6577

February 9, 1995
STID 478

Attn: Mark Miller
Chevron USA
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron station #9-4816, 301-14th St., Oakland CA 94612

Dear Mr. Miller,

Since my last letter dated 3/1/94, I have received the following documents:

1) "Groundwater Monitoring and Sampling Activities," report prepared by Groundwater Technology, Inc. (GTI), dated 4/15/94. This report documented the sampling event for 3/9/94.

2) Subsurface Investigation report, prepared by Sierra Environmental, dated 6/23/94. This report documented the installation of two soil borings, completed as groundwater monitoring well MW-11 and vapor extraction well MW-12.

3) "Bi-Monthly Progress Report," prepared by Weiss Associates, dated 4/12/94. This report documents the status of the soil vapor extraction and treatment system from 2/1/94 to 3/31/94.

4) "Bi-Monthly Progress Report," prepared by Weiss Associates, dated 4/12/94. This report documents the status of the soil vapor extraction and treatment system during April and May 1994.

5) "Groundwater Monitoring and Sampling Activities," report prepared by GTI, dated 7/15/94. This report documented the sampling event for 6/17/94.

6) A fax from Weiss, dated 11/16/94: tabulation of groundwater extraction system data.

7) "Groundwater Monitoring and Sampling Activities," report prepared by GTI, dated 11/11/94. This report documented the sampling event for September 1994.

The soil vapor extraction and treatment system ceased operation in August 1994. However, groundwater extraction and treatment continues to date. During our telephone conversation of 11/15/94, you indicated that you hoped to continue soil vapor extraction and treatment via a thermal unit. During our telephone conversation of 12/12/94, you indicated that you were in the process of getting bids from consultants, and expected to submit a workplan to this office within a month or two. During our telephone conversation of 1/4/95, you indicated that you actually sent the project out to bid in late December, and the bid proposals were expected by the end of January.

This office is concerned with the cessation of soil/soil vapor treatment, and the lengthy delays (since August 1994), in determining the next course of treatment. I understand that none of the seven consultants have yet responded with their bid proposals. This is per our telephone conversation of today, when you also indicated that you provided a new deadline for bid proposals: February 21, 1995. **You are hereby requested to submit a remediation workplan within 30 days, or by March 9, 1995.**

Please be advised that this is a formal request for technical reports pursuant to California Water Code Section 13267(b). Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or the RWQCB.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Attn: Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Ed Howell/file

je.478-A

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

March 1, 1994
STID 478

Nancy Vukelich
Chevron USA
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron station
301-14th St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of the 2/24/94 "Hydraulic Test Results," prepared by Weiss Associates, submitted under your cover letter dated 2/23/94. As you know, these are the results of the hydraulic tests which were conducted on wells CR-1 and VEW-3. Weiss concludes that wells CR-1, C-5 and VEW-3 "should be sufficient to achieve plume capture." Well C-5 will be reconstructed as an extraction well and also used for groundwater extraction.

The hydraulic test results are to be used in conjunction with the 11/2/93 "GWE System Installation Work Plan," also prepared by Weiss Associates.

The workplan is acceptable for implementation. If you have any questions, please contact me at 510-271-4530. Please notify me at least 2 business days in advance of field activities so that I may arrange to be onsite.

We are also in receipt of the 2/8/94 "BiMonthly Progress Report" for the SVE system, prepared by Weiss, submitted under your cover letter dated 2/14/94. Lastly, we are in receipt of the 1/28/94 "Quarterly Report" prepared by Groundwater Technology Inc., submitted under your cover letter dated 2/15/94.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Janet Macdonald, Weiss Associates, 5500 Shellmound St., Emeryville CA 94608
John McCarthy, Groundwater Technology Inc., 4057 Port Chicago Hwy, Concord CA 94520
Attn: Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Ed Howell/file je

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

February 16, 1994
STID 478

Nancy Vukelich
Chevron USA
PO Box 5004
San Ramon CA 94583-0804

RE: former Chevron station
301-14th St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of the 1/27/94 "Work Plan for Additional Site Assessment," prepared by Groundwater Technology Inc. As you know, this workplan involves the installation of one downgradient, offsite groundwater monitoring well. The workplan is acceptable for implementation. If you have any questions, please contact me at 510-271-4530.

Please notify me at least 2 business days in advance of field activities so that I may arrange to be onsite.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: John McCarthy, Groundwater Technology Inc., 4057 Port Chicago Hwy, Concord CA 94520
Attn: Beth Castleberry, Ware & Freidenrich, 400 Hamilton Ave., Palo Alto CA 94301-1825
Ed Howell/file

je

Chevron

FACSIMILE MESSAGE

CHEVRON U.S.A. PRODUCTS COMPANY
Northwest Region
Marketing Department SR-2410 Camino Ramon

Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804
(Street Address: 2410 Camino Ramon)

Reply by Facsimile: (510) 842-8252

Date: 1/11/94

To: Jennifer Eberle Fax Number: 569-4757
Acurex

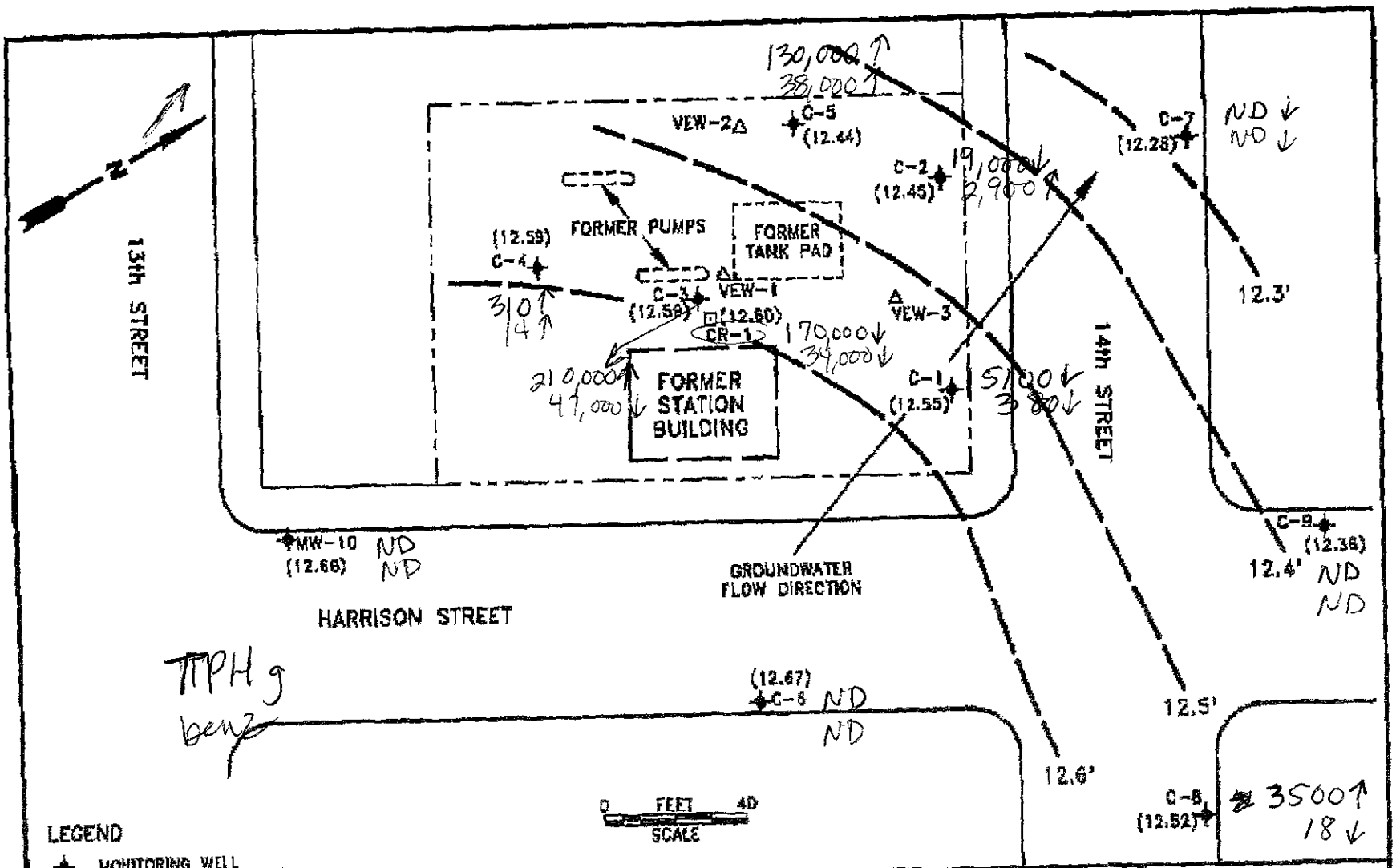
From: Nancy L. Vukelich Phone No.: (510) 842-9581
Site Assessment and Remediation Engineer

Subject: #9-4816 - 301 14th St. Oakland

Comments: Copy of Potentiometric map for your review. Please call to discuss once you've completed your review.

Thank you

NUMBER OF PAGES INCLUDING COVER SHEET 2



GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387

POTENTIOMETRIC SURFACE MAP (12/21/93)

CLIENT:	LOCATION:	REV. NO.:	DATE:
CHEVRON U.S.A. PRODUCTS Co. SERVICE STATION No. 9-4816	301 14th STREET OAKLAND, CALIFORNIA	0	1/11/94

PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:	FIGURE:
		TW	ML	PSMd2f93/SP493	020204084	1

Chevron

FACSIMILE MESSAGE

CHEVRON U.S.A. PRODUCTS COMPANY
Northwest Region
Marketing Department SR-2410 Camino Ramon

Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804
(Street Address: 2410 Camino Ramon)

Reply by Facsimile: (510) 842-8252

Date: 12/16/93

To: Jennifer Eberle Fax Number: 569-4757
ACHCS

From: Nancy L. Vukelich Phone No.: (510) 842-9581
Site Assessment and Remediation Engineer

Subject: #9-4916 - Oakland

Comments: Per my voice mail message, I look forward to reviewing the site with you.

NUMBER OF PAGES INCLUDING COVER SHEET 2

MEMORANDUM

San Ramon, CA
August 23, 1993

Former Chevron Service Station #9-4816
301 14th Street, Oakland

J.N. ROBBINS
CHVPKV/V1156

Please reference the letter dated August 11, 1993, submitted by Ms. Castleberry, of Ware & Freidenrich regarding the referenced property. This memorandum will address the concerns expressed by McLaren Hart, the consultant contracted by Ms. Castleberry's client to review and analyze Chevron's remediation efforts to date. The concerns expressed relate to the remedial activity performed at the property.

As presented in McLaren Hart's evaluation, their opinion was that the more traditional approach of ground water pumping and skimming would have been more effective than the soil vapor extraction (SVE) system employed. As presented in Weiss Associates (WA) Remediation Work Plan dated February 10, 1992, approved by Ms. Castleberry orally on January 27, 1992, and formally on January 28, 1992, a phased remedial approach was recommended. The first remedial phase would address the most immediate concern at the site, the presence of the floating hydrocarbons. Because previous investigations indicated that the soils beneath the site have relatively high permeability, WA proposed SVE as an effective means of floating hydrocarbon removal. This technology had been documented to be more effective in mitigating floating hydrocarbons than other traditional technologies such as ground water extraction/product recovery systems. Ground water extraction is also not an efficient remedial approach to attempt dissolved hydrocarbon removal while significant floating hydrocarbons remain because the floating hydrocarbons act as a continual source to ground water contamination. If such a system was installed in lieu of the SVE system and operated for the same amount of time, if one generously assumes that a multiple well ground water extraction system could pump 10 gallons per minute (gpm) at an average TPH-G concentration of 50,000 ppb, the dissolved hydrocarbon mass removal rate would be about 6 lbs/day. The estimated cumulative recovery rate would be approximately 2,190 lbs. However, it is highly unlikely that the flow rate would be this high.

To date, approximately 11,000 lbs. (approximately 1,600 gallons) of hydrocarbons have been recovered by the SVE system since its activation in March, 1992. Prior to its operation approximately 250 gallons of free product had been recovered via bailing. Thus, cumulative hydrocarbon recovery at the site is estimated to be 1,850 gallons (12,650 lbs.). This indicates that the SVE system has performed very effectively and substantial progress has been made to date.

FP

After removing the floating hydrocarbons, we outlined in the work plan that we planned to evaluate remedial alternatives for the second phase of remediating - dissolved hydrocarbon removal. We have recognized that the water levels have risen and that SVE alone is less effective and alternative remedial measures are being evaluated. Thus, we are currently evaluating ground water extraction, in-situ air sparing or some combined methods including continued SVE.

McLaren Hart also expressed that an initial estimate of the mass of hydrocarbons in the soil and groundwater was never calculated. They claimed that without such an estimate they were unable to provide Ms. Castleberry with a ballpark estimate on the length of time necessary to complete cleanup. Prior to developing the remedial approach, WA evaluated the available data to estimate the distribution of fuel hydrocarbons present in the subsurface. A written presentation of an estimate was not prepared at that time because it would be of little immediate usefulness. Estimating the mass of hydrocarbons on-site is inherently uncertain due to a number of factors such as subsurface hererogeneities, fluctuating water table elevation and limited data on the distribution of the hydrocarbons. Furthermore, to estimate cleanup times based on mass estimates relies on additional uncertainties such as unknown well yields (ground water and vapor), areas of influence and soil desorption rates. Even use of sophisticated modeling techniques still produce cleanup time estimates with such a large degree of uncertainty as to be of limited practical value.

Because it was apparent that floating hydrocarbon recovery would be necessary from all wells with significant thicknesses, an initial mass estimate would not have had a bearing on the design of the extraction system or method of treatment. In accordance with Ms. Castleberry's request in the August 11, 1993 letter, attached is an initial estimate calculated by WA. Because data is limited, several assumptions were made by WA to calculate this volume. Analyses of soil samples collected during boring and well installations indicated that only trace hydrocarbon concentrations were present at depths above 20-feet below grade. This suggests that the shallow soil is not a significant source of hydrocarbons. Elevated concentrations were found at the 20-foot depth, however, this depth is so close to the fluctuating water table as to be indistinguishable as a separate source from the floating hydrocarbons. Therefore, WA was of the opinion that the hydrocarbon mass in the unsaturated zone was not significant compared to the mass of floating hydrocarbons. Likewise, WA was of the opinion that although analytic data indicated that elevated concentrations of dissolved hydrocarbons are present on-site, the mass in the dissolved phase was negligible compared to that of the floating hydrocarbons. WA estimated less than 50 gallons.

If you have any questions regarding the above, please do not hesitate to contact me.

NANCY YUKELICH

Attachment

cc: J.W. Hartwig
B.C. Owen
File (9-4816L1)

WARE & FREIDENRICH
a professional corporation

Attorneys at Law

400 Hamilton Avenue
Palo Alto
California 94301-1825
(415) 328-6561

Facsimile
(415) 327-3699
Telex 348-372
Voice Mail
(415) 328-1983
EasyLink
62756934

December 10, 1993

VIA FACSIMILE AND REGULAR MAIL

S0605-900400

Ms. Nancy Vukelich
Environmental Engineer
Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583-0804

Re: Former Chevron Service Station No. 9-4816, at 301 14th Street, Oakland, California; McLaren/Hart Report (the "Property")

Dear Nancy:

Enclosed is a copy of the report of McLaren/Hart, responding to questions about Jon Robbin's letter to me dated August 25, 1993 and assessing Chevron's recently proposed Work Plan for the Property.

I spoke recently with Jennifer Eberle at the County of Alameda to let her know that the Property owner wishes to be more closely involved with the continuing clean up, and that the owner would be having McLaren/Hart review and assess the proposed Work Plan. In response to her questions, I informed her that over the period of the last year, the Stowell Trust has retained McLaren/Hart to assess Chevron's remediation activities on the site because of dissatisfaction with progress on the clean up. Ms. Eberle asked that I send her recent correspondence between the Property owner and Chevron related to the remediation, as well as McLaren/Hart's eventual assessment of the proposed Work Plan. Accordingly, we will be forwarding to her such correspondence and have sent her a copy of the attached report.

We would still appreciate meeting with you and Jon Robbins sometime within the next several weeks, and at a time convenient for both of you, to further discuss the remediation. We originally proposed such a meeting in my letter to Jon of August 11, 1993; in his letter to me of August 25, 1993, he left open the possibility of pursuing such a meeting.

Once you have had the opportunity to review the enclosed report, please contact me directly to discuss scheduling a meeting. Ms. Massaro would request that a representative from McLaren/Hart also join us. We would be happy to meet at your office or to accommodate you at ours.

Very truly yours,

WARE & FREIDENRICH
A Professional Corporation

Beth Detweiler Castleberry

BDC:cb
Enclosure
cc: Ms. Joyce Massaro
Ms. Jennifer Eberle - Alameda County Health Care Services - Hazardous Materials
Joseph Scott, McLaren/Hart
Saul Germanas, McLaren/Hart

WARE & FREIDENRICH

a professional corporation

Attorneys at Law

400 Hamilton Avenue
Palo Alto
California 94301-1825
(415) 328-6561

Facsimile
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Telex 346-372
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(415) 328-1983
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FACSIMILE TRANSMISSION COVER SHEET

CONFIDENTIALITY NOTICE

This FACSIMILE transmission is intended only for the use of the individual or entity named below and may contain information that is confidential, privileged and exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or use of any of the information contained in this transmission is strictly PROHIBITED. If you have received this transmission in error, please immediately notify us by telephone and mail the original transmission to us at the above address. Thank you.

DATE: December 8, 1993

TOTAL NUMBER OF PAGES INCLUDING COVER SHEET: 6

TO: Jennifer Eberle

COMPANY: Alameda Co. Health Care Services - Hazardous Materials

RECEIVING FAX NUMBER: (510) 569-4757

RECEIVING TELEPHONE NUMBER: (510) 271-4320

FROM: Beth Detweiler Castleberry

RE: 301 14th Street, Oakland (former Chevron Service Station Site)

FILE NO.: S0605-900400

If you do not receive the page(s) or are disconnected, please call (415) 328-6561.

Facsimile Operator, Ext.

COMMENTS: Jennifer: The attached report is the one you and I discussed by telephone today, and I will forward a copy to Nancy Vukelich tonight. Please give me a call once you have had the opportunity to review. Thank you

12/08/93 15:32 WARE & FREIDENRICH NO. 555 P001/006

McLaren Hart™

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AND CONFIDENTIAL
not

November 18, 1993

Beth Castleberry, Esq.
Attorney at Law
Ware & Freidenrich
400 Hamilton Avenue
Palo Alto, California 94301-1825

we don't have

Dear Ms. Castleberry:

SUBJECT: RESPONSE TO CHEVRON USA PRODUCTS COMPANY LETTER OF AUGUST 25, 1993 REGARDING THE STOWELL TRUST PROPERTY LOCATED AT 14TH AND HARRISON STREETS IN OAKLAND, CALIFORNIA

At your request, McLaren/Hart has reviewed the above referenced letter and attachments, and has attempted to respond to items raised by you in your August 31, 1993 letter to McLaren/Hart. These items regard: 1) the suitability of soil vapor extraction (SVE) as a means of free-phase hydrocarbon removal from groundwater, 2) the progress of the SVE system at reducing free-phase hydrocarbon thicknesses at the site, and 3) an estimate of the duration of remedial system operation. The following sections of this letter will discuss these items. This letter will also include comments to the Weiss Associates November 2, 1993 Groundwater Extraction System Installation Workplan.

SUITABILITY OF SOIL VAPOR EXTRACTION

The use of SVE for the removal of adsorbed and residual volatile hydrocarbons from unsaturated vadose zone soils is well established and numerous successful demonstrations of this technology have been made. The application of SVE for the removal of free-phase hydrocarbons floating on groundwater is a new technique that has limited information

1135 Atlantic Avenue, Alameda, CA 94501 (510) 521-5200 FAX (510) 521-1547

supporting its success, therefore, this application has not been generally accepted by the environmental engineering industry. Several theoretical limitations of the suitability of SVE for free-phase hydrocarbon removal include rate limitations for the phase change from liquid hydrocarbon to hydrocarbon vapor, and the potential for little vacuum influence in saturated soils if the vapor extraction well screen also intercepts permeable unsaturated soils. Any difference in relative permeability between saturated and unsaturated soil would result in the "short circuiting" of vapor extraction whereby little or no vacuum would be applied against the less permeable zone. Skimming of free-phase hydrocarbons by the use of a pump placed in the free-phase hydrocarbon layer is a more widely accepted method for removal of floating hydrocarbons.

The installation of skimmer pumps or dual-phase extraction systems in wells which contain free-phase hydrocarbons remains the standard technique for the removal of a floating hydrocarbon product layer. The rapid and successful application of this technique has been employed at hundreds of sites. The use of a hydrocarbon phase skimming system and/or dual-phase extraction system would likely have been a more effective approach for removal of the separate phase hydrocarbons at this site. The sample calculation provided in the memo authored by Ms. Vukelich compares the quantity of hydrocarbons removed by the SVE operation to the quantity that would have been removed by extraction of groundwater containing 50,000 ppb of hydrocarbons at a rate of 10 gpm over the same period of operation. However, the primary purpose of a product skimming system or a dual-phase extraction system is to remove separate liquid hydrocarbons with only minimal removal of groundwater to the extent necessary to provide a cone-of-depression for flow of the liquid hydrocarbons into the recovery well. Ms. Vukelich's example does not consider the quantity of separate phase hydrocarbons that could have been removed through operation of a skimming or dual-phase recovery system.

PROGRESS OF THE SVE SYSTEM AT THE SITE

Regardless of the theoretical implications of the suitability or unsuitability of SVE for the removal of free-phase hydrocarbons, the data acquired during the operation of the SVE system at the site since March 12, 1992 indicate that the system has been operating at well below predicted levels. Since system start-up, only approximately 1,600 gallons of hydrocarbons have been recovered by the SVE system (an average of approximately 22 lbs/day) as compared to the initial estimate of removal of approximately 1,000 lb/day. This low recovery is due to periods during which the SVE was not in operation in addition to the apparent unsuitability of the use of SVE for removal of the floating hydrocarbon layer at

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? recovered HC

this site. It is not possible to estimate how much was due to removal of free-phase hydrocarbons or how much was from hydrocarbons present in the vadose zone soils. Significant soil contamination exists at the site as demonstrated during the installation of vapor extraction well VEW-3 in March 1993 where 2,500 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPHG) and 25 ppm benzene were detected in a soil sample collected at a depth of 20 feet below grade. Weiss Associates had estimated a volume of free-phase hydrocarbons ranging from 4,000 to 6,000 gallons prior to the initiation of the SVE system, and if the entire amount of hydrocarbons removed by the SVE system were to have been from the plume of free product (which is highly unlikely), approximately 2,400 to 4,400 gallons of free product would still be expected to be present at the site. Since free-phase hydrocarbons were last detected in monitoring wells at the site on March 15, 1993, it must be assumed that the hydrocarbons have now either 1) dissolved and been incorporated into the groundwater contamination plume, 2) adsorbed onto vadose zone soils, or 3) migrated off-site.

DURATION OF REMEDIATION

The intention of the SVE system was to remove the plume of free-phase hydrocarbons in groundwater. Since free-phase hydrocarbons are apparently no longer present in groundwater monitoring wells on or in the vicinity of the site, the focus of site remediation should shift to removal of dissolved gasoline hydrocarbons in groundwater and removal of adsorbed gasoline hydrocarbons in vadose zone soils. Chevron's intent to operate both SVE and a groundwater extraction and treatment system concurrently is an acceptable approach. Proper design of the revised remedial system and continued evaluation of system operations and effectiveness will be necessary to optimize the prompt removal of the contaminants and return the site to a saleable condition.

The initial mass of hydrocarbons adsorbed to soil has not been estimated, but may be substantial. The presence of significant concentrations of TPHG immediately above the static groundwater elevation outside of the assumed source area may in part be due to the volatilization from a free-phase layer. Contamination of this zone is most likely due to seasonal fluctuations of groundwater surface elevations, which allowed free-phased hydrocarbons to smear across the soil. The removal of hydrocarbons from soil should proceed via the operation of the SVE system. The duration of remediation of vadose zone soil may depend greatly on the efficiency of the groundwater remediation if volatilization and smearing are the primary contributing factors to TPHG contamination in this zone.

The mass of dissolved hydrocarbons in groundwater may also be substantial. There does not appear to be sufficient information at this time to characterize the extent of the hydrocarbon contamination in groundwater, particularly off-site. It is not possible to fully evaluate the suitability of the remediation approach nor estimate the duration of clean-up without such information. The removal of gasoline hydrocarbons from groundwater must proceed at a reasonably rapid rate to minimize the duration of remediation.

REVIEW OF WEISS ASSOCIATES WORKPLAN

C-5

The Weiss Associates workplan for the installation of a groundwater extraction and treatment system at the site contains very general information regarding the proposed system to be installed at the site. The workplan states that the system will consist of three submersible pumps installed in monitoring wells CR-1, C-3 and VEW-3, groundwater will be extracted at a combined rate of approximately 4 gallons per minute, the extracted water will pass through a filter and activated carbon vessels in order to remove the hydrocarbons prior to discharge into the East Bay Municipal Utilities District sanitary sewer.

Design of a groundwater treatment system should involve the evaluation of whether the groundwater extraction rate will be sufficient to capture the entire plume of groundwater impacted above regulatory cleanup criteria. In addition the off-site extent of groundwater contamination has not been sufficiently characterized. McLaren/Hart was not provided any documentation discussing hydrogeological parameters, such as hydraulic conductivity or specific yield, required to prepare estimates of the radius of influence or zone of capture. Future evaluation of remedial system progress would also be aided by the collection of hydrogeological parameters prior to the initiation of groundwater extraction (the establishment of baseline conditions). Questions such as "are three groundwater extraction wells enough" can only be answered by the thorough evaluation of the site hydrogeology, generally by the performance of aquifer testing. McLaren/Hart strongly suggests that aquifer testing be performed by Chevron's consultants in order that system design and effectiveness be optimized.

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AND CONFIDENTIAL**

McLaren/Hart appreciates the opportunity to continue to provide our services to you and your clients. If you have any questions regarding this letter, please do not hesitate to contact either of us at (510) 521-5200.

Sincerely,

for:

Saulius Germanas, R.G.
Senior Associate Geoscientist

Joseph Scott, P.E.
Supervising Engineer

1118CDJ1

Subsurface Consultants, Inc.

Consulting Engineers

FAX TRANSMISSION COVER SHEET

To: Madhulla Logan Receiver's Fax: 569-4757

Company: ACHCSA

From: Scott Leck ☐ *RUSH!* Please Deliver Immediately

Date: 11/17/93 SCI Job No.: 611.004 Pages Transmitted: 2

Project: Subject: Meeting

☐ For Your Review and Comment ☒ As Requested

☐ Original Will Be Mailed ☐ Please Return an Executed Copy

☒ For Your Information ☐ _____

Copies have also been sent to: _____

Remarks: _____

Subsurface Consultants, Inc.
171 - 12th Street, Suite 201
Oakland, California 94607
510-268-0461 **FAX 510-268-0137**

James P. Bowers, PE
R. William Rudolph, Jr., PE

SCI 611.004
November 17, 1993

Ms. Madhulla Logan
Alameda County Health Care Services Agency
80 Swan Way, Suite 200
Oakland, California 94621

Request for Meeting
300-312 13th Street/1307 Harrison Street
Oakland, California

Dear Ms. Logan:

As directed by Mr. Tom Peacock of your office, I would like to schedule a meeting to review recent data from the former Chevron Service Station located at 301 14th Street, which was the source of gasoline contamination of the soil and groundwater on that site. Our client, who owns properties adjacent to this site is concerned about the potential for migration of contaminants onto the properties and the possible consequences.

Our review of existing data suggests that the groundwater gradient is towards the subject properties. Specifically, we want to know the Agencies' position on the possibility of contaminants from the service station site migrating to the subject properties and the future requirements for mitigation, etc. We understand that the meeting time will be billed to us at the rate of $75/hour.

We would appreciate your scheduling this meeting at the earliest possible time.

Yours very truly,

Subsurface Consultants, Inc.

Scott M. Lack
Project Manager

SML:egh

cc: Mr. Steve Banker
LCB Associates

WARE & FREIDENRICH
a professional corporation

Attorneys at Law

400 Hamilton Avenue
Palo Alto
California 94301-1825
(415) 328-6561

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Telex 348-372
Voice Mail
(415) 328-1983
EasyLink
62756934

ALCO
HAZMAT
93 NOV 10 AM 11: 13

November 8, 1993

S0605-900400

VIA FACSIMILE AND U.S.MAIL

Jennifer Eberle
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, California 94621

Re: Former Chevron Service Station #9-4816, 301 14th Street, Oakland

Dear Ms. Eberle:

I am writing to confirm the details of a voicemail message I left for you this afternoon regarding the above-referenced property (the "Property") and Chevron's proposed workplan submitted to you with correspondence from Nancy Vukelich of Chevron dated November 4, 1993.

As you may recall, this office represents the Gertha Ann Stowell Trust, the fee title owner of the Property. As a brief background, for some time now, we have been working together with Chevron and monitoring Chevron's work with respect to the soil and groundwater remediation of the Property. Over the course of the last year, the Trust has hired McLaren Hart as its environmental consultant to review Chevron's work in this regard, and to advise the Trust on the efficiency of the remediation systems chosen by Chevron and the rate of progress made to date in cleaning up the site. The Trust, through Joyce Massaro, sole trustee, and as represented by our office, has chosen to get more closely involved with the continuing clean up, based on the initial conclusions rendered by McLaren Hart. We are in the process of responding to Chevron in writing and arranging a meeting with Chevron regarding the continuing clean up and McLaren Hart's conclusions and recommendations.

To this end, I have sent McLaren Hart via facsimile today a copy of Chevron's proposed workplan referenced above, and have asked that they review and evaluate the same. We request at this time that your office withhold further action related to approving the proposed workplan until such time as the Trust and McLaren Hart have the opportunity to both evaluate the workplan and communicate with you regarding such evaluation. I would appreciate speaking with you by telephone at your earliest convenience, as I do not know when you may have received Nancy Vukelich's November 4 letter and the proposed workplan, and whether you have taken any action with regard to approving the same.

Chevron U.S.A. Products Company
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O Box 5004, San Ramon, CA 94583-0804

92 [illegible] 7:34

October 5, 1992

Ms. Jennifer Eberle
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

478

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland 94612

Dear Ms. Eberle:

This letter is in response to your letter dated August 31, 1992, received in this office on September 14, 1992. In specific, this letter addresses the apparent fluctuating ground water flow direction at the referenced site.

The historical ground water flow direction at this site has been directed to the south. On the May 6, 1992 monitoring and sampling event, the ground water gradient was calculated to be .001 ft/ft with apparent ground water mounding near and around the vapor recovery well CR-1. Vapor recovery wells CR-1 and C-5 were operating during the May 6, 1992 monitoring event. These wells are no longer utilized as vapor recovery wells due to their limited screening interval. Vapor recovery wells VEW-1 and VEW-2 installed in June, 1992, are currently operating in the same general locations as CR-1 and C-5. Observed changes in the ground water gradient are likely the result of the decreased soil pore pressure created by the on-site soil vapor extraction system.

In your letter you requested that monthly ground water elevation measurements be performed for the next consecutive twelve (12) months to determine the hydrology at the site. Chevron will agree to perform monthly measurements for three (3) consecutive months, with a quarterly monitoring frequency resuming after this period. A monthly monitoring frequency for this three (3) month period will provide useful data to evaluate the water level data accuracy and variations. If ground water continues to flow in a west-northwesterly direction (5/6/92 monitoring event) while the system continues to operate, this will support that the change in ground water gradient is due to the operation of the soil vapor extraction system. If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY

Nancy Vukelich
Site Assessment and Remediation Engineer

where do you get this? The 5-8-92 AG report did not conclude a gw flow direction

cc: Mr. Rich Hiett, RWQCB
File (9-4816-4)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

August 31, 1992

STID 478

Chevron USA Inc.
PO Box 5004
San Ramon CA 94583-0804
Attn: Nancy Vukelich

RE: Former Service Station 94816
301-14th St.
Oakland CA 94612

Dear Ms. Vukelich,

We are in receipt of the following documents: the Bimonthly Progress Report by Weiss Associates dated 6/1/92, the Quarterly Ground Water Monitoring Report by Alton Geoscience dated 5/8/92, and the Environmental Assessment Report by Groundwater Technology Inc. dated 8/3/92.

As you are aware, a soil vapor extraction system has been operating at this site since March 1992. Three new borings were advanced in June 1992; two of these borings were completed as vapor extraction wells (VEW-1 and VEW-2). The third boring was completed as off-site groundwater monitoring well MW-10; this well was installed to delineate the extent of the groundwater hydrocarbon plume.

Groundwater flow direction appears to have been **south** at the site in November 1991 and February 1992 (Alton Geoscience, 12/19/91 and 3/11/92). Therefore, it seems that MW-10 was originally intended to delineate the **downgradient extent** of the plume. However, groundwater flow direction in May 1992 appears to have been unclear due to apparent groundwater mounding near C-1 (Alton Geoscience, 5/8/92). Likewise, groundwater flow direction in June 1992 appears to have been unclear (or possibly **north**) due to apparent groundwater mounding near C-3, ~~and/or MW-10~~. (see EAR by GW Tech. 8-3-92)

Therefore, we request **monthly groundwater elevation measurements** for the next consecutive twelve months to determine the hydrology at the site. This information will be an aid in understanding whether MW-10 is actually downgradient of the site, as well as the most effective way to remediate the groundwater.

If you have any questions, please contact Jennifer Eberle at 510-271-4320.

Sincerely,

Susan L Hugo

Susan Hugo
Senior Hazardous Materials Specialist

cc: Robert Logan, Alton Geoscience, 5870 Stoneridge Dr., Suite 6, Pleasanton CA 94588
Sandra Lindsey, Groundwater Technology, Inc., 4057 Port Chicago Hwy, Concord CA 94520
Rich Hiett, RWQCB
Ed Howell/File
je

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

May 8, 1992

STID #478

Chevron USA
PO Box 5004
San Ramon CA 94583-0804
Attn: Nancy Vukelich

RE: Former Chevron Service Station #9-4816
301-14th St.
Oakland CA 94612

Dear Ms. Vukelich,

The case file for the above referenced site has recently been reviewed by our staff. The case has been reassigned to Jennifer Eberle, Hazardous Materials Specialist. Please mail future correspondence to her attention.

We are in receipt of your letter dated 4/30/92 and the attached work plan by Groundwater Technology, Inc., in which you propose one additional groundwater monitoring well in the downgradient direction. This plan is hereby approved with the understanding that if the data generated by this well is not sufficient, additional wells may be needed to delineate the groundwater plume.

If you have any questions, please phone Jennifer Eberle at 510-271-4320.

Sincerely,

Susan L. Hugo

Susan Hugo
Senior Hazardous Materials Specialist

cc: Sandra Lindsey, (Groundwater Technology, Inc., 4057 Port Chicago Hwy, Concord CA 94520)
Rich Hiett, RWQCB

je

Chevron U.S.A. Products Company
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

92 MAR 13 AM 9:03

March 6, 1992

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

STID 478

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

9462

Dear Mr. Smith:

Enclosed we are forwarding the Monthly Manual Recovery of Free Product letter prepared by our consultant Alton Geoscience for the above referenced site. This letter documents the bailing activity for the month of February. As indicated in the letter, approximately 25.3 gallons of free product was recovered during this period. To date, a total of approximately 247.8 gallons of free product has been recovered since the initiation of the bailing program on June 12, 1990.

Chevron will continue to submit this letter on a monthly basis until the dedicated recovery system is installed and in operation.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY

Nancy Vukelich
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB
File (9-4816-6)

ALTON GEOSCIENCE
THE RESULTS TEAM

MAR '92 T.L.H.

March 3, 1992

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

31-0557

Subject: Weekly Manual Recovery of Free Product
Former Chevron Service Station No. 9-4816
301 14th Street
Oakland, California

Dear Ms. Vukelich:

Alton Geoscience submits the following estimate of free product removal, for the month of February 1992, from former Chevron Service Station No. 9-4816, located at 301 14th Street, Oakland, California. Site visits include measuring depth to ground water in all monitoring wells onsite, measuring observed free product thicknesses, and manually recovering free product from wells that exhibit measurable free product.

Site visits were conducted on February 4, February 14, February 21, and February 25, 1992. Currently, Monitoring wells CR-1, C-3 and C-5 exhibit measurable free product. During the month of February 1992, approximately 25.3 gallons of free product, in total, was removed from the three monitoring wells. While sheen was detected in monitoring wells C-1 and C-2, no measurable quantity could be removed from these wells.

Please call Dale P. Swain at (510) 734-8134 if you have any questions regarding this letter.

Sincerely,

ALTON GEOSCIENCE

Dale P. Swain
Staff Scientist

5870 Stoneridge Drive, Suite 6
Pleasanton, California 94588
(510) 734-8134 • FAX (510) 734-8420

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

February 25, 1992

Ms. Nancy Vukelich
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, CA 94583-0804

Re: Site Remediation at Former Chevron Service Station # 9-4816 at 301 14th Street, Oakland, CA 94612

Dear Ms. Vukelich,

Alameda County Environmental Health Division, Hazardous Materials Division is in receipt of the Corrective Action Work Plan, dated February 10, 1992, prepared by Weiss Associates (Weiss).

The work plan proposes the installation of a vapor extraction system (VES) to remediate hydrocarbon contamination in soil and ground water beneath the site.

Recent free product measurement from four of the ten wells associated with the subject site indicate levels of .48 inches in monitoring well (mw) C-2, 29.52 inches in C-3, 27.48 inches in C-5 and 29.16 inches in CR-1 from measurements taken November 5, 1991.

Although weekly free product removal has occurred in each of the wells since December 19, 1991 there is some question that the installation of a VES system utilizing 2 extraction points would adequately deal with the significant ground water problem associated with the site. After review of the proposal it appears that, in addition to the proposed VES, direct removal of free product utilizing free product recovery pumps/ skimmers in all wells containing free product must occur. This Department feels this additional measure must be implemented as opposed to the indirect VES which you are currently proposing, unless you can provide a compelling argument that this system is not necessary.

Prior to work plan approval you are requested to address the following concerns:

1) Provide a schematic of the VES and ground water extraction/treatment system detailing the size and equipment type including piping size, extraction pump/ flow rates and pollutant capture zones etc.

2) Provide a rationale to substantiate the selection of the preferred location of the extraction wells.

3) Provide a time line by which upon system approval the installation and start up of the treatment system is anticipated to occur, the hours of system operation, scheduled equipment maintenance, sampling intervals (influent and effluent) and the anticipated duration of the treatment system. Further, describe proposed actions which will demonstrate the effectiveness of the treatment system once you feel that treatment has been achieved.

4) Provide a Health and Safety (H&S) Plan prepared by the Contractor/Consultant installing the treatment system. The H&S plan should include but not be limited to name of the site safety officer, personal protective equipment available to on site workers, medical facility (name, address and phone number), site security measures, monitoring equipment, fire protection and employee training.

5) Provide a contingency plan which will be implemented in the event of equipment malfunction (i.e. a pump, vapor knock out drum or plumbing system breakdown etc.).

As we discussed in our telephone conversation yesterday, various reports document a fluctuation in gradient from the southwest in the February 10, 1992 report to the southeast in the December 5, 1990 well installation report. **Additionally, you are required to submit a work plan to this office for the installation of additional borings/ monitoring wells in order to delimit the extent of both soil and ground water contamination in the current or previous down gradient directions.**

Finally, an additional concern involves the presence of contamination in mw C-8 which indicates petroleum contamination. Please discuss pollutant found in C-8 relative to the investigation associated with the above site.

Due to the significant ground water contamination problem present at the above facility this Department considers this case and the implementation of a treatment system to have the highest degree of urgency I therefore request a response to the above issues within 15 days of the date of this letter.

If you have any questions or comments please contact me at 510 271-4320. I would be happy to discuss the contents of this letter with either yourself or your consultant.

Sincerely,

Paul M. Smith

Paul M. Smith
Hazardous Materials Specialist

cc: Fatima Lelic/ Tom Berry Everett Sorenson, Weiss Associates
Gil Jensen, Alameda County District Attorney's Office of Environmental and Consumer Protection
Eddy So, RWQCB

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

92 FEB -7 AM 11:13

February 2, 1992

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. Smith:

Enclosed we are forwarding the Monthly Manual Recovery of Free Product letter prepared by our consultant Alton Geoscience for the above referenced site. This letter documents the bailing activity for the month of January. As indicated in the letter, approximately 18 gallons of free product was recovered during this period.

Chevron will continue to submit this letter on a monthly basis until a dedicated recovery system is installed and in operation.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

Enclosure

cc: Mr. Eddy So, RWQCB
File (9-4816-5)

ALTON GEOSCIENCE
THE RESULTS TEAM

JAN 31 '92 T.L.H.

February 1, 1992

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

31-0557

Subject: Weekly Manual Recovery of Free Product
Former Chevron Service Station No. 9-4816
301 14th Street
Oakland, California

Dear Ms. Vukelich:

Alton Geoscience submits the following estimate of free product removal, for the month of January 1992, from former Chevron Service Station No. 9-4816, located at 301 14th Street, Oakland, California. Site visits include measuring depth to ground water in all monitoring wells onsite, measuring observed free product thicknesses, and manually recovering free product from wells that exhibit measurable free product.

Site visits were conducted on January 6, January 16, January 22, and January 28, 1992. Currently, Monitoring wells CR-1, C-1, C-2, C-3 and C-5 exhibit measurable free product. During the month of January 1992, approximately 18 gallons of free product, in total, was removed from the five monitoring wells.

Please call John De George at (510) 682-1582 if you have any questions regarding this letter.

Sincerely,

ALTON GEOSCIENCE

John De George
Staff Geologist

1000 Burnett Avenue, Suite 140
Concord, California 94520
(415) 682-1582 • FAX (415) 682-8921

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

January 6, 1992

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. Smith:

Enclosed we are forwarding the Monthly Manual Recovery of Free Product letter prepared by our consultant Alton Geoscience for the above referenced site. This letter documents the bailing activity for the month of December. As indicated in the letter, approximately 3.9 gallons of free product were recovered during this period.

Chevron will continue to submit this letter on a monthly basis until a dedicated recovery system is installed and in operation. We have instructed Alton Geoscience to increase the purging frequency from monthly to weekly.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

Enclosure

cc: Mr. Eddy So, RWQCB
File (9-4816-4)

ALTON GEOSCIENCE
THE RESULTS TEAM

JAN 6 '92 T.L.H.

January 1, 1992

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

310-557

Subject: Manual Recovery of Free Product
Former Chevron Service Station No. 9-4816
301 14th Street
Oakland, California

Dear Ms. Vukelich:

Alton Geoscience submits the following estimate of free product removal, for the month of December 1991, from former Chevron Service Station No. 9-4816, located at 301 14th Street, Oakland, California. Site visits include measuring depth to ground water in all monitoring wells onsite, measuring observed free product thicknesses, and removing free product from wells exhibiting measurable free product.

Currently, Monitoring wells CR-1, C-2, C-3 and C-5 exhibit measurable free product. On December 19, 1991, approximately 3.9 gallons of free product, in total, was removed from the four monitoring wells.

Please call John De George at (510) 682-1582 if you have any questions regarding this letter.

Sincerely,

ALTON GEOSCIENCE

John De George
Staff Geologist

1000 Burnett Avenue, Suite 140
Concord, California 94520
(415) 682-1582 • FAX (415) 682-8921

PS

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address. P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

January 6, 1992

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. Smith:

Enclosed we are forwarding the Monthly Manual Recovery of Free Product letter prepared by our consultant Alton Geoscience for the above referenced site. This letter documents the bailing activity for the month of December. As indicated in the letter, approximately 3.9 gallons of free product were recovered during this period.

Chevron will continue to submit this letter on a monthly basis until a dedicated recovery system is installed and in operation. We have instructed Alton Geoscience to increase the purging frequency from monthly to weekly.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

Enclosure

cc: Mr. Eddy So, RWQCB
File (9-4816-4)

92 JAN -8 PM 12:11

ALTON GEOSCIENCE
THE RESULTS TEAM

JAN 03 '92 T.C.H.

January 1, 1992

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

310-557

Subject: Manual Recovery of Free Product
Former Chevron Service Station No. 9-4816
301 14th Street
Oakland, California

Dear Ms. Vukelich:

Alton Geoscience submits the following estimate of free product removal, for the month of December 1991, from former Chevron Service Station No. 9-4816, located at 301 14th Street, Oakland, California. Site visits include measuring depth to ground water in all monitoring wells onsite, measuring observed free product thicknesses, and removing free product from wells exhibiting measurable free product.

Currently, Monitoring wells CR-1, C-2, C-3 and C-5 exhibit measurable free product. On December 19, 1991, approximately 3.9 gallons of free product, in total, was removed from the four monitoring wells.

Please call John De George at (510) 682-1582 if you have any questions regarding this letter.

Sincerely,

ALTON GEOSCIENCE

John De George
Staff Geologist

1000 Burnett Avenue, Suite 140
Concord, California 94520
(415) 682-1582 • FAX (415) 682-8921

Gu401

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
PHONE NO. 415/271-4320

* see page 5 comments

577 123
744 —
11/14/90

ACCEPTED
DEPARTMENT OF ENVIRONMENTAL HEALTH
470 - 27th Street, Third Floor
Oakland, CA 94612
Telephone: (415) 874-7237

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction.

One copy of these accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.

Any change or alterations of these plans and specifications must be submitted to this Department and to the Fire and Building Inspection Department to determine if such changes meet the requirements of State and local laws. Notify this Department at least 48 hours prior to the following required inspections:

✓ Removal of Tank and Piping
✓ Sampling
___ Final Inspection

Issuance of a permit to operate is dependent on compliance with accepted plans and all applicable laws and regulations.

THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.

approved 2/13/91 P. [signature]

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

1. **Business Name** Chevron Service Station
   Business Owner Chevron USA
2. **Site Address** 301-14th St
   City Oakland **Zip** 94612 **Phone** (415)842-9103
3. **Mailing Address** 2410 Camino Ramon
   City San Ramon **Zip** 94583 **Phone** (415)842-9103
4. **Land Owner** STOWELL TRUST
   ATTORNEY: WARE & FREIDENRICH
   Address 400 HAMILTON AVE **City, State** PALO ALTO CA **Zip** 94301-1869
5. **EPA I.D. No.** CAL000041709
6. **Contractor** R.W. Johnston & Son
   Address 801-53rd Ave
   City Oakland Ca **Phone** 261-9424
   License Type A-B **ID#** 289839
7. **Consultant** Chevron USA
   Address 2410 Camino Ramon
   City San Ramon **Phone** 842-9500

8. Contact Person for Investigation

Name Wendy Vukelich Title Environmental Engineer

Phone 842-9500

9. Total No. of Tanks at facility 3

10. Have permit applications for all tanks been submitted to this office? Yes [X] No [ ]

11. State Registered Hazardous Waste Transporters/Facilities

a) Product/Waste Tranporter

Name Erickson Inc EPA I.D. No. CAD009466392

Address 255 Parr Blvd

City Richmond State Ca Zip 94801

b) Rinsate Transporter

Name Same EPA I.D. No. _____

Address _____

City _____ State _____ Zip _____

c) Tank Transporter

Name Same EPA I.D. No. _____

Address _____

City _____ State _____ Zip _____

d) Tank Disposal Site

Name Same EPA I.D. No. _____

Address _____

City _____ State _____ Zip _____

e) Contaminated Soil Transporter

Name U.S. Services EPA I.D. No. CAD052453O7

Address 860-92nd Ave.

City OAKLAND State CA Zip 94603

12. Sample Collector

Name _____

Company Blain Tech

Address 1370 Tully Rd Suite 505

City San Jose State Ca Zip 95122 Phone 408-995-5535

13. Sampling Information for each tank or area

Tank or Area		Material sampled	Location & Depth
Capacity	Historic Contents (past 5 years)		
10,000	Gasoline UL	soil	12'
10,000	Gasoline SP	soil	12'
5,000	Gasoline RG	soil	12'

14. Have tanks or pipes leaked in the past? Yes [ ] No [X]

If yes, describe. _____

15. NFPA methods used for rendering tank inert? Yes [X] No [ ]

If yes, describe. Triple rinse and inert with dry ice 20# per 1,000 gal capacity

An explosion proof combustible gas meter shall be used to verify tank inertness.

16. Laboratories

Name Superior Lab

Address 1385 FAIRFAX ST. Suite D

City San Francisco State Ca. Zip 94124

State Certification No. 220

17. Chemical Methods to be used for Analyzing Samples

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Number
TPH Gasoline	EPA 5030 w/ 8015	
BTX&E	EPA 8020	
TEL	DHS Lust	

18. Submit Site Safety Plan

19. Workman's Compensation: Yes [X] No [ ]

Copy of Certificate enclosed? Yes [X] No [ ]

Name of Insurer Republic Indemnity

20. Plot Plan submitted? Yes [X] No [ ]

21. Deposit enclosed? Yes [X] No [ ]

22. Please forward to this office the following information within 60 days after receipt of sample results.

a) Chain of Custody Sheets

b) Original Signed Laboratory Reports

c) TSD to Generator copies of wastes shipped and received

d) Attachment A summarizing laboratory results

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Saftey and Health Administration) requirements concerning personnel and safety.

I will notify the Department of Environmental Health at least two (2) working days (48 hours) after approval of this closure plan in advance to schedule any required inspections. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Signature of Contractor

Name (please type) GW Johnston

Signature [signature]

Date 11/13/90

Signature of Site Owner or Operator

Name (please type) Cynthia C. Wong

Signature [signature]

Date 11/6/90

* pipeline soil sampling will occur 1 per 20 lineal feet of underneath gas dispensers.
* stockpile soil sampling will occur (collect 4 samples per 20 yd^3) & composit in cert. lab.
* Respirators w/ organic vapor cartridges req. onsite
* triple rinsing of UST's not recommended
* all piping will be properly rinsed & recycled or manifested offsite

NOTES:

1. Any changes in this document must be approved by this Department.

2. Any leaks discovered must be submitted to this office on an underground storage tank unauthorized leak/contamination site report form within 5 days of its discovery.

3. Three (3) copies of this plan must be submitted to this Department. One copy must be at the construction site at all times.

4. After approval of plan, notification of at least two (2) working days (48 hours) must be given to this Department prior to removal of tank(s).

5. A copy of your approved plan must be sent to the landowner.

6. Triple rinse means that:

   a) Final rinse must contain less than 100 ppm of Gasoline (EPA method 8020 for soil, or EPA method 602 for water) or Diesel (EPA method 418.1). Other methods for halogenated volatile organics (EPA method 8010 for soil, EPA method 601 for water) may be required. The composition of the final rinse must be demonstrated by an original or facsimile report from a laboratory certified for the above analyses.

   b) Tank interior is shown to be free from deposits or residues upon a visual examination of tank interior.

   c) Tank should be labelled as "tripled rinsed; laboratory certified analysis available upon request" with the name and address of the contractor.

If all the above requirements cannot be met, the tank must be transported as a hazardous waste.

7. Any cutting into tanks requires local fire department approval.

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

ATTACHMENT A

SAMPLING RESULTS

Tank or Area	Contaminant	Location & Depth	Results (specify units)

INSTRUCTIONS

2. SITE ADDRESS
Address at which closure or modification is taking place.

5. EPA I.D. NO.
This number may be obtained from the State Department of Health Services, 916/324-1781.

6. CONTRACTOR
Prime contractor for the project.

7. OTHER
List professional consultants here.

12. SAMPLE COLLECTOR
Persons who are collecting samples.

13. SAMPLING INFORMATION
Historic contents - the principal product(s) used in the last 5 years.

Material sampled - i.e., water, oil, sludge, soil, etc.

16. LABORATORIES
Laboratories used for chemical and geotechnical analyses.

17. CHEMICAL METHODS:
All sample collection methods and analyses should conform to EPA or DHS methods.

Contaminant - Specify the chemical to be analyzed.

Sample Preparation Method Number - The means used to prepare the sample prior to analyses - i.e., digestion techniques, solvent extraction, etc. Specify number of method and reference if not an EPA or DHS method.

Analysis Method Number - The means used to analyze the sample - i.e., GC, GC-MS, AA, etc. Specify number of method and reference if not a DHS or EPA method.

NOTE:
Method Numbers are available from certified laboratories.

18. SITE SAFETY PLAN
A plan outlining protective equipment and additional specialized personnel in the event that significant amount of hazardous materials are found. The plan should consider the availability of respirators, respirator cartridges, self-contained breathing apparatus (SCBA) and industrial hygienists.

19. ATTACH COPY OF WORKMAN'S COMPENSATION

20. PLOT PLAN

The plan should consists of a scaled view of the facility at which the tank(s) are located and should include the following information:

a) Scale

b) North Arrow

c) Property Line

d) Location of all Structures

e) Location of all relevant existing equipment including tanks and piping to be removed

f) Streets

g) Underground conduits, sewers, water lines, utilities

h) Existing wells (drinking, monitoring, etc.)

i) Depth to ground water

j) All existing tanks in addition to the ones being pulled

9

rev. 9/88
mam

CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY): 08/29/90

PRODUCER

Putnam, Knudsen
& Wieking, Inc.
P.O. Box 24205
Oakland, CA 94623

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED

R. W. Johnston & Son
801 53rd Avenue
Oakland, CA 94601

COMPANIES AFFORDING COVERAGE

COMPANY LETTER A	Fireman's Fund
COMPANY LETTER B	Republic Indemnity
COMPANY LETTER C	
COMPANY LETTER D	
COMPANY LETTER E	

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	ALL LIMITS IN THOUSANDS	
A	GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS MADE [X] OCCUR. [ ] OWNER'S & CONTRACTOR'S PROT [ ]	MXX80387571	09/01/89	09/01/92	GENERAL AGGREGATE PRODUCTS-COMP/OPS AGGREGATE PERSONAL & ADVERTISING INJURY EACH OCCURRENCE FIRE DAMAGE (Any one fire) MEDICAL EXPENSE (Any one person)	$ 2,000 $ 2,000 $ 1,000 $ 1,000 $ 50 $ 5
A	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [ ] HIRED AUTOS [ ] NON-OWNED AUTOS [ ] GARAGE LIABILITY	MXA80091783	09/01/90	09/01/91	COMBINED SINGLE LIMIT BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE	$ 1,000 $ $ $
	EXCESS LIABILITY [ ] OTHER THAN UMBRELLA FORM				EACH OCCURRENCE $	AGGREGATE $
B	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY	PC998177	07/01/90	07/01/91	STATUTORY $ 1,000 (EACH ACCIDENT) $ 1,000 (DISEASE—POLICY LIMIT) $ 1,000 (DISEASE—EACH EMPLOYEE)	
	OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

RE: INSURED'S CALIFORNIA OPERATIONS. JPW/LM/PRS

COPY

CERTIFICATE HOLDER

ALAMEDA COUNTY HEALTH
HAZARDOUS MATERIALS DIV.
80 SWAN WAY
OAKLAND, CA 91621

CANCELLATION - Ten Day Notice for Non-Payment of Premium

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL [redacted] MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, [redacted]

AUTHORIZED REPRESENTATIVE

James P. Wieking Jr.

II. Code of Safe Practices

General

1. All persons shall follow these safe practices rules, render every possible aid to safe operations, and report all unsafe conditions or practices to the foreman or superintendent.
2. Foremen shall insist on employees observing and obeying every rule, regulation, and order as is necessary to the safe conduct of the work, and shall take such action as is necessary to obtain observance.
3. All employees shall be given frequent accident prevention instructions. Instructions shall be given at least every 10 working days.
4. Anyone known to be under the influence of drugs or intoxicating substances which impair the employee's ability to safely perform the assigned duties shall not be allowed on the job while in that condition.
5. Horseplay, scuffling, and other acts which tend to have an adverse influence on the safety or well-being of the employees shall be prohibited.
6. Work shall be well planned and supervised to prevent injuries in the handling of materials and in working together with equipment.
7. No one shall knowingly be permitted or required to work while the employee's ability or alertness is so impaired by fatigue, illness, or other causes that it might unnecessarily expose the employee or others to injury.
8. Employees shall not enter manholes, underground vaults, chambers, tanks, silos, or other similar places that receive little ventilation, unless it has been determined that it is safe to enter.
9. Employees shall be instructed to ensure that all guards and other protective devices are in proper places and adjusted, and shall report deficiencies promptly to the foreman or superintendent.
10. Workers shall not handle or tamper with any electrical equipment, machinery, or air or water lines in a manner not within the scope of their duties, unless they have received instructions from their foreman.
11. All injuries shall be reported promptly to the foreman or superintendent so that arrangements can be made for medical or first aid treatment.
12. When lifting heavy objects, the large muscles of the leg instead of the smaller muscles of the back shall be used.
13. Inappropriate footwear or shoes with thin or badly worn soles shall not be worn.
14. Materials, tools, or other objects shall not be thrown from buildings or structures until proper precautions are taken to protect others from the falling objects.
15. Employees shall cleanse thoroughly after handling hazardous substances, and follow special instructions from authorized sources.
16. Work shall be so arranged that employees are able to face ladder and use both hands while climbing.
17. Gasoline shall not be used for cleaning purposes.

18. No burning, welding, or other source of ignition shall be applied to any enclosed tank or vessel, even if there are some openings, until it has first been determined that no possibility of explosion exists, and authority for the work is obtained from the foreman or superintendent.
19. Any damage to scaffolds, falsework, or other supporting structures shall be immediately reported to the foreman and repaired before use.
20. All work on gasoline tanks and piping must be done per National Fire Protection Authority regulations.

Use of Tools and Equipment

21. All tools and equipment shall be maintained in good condition.
22. Damaged tools or equipment shall be removed from service and tagged "DEFECTIVE."
23. Pipe or Stillson wrenches shall not be used as a substitute for other wrenches.
24. Only appropriate tools shall be used for the job.
25. Wrenches shall not be altered by the addition of handle-extensions or "cheaters."
26. Files shall be equipped with handles and not used to punch or pry.
27. A screwdriver shall not be used as a chisel.
28. Wheelbarrows shall not be pushed with handles in an upright position.
29. Portable electric tools shall not be lifted or lowered by means of the power cord. Ropes shall be used.
30. Electric cords shall not be exposed to damage from vehicles.
31. In locations where the use of a portable power tool is difficult, the tool shall be supported by means of a rope or similar support of adequate strength.

Machinery and Vehicles

32. Only authorized persons shall operate machinery or equipment.
33. Loose or frayed clothing, or long hair, dangling ties, finger rings, etc., shall not be worn around moving machinery or other sources of entanglement.
34. Machinery shall not be serviced, repaired or adjusted while in operation, nor shall oiling of moving parts be attempted, except on equipment that is designed or fitted with safeguards to protect the person performing the work.
35. Where appropriate, lock-out procedures shall be used.
36. Employees shall not work under vehicles supported by jacks or chain hoists, without protective blocking that will prevent injury if jacks or hoists should fail.
37. Air hoses shall not be disconnected at compressors until hose line has been bled.
38. All excavations shall be visually inspected before backfilling, to ensure that it is safe to backfill.
39. Excavating equipment shall not be operated near tops of cuts, banks, and cliffs if employees are working below.

40. Tractors, bulldozers, scrapers and carryalls shall not operate where there is possibility of overturning in dangerous areas like edges of deep fills, cut banks, and steep slopes.

Blasting Operations

1. Any blasting necessary or required shall be subcontracted to a contractor properly licensed and experienced for this work.

For underground gasoline storage tank removals, two fire extinguisher, level c protective clothing and explosimeter will be on site provided by R. W. J. & S.

If contamination is encountered to the extent specified in CFR 1910.120(i)(2))i) work will be stopped until all necessary protective equipment and qualified consultants are on site before work proceeds.

R.W. JOHNSTON & SON
801 - 53RD Avenue
Oakland, CA 94601
Cal State Contractors Lic#289839

O.S.H.A. (ACCIDENT PREVENTION PROGRAM) FOR ALL FOREMEN

I. Planning for Construction Work

In advance of starting any construction work the following should be considered:

A. Workers and Equipment Access Movement at Work Site
   1. Adequate work areas.
   2. Walkways, runways, ladders, stairs and roads.
      a) clear of debris at all times.
   3. All floor, roof and excavation openings shall be protected.
   4. When working during darkness provide adequate lighting.

B. Location of Temporary Facilities
   1. Consider location of all existing and future utilities when locating temporary office, tool sheds, toilets, and drinking water.

C. Schedule Work for Safety
   1. Have all safety equipment ready when needed (shoring, first aid, and personal protective equipment).
   2. Plan work so that too many people are not in a small area at the same time.

D. Work Procedures
   1. Use proper equipment for each job.
      a) cranes, fork trucks, back hoes and trucks.
   2. Use proper tools specifically designed for the work being done.
   3. Train all workers in proper use of tools and equipment.
   4. Provide for (tail gate) safety meetings each week, or as necessary.
   5. Have adequate manpower available.
   6. Post all safety regulations and posters required.

(415) 261-9424

CALIFORNIA LICENSE NO. 289839
NEVADA LICENSE NO. 0018186

R. W. JOHNSTON & SON
GENERAL CONTRACTORS
801 - 53RD AVENUE
OAKLAND, CALIFORNIA 94601

November 13, 1990

Alameda County Health Department
80 SWAN WAY
OAKLAND, CA 94621

Re: Chevron Service Station
301 - 14th Street
Oakland, Ca 94612

Tank Closure Plan for all tanks to be removed at the above address.

1. Obtain all required permits.
2. Schedule tank removal date and time with:
   1. Alameda County Health Department (ACHD)
      (415) 271-4320
   2. Oakland Fire Department (OFP)
      (415) 273-3242
   3. Blain Tech (BT)
      (408) 995-5535
   4. Erickson, inc. (ERK)
      (415) 235-1393

3. Remove all product from tanks.

4. Uncover tank and disconnect piping.

5. De-gas tank using dry ice, 20 pounds per thousand, or per local requirements.

6. Remove tank and inspect for leakage. Load on ERK truck and haul on Hazardous Waste Manifest for cleaning and disposal as scrap.

7. If tank pit appears to be free of contamination, BT will take two soil samples from under tank at interface of tank backfill and native soil. Sample will be collected in clean 2" diameter brass tubes, sealed with aluminum foil, plastic caps and tape, and stored in a cooled ice chest for delivery to Superior Lab.

(415) 261-9424

CALIFORNIA LICENSE NO. 289839
NEVADA LICENSE NO. 0018186

R. W. JOHNSTON & SON
GENERAL CONTRACTORS
801 - 53RD AVENUE
OAKLAND, CALIFORNIA 94601

If obvious contamination is found, further excavation will be done to remove all contaminated soil from tank pit. One soil sample will be taken from under the tank at this depth, or as directed by ACHD. If ground water is encountered, one ground water sample will be collected in clean VOA vials, sealed with teflon lined screw caps and tape. additional sidewall samples (6" above ground water table) will be collected as necessary.

Note: if remediation is required, Chevron USA may propose alternate method., other than excavation and disposal.

"Chain of Custody" is as follows...
BT takes sample and deliver to Superior laboratory.

Superior will send results to Chevron USA. Chevron will send copies to ACHD, OFP, and Regional Water Quality Control Board, if required.

Richard H. Burge

RHB/jmk

Chevron

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address. P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

91 DEC 13 PM 12: 34

December 10, 1991

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. Smith:

Enclosed we are forwarding the Monthly Manual Recovery of Free Product letter prepared by our consultant Alton Geoscience for the above referenced site dated December 1, 1991. This letter documents the bailing activity for the month of November. As indicated in the letter, approximately 4.5 gallons of free product were recovered during this period. For your information, Alton Geoscience has been instructed to increase the bailing frequency from monthly to weekly until a system is in operation.

Chevron will continue to submit this letter on a monthly basis until a dedicated recovery system is installed and in operation.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

Enclosure

cc: Mr. Eddy So, RWQCB
File (9-4816-5)

ALTON GEOSCIENCE
THE RESULTS TEAM

December 1, 1991

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

310-557

Subject: Monthly Manual Recovery of Free Product
Former Chevron Service Station No. 9-4816
301 14th Street
Oakland, California

Dear Ms. Vukelich:

Alton Geoscience submits the following estimate of free product removal, on a monthly basis, from former Chevron Service Station No. 9-4816, located at 301 14th Street, Oakland, California. Monthly site visits include measuring depth to ground water in all monitoring wells onsite, measuring observed free product thicknesses, and removing free product from wells exhibiting measurable free product.

Currently, Monitoring wells CR-1, C-2, C-3 and C-5 exhibit measurable free product. On November 5, 1991, approximately 4.5 gallons of free product, in total, was removed from the four monitoring wells.

Please call John De George at (510) 682-1582 if you have any questions regarding this letter.

Sincerely,

ALTON GEOSCIENCE

John De George
Staff Geologist

1000 Burnett Avenue, Suite 140
Concord, California 94520
(415) 682-1582 • FAX (415) 682-8921

Chevron

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

December 2, 1991

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. Smith:

Per our conversation of November 22, 1991, Chevron is formally requesting an extension for submittal of a remediation work plan to be effective November 30, 1991, to terminate on January 15, 1992. This has become necessary due to a change in Chevron's remedial approach from a separate-phase pumping system to a soil vapor extraction system. As discussed with you, we will propose to operate a VR Systems ICE (Internal Combustion Engine) at the referenced site to mitigate the separate-phase hydrocarbons on the ground water table and remove remaining petroleum hydrocarbons in the subsurface soils in preparation for future development. We are currently preparing an air permit application for submittal to the Bay Area Air Quality Management District (BAAQMD) for permission to operate this system. This application will be submitted to the BAAQMD by December 9, 1991.

For your information, as part of Chevron's agreement with the property owner, a draft work plan must be submitted for their review prior to formalization. This draft is being submitted to the property owners the week of December 9, 1991. I am requesting to have their comments back no later than December 31, 1991. Upon receipt, my consultant will formalize the work plan for submittal for your review and concurrence.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

cc: Mr. Eddy So, RWQCB
Ms. Fatima Lelic, Weiss Associates
File (9-4816-4)

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

91 NOV 19 2:10: 38

November 15, 1991

Mr. Eddy So
California Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, CA 94612

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. So:

This letter is in response to your letter dated November 8, 1991, received in this office November 13, 1991. Chevron has been actively pursuing installation of additional ground water monitor wells both on-site and off-site since the site responsibility was turned over to me in June, 1990. The wells proposed are in the surmised down-gradient direction (southwest) and other source areas. Based on topography, ground water may flow to the southwest, give or take 30 degrees. Your assumption that the decreasing concentrations of TPH-G and Benzene since the December 8, 1990, sampling indicate the possibility that contaminant migration may have occured is the rational we based the off-site well locations on. We more actively pursued off-site wells as the property owner did not want any other wells installed on his property.

As stated in my cover letter dated October 31, 1991, the city denied the encroachment permit based on a city requirement whereby encroachment permits can only be issued to owners or tenants of properties from which encroachment is requested. However, the city will issue a permit if Chevron formally notifies the property owner of their intent to perform said work, assuming full responsibility, and secure written acknowledgement for Chevron to perform this additional work. The property owner will not sign this authorization for Chevron to perform this additional work. However, it has been recently brought to my attention that the parcel of land the former service station existed on was subdivided into two (2) separate parcels. Our property representative is currently pursuing securing of an easement agreement with this property owner to allow us access to perform additional on-site work. In addition, we will continue to pursue securing the necessary acknowledgement for Chevron to secure off-site encroachment permits with this property owner.

With this Chevron is requesting an extension for submittal of a work plan effective November 18, 1991, to terminate on January 15, 1992 to allow for sufficient time to secure the necessary access agreements. If securing of necessary easement agreements is not completed by this time, you will be formally notified.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

cc: File (9-4612-4)
✓ Mr. Ariu Levi - Alameda County Health Care Services

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Department

91 NOV -8 (:10:40

November 4, 1991

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. Smith:

Enclosed we are forwarding the Monthly Manual Recovery of Free Product letter prepared by our consultant Alton Geoscience for the above referenced site. This letter documents the bailing activity for the month of October. As indicated in the letter, approximately seven (7) gallons of free product were recovered during this period.

Chevron will continue to submit this letter on a monthly basis until a dedicated recovery system is installed and in operation.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

Enclosure

cc: Mr. Eddie So, RWQCB
File (9-4816-3)

ALTON GEOSCIENCE
THE RESULTS TEAM

November 1, 1991

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
Post Office Box 5004
San Ramon, California 94583-0804

310-557

Subject: Monthly Manual Recovery of Free Product
Former Chevron Service Station No. 9-4816
301 14th Street
Oakland, California

Dear Ms. Vukelich:

Alton Geoscience submits the following estimate of free product removal, on a monthly basis, from former Chevron Service Station No. 9-4816, located at 301 14th Street, Oakland, California. Monthly site visits include measuring depth to ground water in all monitoring wells onsite, measuring observed free product thicknesses, and removing free product from wells exhibiting measurable free product.

Currently, Monitoring wells CR-1, C-2, C-3 and C-5 exhibit measurable free product. On October 18, 1991, approximately 7 gallons of free product, in total, was removed from the four monitoring wells.

Please call John De George at (510) 682-1582 if you have any questions regarding this letter.

Sincerely,

ALTON GEOSCIENCE

John De George
Staff Geologist

1000 Burnett Avenue, Suite 140
Concord, California 94520
(415) 682-1582 • FAX (415) 682-8921

Chevron

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address PO Box 5004, San Ramon, CA 94583-0804

Marketing Department

91 OCT 32 AM 11:59

October 30, 1991

Mr. Paul Smith
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station #9-4816
301 14th Street, Oakland

Dear Mr. Smith:

Chevron is requesting an extension to respond to your letter received in this office September 30, 1991 (letter was not dated - copy attached). The soils remediation program was completed in July, 1991. We have been evaluating all the data compiled to date to assess what the appropriate remedial approach should be. Thus, it has become necessary for us to request an extension effective November 1, 1991, to terminate on November 30, 1991, for responding to Items 3 and 4.

However, I will respond to both items 1 and 2 concurrently at this time. In June, 1990, four (4) monitor wells designated C-1 through C-4 were installed. Weekly inspection of the monitoring well network was initiated on June 14, 1990, due to the presence of phase-separated hydrocarbons observed in monitor well C-3. Approximately 68.5 gallons of phase-separated hydrocarbons were bailed from monitor well C-3 from initiation date through July 30, 1990. This activity was documented in the "Soil Boring and Well Installation Report" dated August 8, 1990, submitted to your office. All additional monitor wells installed subsequent to June 14, 1991, that exhibited phase-separated hydrocarbons were included in this weekly purging program. This activity was documented in both the "Well Installation Reports" dated December 10, 1990, and June 17, 1991. In addition, all site update reports included the amount of phase-separated hydrocarbons recovered during that monitoring period. A reduction to monthly purging of the phase-separated hydrocarbons was implemented in July, 1991, and will continue until a dedicated recovery system in in operation. All bailing data collected since the initiation of this activity is enclosed for your information. To date, approximately 175.75 gallons of phase-separated hydrocarbons has been recovered. All future monthly bailing activity will be documented in a letter that we will submit to your office on a monthly basis until a dedicated recovery system is installed and in operation.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

Enclosure

cc: Mr. Eddie So, RWQCB
File (9-4816-2)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
2410 Camino Ramon
San Ramon, CA 94583

September 25, ~~1990~~ 1991

RE: Site Remediation at Chevron, 301 14th Street, Oakland, CA 94612

Dear Ms. Vukelich,

Alameda County Environmental Health Department, Hazardous Materials Division has received and reviewed the Tank Removal Observation Report dated July 24, 1991 and the Well Installation Report dated June 13, 1991, both prepared by Geostratagies Inc.

Sampling which occurred during the removal of the underground tanks indicated soil contamination levels as high as 7800 ppm of Total Petroleum Hydrocarbons as gasoline (TPHg) and 2.8 ppm benzene from beneath the former tanks.

Upon review of the reports and following a phone conversation with Mr. Jeff Monroe with Geostratagies (in order to clarify the procedures employed in removing, aerating and sampling soils) it appears that significant soil contamination has been removed from the above site.

However, there currently exists a significant ground water contamination problem requiring urgent attention. Of the ten monitoring wells which have been installed on or around the site eight have significant contamination levels. The last monitoring performed on monitoring well c-3 on 1/17/91 indicated 2.5 feet of free product. Results from monitoring well c-2 indicated benzene concentrations in ground water of 4,500 ppb.

1) You are directed to immediately commence monthly subjective monitoring of <u>all</u> wells for the presence of free product. Those showing free product are to be bailed as a means of interim remediation. This interim remediation shall be in place until such time as a dedicated recovery/treatment system is operating. You are required to record the date and amount of free product removed and submit it this office in monthly reports until a dedicated system is on line

You are required to provide the following information to this department within 30 days of the receipt of this letter.

2) Specify the interim measures undertaken in the past six months and those measures in the future to remove free product in all applicable monitoring wells.

3) A written proposal outlining the details of a groundwater treatment system. The groundwater treatment proposal shall include the following:

A) Rationale for the placement of extraction well(s).

B) Technical information about the proposed dedicated treatment system designed to address the site specific conditions, both hydrogeological and logistical for the site.

C) The measures proposed to evaluate the effectiveness of the treatment system, at regular intervals, (while the system is operating) and a description of the measures which will be employed in measuring the overall effectiveness of the treatment system at the completion of the project.

D) A Description of how the proposed system will prevent further migration of petroleum pollutants.

4) Although the down gradient direction of groundwater contamination has yet to be completely delineated, this office does not see why that this effort cannot commence concurrently with the design and implementation of a groundwater treatment system. You are therefore requested to provide a work plan specifying proposed actions to effectively define the ground water contamination and to also adequately address the groundwater pollution associated with the past activities at the site.

A) You are required to specify an attainable time line for both the adequate delineation of the contamination problem and the implementation of the ground water treatment system.

If you have any questions regarding any of the above please feel free to contact me at (510) 271-4320.

Sincerely,

Paul M. Smith

Paul M. Smith
Hazardous Materials Specialist

cc:
Eddie So, SFRWQCB
Jeff Monroe, GeoStratagies Inc.
Gil Jensen, Alameda County District Attorney's Office of Environmental and Consumer Protection

gettler — ryan inc.

FACSIMILE COVER SHEET

TO: Paul Smith

COMPANY: A.C.E.H.D.

FROM: Jeff Moore

DATE: 7-18-91

RE: Former Chevron SS # 4816 (4th Ave. Oakland)

COMMENTS: Location of latest stockpile
Samples from aerated
soil - I will let results when I
receive them from
the lab.

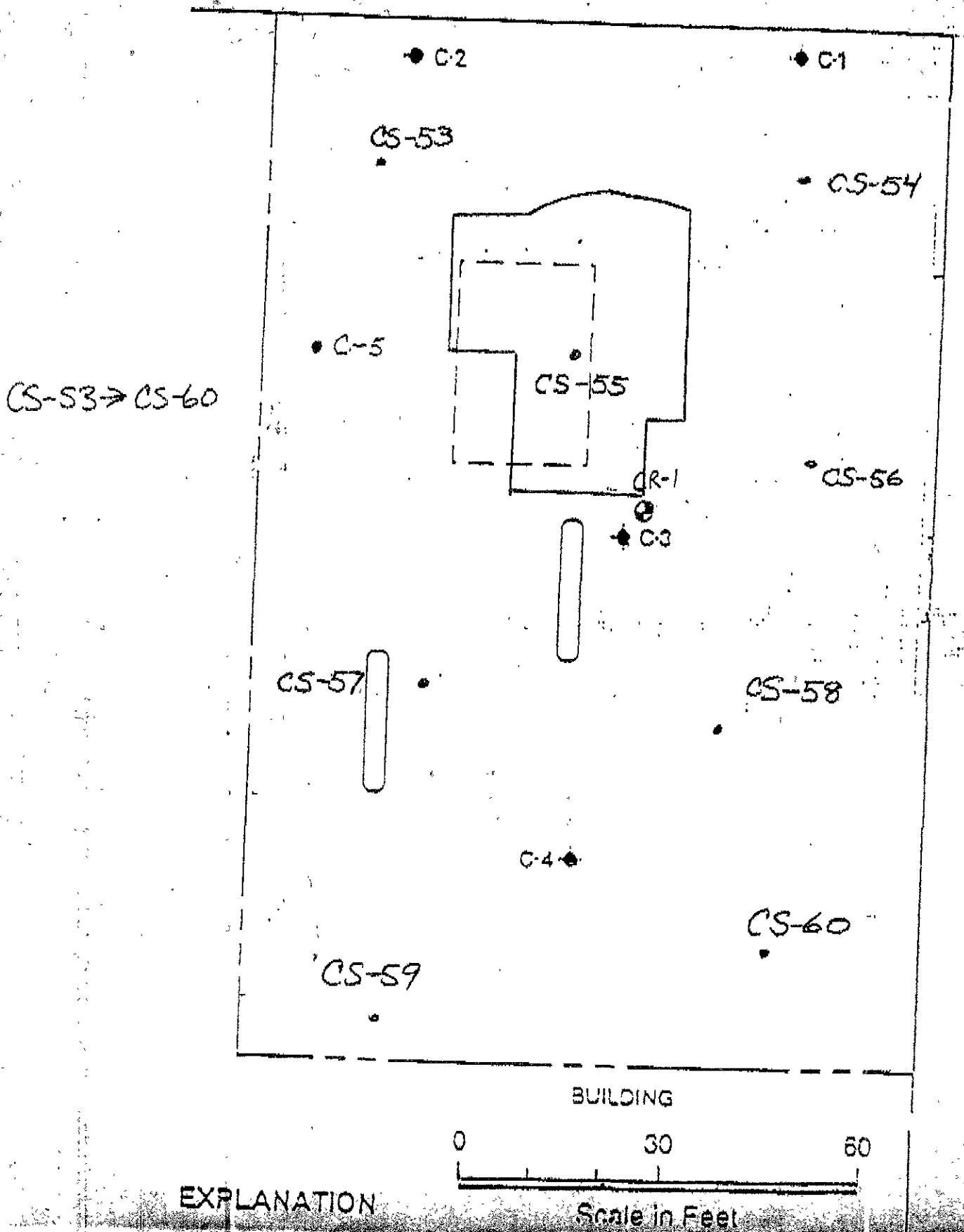
2 pages including cover.

IF THERE ARE ANY PROBLEMS WITH THIS TRANSMISSION, PLEASE CALL (415) 783-7500.

2150 west winton avenue • hayward, california 94545-1210 • (415) 783-7500
FAX (415) 783-1089

14th Street

7270 Chevron #4816



white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

Hazardous Materials Division Inspection Form

I

Site ID# ______ Site Name ______ Today's Date 2/21/91

Site Address 301 14th St EPA ID# ______

City Oakland Zip 94612 Phone ______

MAX Amt. Stored > 500lbs/55g/200cf? Y N
Hazardous Waste generated per month?

Inspection Categories:
___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
___ II. Business Plans, Acute Hazardous Materials
___ III. Underground Tanks

onsite 1:20
offsite 5:21

The marked items represent violations of the Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

I.A GENERATOR (Title 22)

	1. Waste ID	* 66471
	2. EPA ID	66472
	3. > 90 days	66508
	4. Label dates	66508
	5. Biennial	66493
Manifest	6. Records	66492
	7. Correct	66484
	8. Copy sent	66492
	9. Exception	66484
	10. Copies Rec'd	66492
Misc.	11. Treatment	66371
	12. On-site Disp. (H.S.&C.)	26189.5
	13. Ex Haz. Waste	66570
Prevention	14. Communications	67121
	15. Aisle Space	67124
	16. Local Authority	67126
	17. Maintenance	67120
	18. Training	67105
Contingency	19. Prepared	67140
	20. Name List	67141
	21. Copies	67141
	22. Emg. Coord. Trng.	67144
Containers, Tanks	23. Condition	67241
	24. Compatibility	67242
	25. Maintenance	67243
	26. Inspection	67244
	27. Buffer Zone	67246
	28. Tank Inspection	67259
	29. Containment	67245
	30. Safe Storage	67261
	31. Freeboard	67257

I.B TRANSPORTER (Title 22)

	32. Applic./Insurance	66428
	33. Comp. Cert./CHP Insp.	66448
	34. Containers	66465
Manifest	35. Vehicles	66465
	36. EPA ID #s	66531
	37. Correct	66541
	38. HW Delivery	66543
	39. Records	66544
Cont'rs	40. Name/ Covers	66545
	41. Recyclables	66800

Rev 6/88

Comments: Kurt - representing RW Johnson
AGE of tanks approx 20 yrs.
Clyde Geomatrix sampler ESI
Tank #1 unleaded (next to Harrison st) 10,000 gallon has 2 holes (a couple of inches wide) near the fill end near 14th st. There was a small amount of rusty looking liquid perched on the bottom of the pit from Tank 1. Depth to groundwater is approx 22-23'
Tank 3 - regular 5000 - no visible holes
Shipped to Erickson
Much of the galvanized & fiberglass piping had been removed during the demolition of the gas station structure & car wash
Tank 2 Super unleaded 10,000 gal w/ obvious holes in bottom at 14th st end approx 1½ inches
Super unleaded tank hauled by Trident Truckline State transporter # 107575
Erickson truck took 1st 2 UST's
Sample #1 taken approx 14' from tank #1
Sample #3 taken 14' tank #2
6 15' 3
Soil samples taken from trenches to pump dispensers & underneath dispensers at island closest to Harrison st
Stockpile samples taken from fill material on top of tanks which was isolated in separate piles from excavation material out of the bottom of the tank pit

Contact: ______ Title: ______ Signature: ______

Inspector: ______ Signature: ______

(415) 261-9424

CALIFORNIA LICENSE NO. 289839
NEVADA LICENSE NO. 0018186

R. W. JOHNSTON & SON
GENERAL CONTRACTORS
801 - 53RD AVENUE
OAKLAND, CALIFORNIA 94601

90 NOV 21 AM 8:23

November 20, 1990

Alameda County Health Department
80 SWAN WAY
OAKLAND, CA 94621

Dick Bunge

Re: Chevron Service Station
301 - 14th Street
Oakland, Ca 94612

Tank Closure Plan for all tanks to be removed at the above address.

1. Obtain all required permits.
2. Schedule tank removal date and time with:
   1. Alameda County Health Department (ACHD)
      (415) 271-4320
   2. Oakland Fire Department (OFP)
      (415) 273-3242
   3. Blain Tech (BT)
      (408) 995-5535
   4. Erickson, inc. (ERK)
      (415) 235-1393

Site safety officer shall be Cynthia Wong.

All piping shall be rinsed, removed and hauled off site on a hazardous material manifest by ERK

3. Remove all product from tanks.

4. Uncover tank and disconnect piping.

5. De-gas tank using dry ice, 20 pounds per thousand, or per local requirements.

Vapor monitoring equipment shall be Lower Explosive Limit monitor/sniffer.

6. Remove tank and inspect for leakage. Load on ERK truck and haul on Hazardous Waste Manifest for cleaning and disposal as scrap.

(415) 261-9424

CALIFORNIA LICENSE NO. 289839
NEVADA LICENSE NO. 0018186

R. W. JOHNSTON & SON
GENERAL CONTRACTORS
801 - 53RD AVENUE
OAKLAND, CALIFORNIA 94601

7. If tank pit appears to be free of contamination, BT will take two soil samples from under tank at interface of tank backfill and native soil. Sample will be collected in clean 2" diameter brass tubes, sealed with aluminum foil, plastic caps and tape, and stored in a cooled ice chest for delivery to Superior Lab.

If obvious contamination is found, further excavation will be done to remove all contaminated soil from tank pit. One soil sample will be taken from under the tank at this depth, or as directed by ACHD. If ground water is encountered, one ground water sample will be collected in clean VOA vials, sealed with teflon lined screw caps and tape. additional sidewall samples (6" above ground water table) will be collected as necessary.

Note: if remediation is required, Chevron USA may propose alternate method., other than excavation and disposal.

If contamination is evident, qualified people with ERK will be brought in and will supply themselves with safety equipment. (respirators, etc, as required)

stockpile sample testing shall be performed at a rate of one test per twenty cubic yards, or as required by BT

Excavated soil shall be stockpiled on site until test results are obtained. once test results are obtained, stockpiles will either be hauled off site according to state and local regulations on a hazardous waste manifest, or if clean, used to backfill tank hole.

"Chain of Custody" is as follows...
BT takes sample and deliver to Superior laboratory.

Superior will send results to Chevron USA. Chevron will send copies to ACHD, OFP, and Regional Water Quality Control Board, if required.

Stephen Bard Johnston

SBJ/jmk

COUNTY OF ALAMEDA
HEALTH CARE SERVICES AGENCY
ENVIRONMENTAL HEALTH BILLING

P.O. BOX 28924 OAKLAND, CA 94604
PHONE: (415) 271-4374

INVOICE NO. 0011846

SOLD TO
HARRISON CAR WAH
ROBERT PATTERSON
301 14TH STREET
OAKLAND CA 94612

SHIP TO
HARRISON CAR WAH
ROBERT PATTERSON
301 14TH STREET
OAKLAND CA 94612

ACCOUNT NO.	SLS	PURCHASE OR	SHIP VIA	DATE SHIP	TERMS	INV. DATE	PAGE
TA1023	1987	-	-	10/01/90	NET 30	10/01/90	1

QTY ORDERED	QTY. SHIPPED	ITEM NO.	DESCRIPTION	UNIT PRICE	EXT. PRICE
1.0	1.0	023	TANK CONTAINER - THREE	248.00	248.00

8% PENALTY - 30 DAYS FROM INVOICE DATE

SALE AMOUNT	248.00
SALES TAX	0.0
FREIGHT	
DEPOSIT	
TOTAL	248

PLEASE INCLUDE YOUR ACCOUNT # ON YOUR CHECK

COUNTY OF ALAMEDA
ENVIRONMENTAL HEALTH BUILDING
P.O. BOX 28924 OAKLAND, CA 94604

- ☐ ATTEMPTED NOT KNOWN
- ☐ NO SUCH NUMBER
- ☐ FORWARD ORDER EXPIRED
- ☐ INSUFFICIENT ADDRESS
- ☐ REFUSED
- ☒ DECEASED

N. K. RT1232/22[illegible]

OAKLAND SEP 27 '90 CALIF.
U.S.POSTAGE
≈ 0.25 ≈

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
2410 Camino Ramon
San Ramon, CA 94583

September 25, 1990

RE: Site Remediation at Chevron, 301 14th Street, Oakland, CA 94612

Dear Ms. Vukelich,

Alameda County Environmental Health Department, Hazardous Materials Division has received and reviewed the Tank Removal Observation Report dated July 24, 1991 and the Well Installation Report dated June 13, 1991, both prepared by Geostratagies Inc.

Sampling which occurred during the removal of the underground tanks indicated soil contamination levels as high as 7800 ppm of Total Petroleum Hydrocarbons as gasoline (TPHg) and 2.8 ppm benzene from beneath the former tanks.

Upon review of the reports and following a phone conversation with Mr. Jeff Monroe with Geostratagies (in order to clarify the procedures employed in removing, aerating and sampling soils) it appears that significant soil contamination has been removed from the above site.

However, there currently exists a significant ground water contamination problem requiring urgent attention. Of the ten monitoring wells which have been installed on or around the site eight have significant contamination levels. The last monitoring performed on monitoring well c-3 on 1/17/91 indicated 2.5 feet of free product. Results from monitoring well c-2 indicated benzene concentrations in ground water of 4,500 ppb.

1) You are directed to immediately commence monthly subjective monitoring of all wells for the presence of free product. Those showing free product are to be bailed as a means of interim remediation. This interim remediation shall be in place until such time as a dedicated recovery/treatment system is operating. You are required to record the date and amount of free product removed and submit it this office in monthly reports until a dedicated system is on line

You are required to provide the following information to this department within 30 days of the receipt of this letter.

2) Specify the interim measures undertaken in the past six months and those measures in the future to remove free product in all applicable monitoring wells.

3) A written proposal outlining the details of a groundwater treatment system. The groundwater treatment proposal shall include the following:

A) Rationale for the placement of extraction well(s).

B) Technical information about the proposed dedicated treatment system designed to address the site specific conditions, both hydrogeological and logistical for the site.

C) The measures proposed to evaluate the effectiveness of the treatment system, at regular intervals, (while the system is operating) and a description of the measures which will be employed in measuring the overall effectiveness of the treatment system at the completion of the project.

D) A Description of how the proposed system will prevent further migration of petroleum pollutants.

4) Although the down gradient direction of groundwater contamination has yet to be completely delineated, this office does not see why ~~that~~ this effort cannot commence concurrently with the design and implementation of a groundwater treatment system. You are therefore requested to provide a work plan specifying proposed actions to effectively define the ground water contamination and to also adequately address the groundwater pollution associated with the past activities at the site.

A) You are required to specify an attainable time line for both the adequate delineation of the contamination problem and the implementation of the ground water treatment system.

If you have any questions regarding any of the above please feel free to contact me at (510) 271-4320.

Sincerely,

Paul M. Smith

Paul M. Smith
Hazardous Materials Specialist

cc:
Eddie So, SFRWQCB
Jeff Monroe, GeoStratagies Inc.
Gil Jensen, Alameda County District Attorney's Office of Environmental and Consumer Protection

Chevron

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500
Mail Address. P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Operations

D. Moller
Manager, Operations
S. L Patterson
Area Manager, Operations
C. G. Trimbach
Manager, Engineering

September 25, 1990

Mr. Paul Smith
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Station #9-4816
301 14th Street, Oakland, CA

Dear Mr. Smith:

This letter is in response to your letter dated September 4, 1990, requesting comments regarding the above referenced site remediation. I will address the comments set forth by you in the same order that they were presented in the letter:

Comment 1

An extraction well for floating product recovery was proposed in GeoStrategies, Inc. Well Installation Report dated August 9, 1990. Permits to install the well are currently being pursued and a remedial system is currently being designed which will utilize the well for groundwater and floating product recovery.

Comment 2

All monitoring wells are monitored weekly for separate-phase hydrocarbons using an oil-water interface probe. A clean, clear, acrylic bailer is used to confirm interface probe results. Well C-3 is the only well at the site in which separate-phase hydrocarbons have been observed. Well C-3 is currently being purged on a weekly basis to remove the floating product and at that time all site wells are being monitored and inspected for the presence of floating product. A "long term" method of remediation is currently be-

Comment 2 (Continued)

ing pursued and given the relatively stable position of the floating product (i.e. other wells at the site do not indicate the presence of floating product) it is our opinion that weekly monitoring is adequate at this time. However, should future monitoring indicate a significant increase in floating product thickness or floating product presence, the purging frequency will be adjusted accordingly.

Comment 3

Chevron is in the process of performing the preliminary tasks in preparation of the tank removal (i.e. contractor bidding, securing the necessary permits, etc.).

Comment 4

See Comment 3.

Comment 5

The very low observed hydraulic gradient at the site may mask subtle changes in flow direction. Installation of the proposed wells both on and off-site will provide better areal coverage for monitoring the groundwater gradient at the site. Weekly monitoring data collection is currently providing a database which will assist in further evaluating the apparent discrepancy between regional flow and contaminant distribution with the calculated site gradient.

Comment 6

Upon completion of the proposed scope of work and evaluation of potentiometric data, a tidal study will be performed, if appropriate.

Comment 7

Upon review, an additional well further northwest of the site will be installed. The location of the additional well is shown on Plate 2 attached.

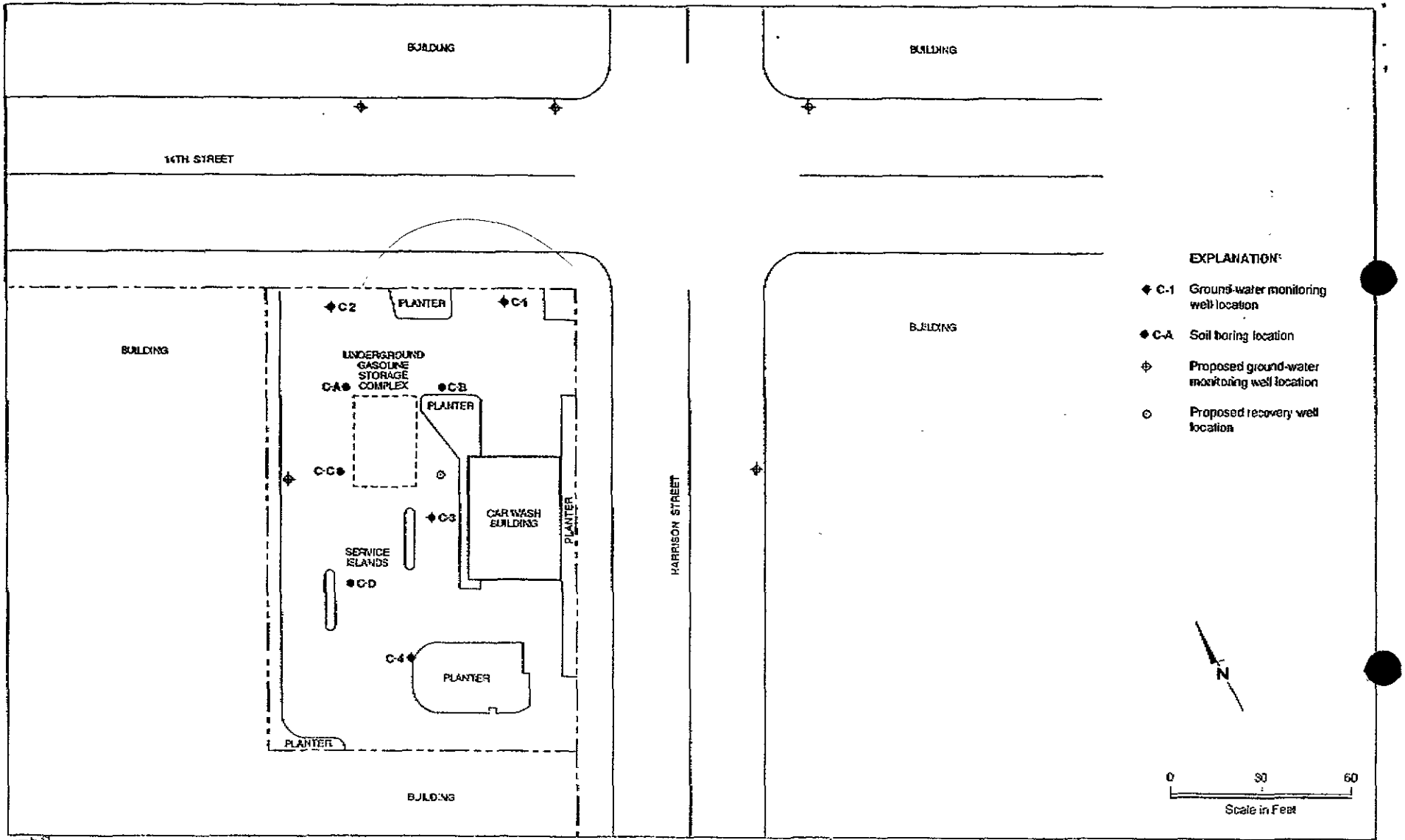
Efforts are currently underway to acquire the necessary permits so that field work can begin as soon as possible. If you have any questions or comments please do not hesitate to contact me at (415) 842-9581.

Very truly yours,
C.G. Trimbach

By Nancy Vukelich
Nancy Vukelich

NLV/jmr
Attachment

cc: Mr. Lester Feldman
RWQCB - Bay Area
1800 Harrison Street
Suite 700
Oakland, CA 94612



GeoStrategies Inc.

Site Plan
Chevron Service Station #4816
301 14th Street
Oakland, California

PLATE
2

JOB NUMBER
7270

DRAWING DATE
8/90

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Ms. Nancy Vukelich
Chevron U.S.A., Inc.
2410 Camino Ramon
San Ramon, CA 94583

September 4, 1990

RE: Site Remediation at Chevron, 301 14th Street, Oakland, CA 94612

Dear Ms. Vukelich,

Our office received the Soil Boring and Well Installation Report dated August 9, 1990 prepared by GeoStrategies Inc. which included soil and water contamination data. We also received the deposit for overseeing the remediation at the above location. The plan for proposed remedial action proposes additional groundwater monitoring wells and the implementation of a recovery well for future remediation efforts.
The plan for proposed remediation is acceptable, however the following concerns need to be addressed:

The installation of an extraction system with recovery unit to remove free product from the groundwater as soon as it is feasible is strongly recommended.

As an interim measure and until such time as a dedicated recovery/ treatment system is installed you are directed to check for the presence of and to remove any free product in monitoring well C-3 and to check all other monitoring wells **every other day** for the presence of free floating petroleum product. The frequency of this activity may be reduced for any one well to weekly purging as the presence of separate phase hydrocarbons is eliminated completely, or diminished to a "sheen", as evidenced by observations; using an optical probe, made during three (3) consecutive site visits. This activity may again be reduced to a schedule of monthly purging as conditions dictate, following the aforementioned protocol.

The underground tanks at this site need to either be removed or permitted. The permits which were issued in October of 1987 have long since expired. Current permit requirements include annual precision testing, inventory reconciliation, and quarterly reporting, and a written monitoring plan.

Given the extent of the contamination at this site and the high probability that the contamination was caused by a leak in either the tank or piping from one or more of these tanks it seems appropriate to remove the tanks. Removal of these tanks may also be necessary to adequately address the contamination of the soil and groundwater at this site.

Because the chemical monitoring well and the regional groundwater flow and the hydraulic flow gradient data collected by Gettler Ryan conflict we require that additional groundwater gradient data be collected in order to determine the actual hydraulic gradient onsite.

If tidal influence is suspected free product thickness water levels must be measured over a 24 hour period.

The installation of an additional monitoring well further to the north-west may be necessary to adequately define the extent of groundwater contamination offsite.

If you have any questions please contact me at (415) 271-4320.

Sincerely,

Paul M. Smith

Paul M. Smith
Hazardous Materials Specialist

cc:
Gil Jensen, Alameda County District Attorney's Office of Environmental and Consumer Protection
Lester Feldman, RWQCB
Chris Palmer, Randall Young, GeoStratagies Inc.

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☐ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☐ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFTY CODE.
SIGNED _____ DATE _____

REPORT DATE: 0M 6M 2D 1D 9Y 0Y

CASE #:

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT: N.L. Vukelich
PHONE: (415) 842-9581
SIGNATURE: [signature]

REPRESENTING ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☒ OTHER Supplier

COMPANY OR AGENCY NAME: Chevron U.S.A., Inc.

ADDRESS: 2410 Camino Ramon (STREET) San Ramon (CITY) CA (STATE) 94583 (ZIP)

RESPONSIBLE PARTY

NAME: ☒ UNKNOWN
CONTACT PERSON:
PHONE: ( )

ADDRESS: (STREET) (CITY) (STATE) (ZIP)

SITE LOCATION

FACILITY NAME (IF APPLICABLE): Former Chevron 2-Pty Station
OPERATOR:
PHONE: ( )

ADDRESS: 301 14th Street (STREET) s/s #9481 6 (CITY) Oakland (COUNTY) Alameda 94612 (ZIP)

CROSS STREET: Harrison

TYPE OF AREA ☐ COMMERCIAL ☐ INDUSTRIAL ☐ RURAL ☐ RESIDENTIAL ☐ OTHER

TYPE OF BUSINESS ☒ RETAIL FUEL STATION ☐ FARM ☐ OTHER

IMPLEMENTING AGENCIES

LOCAL AGENCY / AGENCY NAME: Alameda County Env. Health
CONTACT PERSON: Rafat Shahid
PHONE: (415) 271-4320

REGIONAL BOARD: San Francisco Bay Region
CONTACT PERSON: Hossain Kazemi
PHONE: (415) 464-1255

SUBSTANCES INVOLVED

(1) NAME: Gasoline
QUANTITY LOST (GALLONS): _____ ☒ UNKNOWN

(2) ☐ UNKNOWN

DISCOVERY/ABATEMENT

DATE DISCOVERED: 0M 6M 1D 5D 9Y 0Y
HOW DISCOVERED ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☐ TANK REMOVAL ☒ OTHER Drilling Exploratory Wells

DATE DISCHARGE BEGAN: M M D D Y Y ☒ UNKNOWN

HAS DISCHARGE BEEN STOPPED? ☐ YES ☐ NO IF YES, DATE M M D D Y Y

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ REMOVE CONTENTS ☐ REPLACE TANK ☐ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURE ☐ OTHER

SOURCE/CAUSE

SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ UNKNOWN ☐ PIPING LEAK ☐ OTHER

TANKS ONLY/CAPACITY: _____ GAL. AGE _____ YRS ☒ UNKNOWN

MATERIAL: ☐ FIBERGLASS ☐ STEEL ☐ OTHER

CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ CORROSION ☒ UNKNOWN ☐ SPILL ☐ OTHER

CASE TYPE

CHECK ONE ONLY
☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS

CHECK ONE ONLY
☒ SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) ☐ CLEANUP IN PROGRESS ☐ SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY)
☐ NO ACTION TAKEN ☐ POST CLEANUP MONITORING IN PROGRESS ☐ NO FUNDS AVAILABLE TO PROCEED ☐ EVALUATING CLEANUP ALTERNATIVES

REMEDIAL ACTION

CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD) ☐ EXCAVATE & DISPOSE (ED) ☒ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CONTAINMENT BARRIER (CB) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ TREATMENT AT HOOKUP (HU) ☐ NO ACTION REQUIRED (NA) ☒ OTHER (OT) Action Depends on site investigation results

COMMENTS

Site History: This was a 2-party site. The lessee/dealer died and the estate walked away from their obligations. Chevron is moving in to assess the extent of the contamination. Upon drilling of exploratory wells free product was encountered in one (1) of the wells. A bailing schedule has been implemented to determine the product recharge back into the well.